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PERSONALIZED LAW AND EVIDENCE-BASED JUDICIAL DECISION MAKING: USING INFORMATION FROM PREVIOUS PROCEEDINGS

EL DERECHO PERSONALIZADO Y EL RAZONAMIENTO JUDICIAL BASADO EN EVIDENCIA: EL USO DE LA INFORMACIÓN Y PROCESOS PREVIOS

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Tradicionalmente, las normas legales en el derecho privado han sido generales e impersonales. Este artículo es una contribución al naciente interés en el fenómeno del Derecho Personalizado y también contribuye a la literatura en el campo del razonamiento judicial basado en evidencia. El artículo propone un desarrollo novedoso acerca de la personalización de los procedimientos legales privados y la promoción del eficiente razonamiento judicial basado en evidencia. Se aboga por la personalización en relación con grupos privados con respecto a un proceso particular a través del uso de información concreta obtenida por medio de procesos previos - Internal Process Data [en adelante, IPD].

Se presentará también una lógica para la implementación de la personalización legal, así como también las principales ventajas del uso de la IPD en oposición con el uso de la Big Data. El artículo también abordará las principales dificultades y objeciones existentes contra el uso de la IPD.

El artículo pretende constituir un inicio para el desarrollo de una mayor argumentación a favor de la implementación de reglas objetivas por medio del uso de la IPD como materia residual o complementaria al uso de la Big Data.

Palabras clave: Derecho personalizado; razonamiento judicial; Internal Process Data [IPD]; Big Data.

Traditionally, private law rules have been general and impersonal. This article is a contribution to the rising interest in the phenomenon of Personalized Law and also contributes to the literature in the field of evidence-based judicial decision making. The article proposes an innovative development in personalizing private legal proceedings and promoting efficient judicial decision-making. It advocates recourse to personalization in relation to parties to a particular process through the use of concrete, internal information obtained from previous proceedings - Internal Process Data [from now on, IPD].

Criteria for the implementation of personalization will be presented, as well as the principal advantages of use of IPD as opposed to use of Big Data. The Article will also address possible difficulties and objections to the use of IPD.

The Article may constitute an opening for a wider argument in favor of the implementation of objective rules only as a residual matter.

Key Words: Personalized law; judicial decision-making; Internal Process Data [IPD]; Big Data.

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I. INTRODUCTION

The Article proposes a novel method for personalizing legal proceedings, in a way that will contribute to the achievement of better evidence-based judicial decision making, which is. It advocates recourse to personalization in relation to litigants in a particular process through the use of concrete, internal information obtained from previous proceedings, also known as Internal Process Data [from now on, IPD]. One form of personalization, which is more novel, is the tailoring of the existing law –substantive, procedural and evidentiary, as well as in relation to relief and sanctions– to the relevant parties and situation. Another form is to use the IPD not to change the law and tailor it to the concrete case, but simply in order to apply the existing law to the situation in a better, more accurate manner, in view of the amount of available information regarding the parties. This second form, too, exists in principle today, but the innovation here is that IPD will assist in achieving a more accurate evidence-based decision-making process by the court.

This Article contributes to the burgeoning interest in the phenomenon of personalized law. Whereas classical legal rules in private law are usually general, objective and impersonal, (Hart, 1961, 124 et ss.) Personalized law focuses on tailoring the law to the particular person. This phenomenon examines the extent to which the legal rules move towards personalization of the law and abandon the general and objective yardsticks, such as that of the reasonable person in tort law, which do not take into consideration the particular capabilities and attributes of a person (Ben-Shahar and Porat, 2016, p. 636).[1] This revolution is already taking place, and is gaining increasing scholarly attention[2].

Two trends in personalized law would already appear to be discernible; what they have in common is their attempt to better tailor the law to the concrete situations and the characteristics of the litigants in order to increase efficiency and promote justice. The first trend is the transition from objective general rules to group or sub-group rules, and this is a trend that has already developed in a certain form in various contexts in both the existing and the ideal law (Porat and Strahilevitz, 2014, p. 1417).[3]

The other trend is a more clear-cut one of personalization, and it is the transition from objective general rules to rules that focus on the individual himself. This trend seeks to tailor the legal rule to the particular individual in a way that is most suitable in terms of the circumstances; this, *inter alia*, results from the development of Big Data, which enables access to a great deal of information about the individual person, such as precise data concerning typical traits of the parties to legal proceedings (including potential injurers) and for its analysis accordingly, in order to influence the prediction of preferences and abilities to prevent risks, and thus to create incentives and direct conduct. Hence it is possible, based on this data, to create different legal standards and mechanisms, which will be better suited subjectively and less general and objective (Porat and Strahilevitz, 2014, pp. 1433 and ff.).[4]

Ariel Porat and Lior Strahilevitz believe that the default of the legal rules should be changed such that at least in certain cases, it will be necessary to prefer use of information, such as statistical information emanating from Big Data, as a sufficient basis for personalization of the default rules (possibly as the harbinger of an even broader proposal for standards which are tailored personally to the situation, replacing default rules), when, in any case, there will be room to invoke objective rules only as a residual matter (Porat and Strahilevitz, 2014, pp. 1433 and ff. and a broader approach at 1477-1478).

Adaptation of their proposal for application in cases in which previous information exists from past litigation conducted by the parties is the focus of the process that will be examined in this Article.

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1 See, e.g., Ben-Shahar and Ariel Porat, 2016, p. 636.

2 Articles such as Sunstein, 2013, pp. 7-10; Porat and Strahilevitz, 2014; Ben-Shahar and Porat, 2016, join a body of classical literature, such as Kaplow, 2000; Ayres and Gertner 1989; Ayres, 1993 and Geis, 2006. The reference here is to private law. Expanding on personalization of criminal law, which may be assumed to be pioneering, is beyond the scope of this article.

3 Also see Ben-Shahar and Porat, 2016, at pp. 629-630, 637-642 (demonstrating from standards that developed with respect to certain groups, such as diminished capacity for children and people with physical and mental disabilities and elevated capacity for doctors).

4 Ben-Shahar and Porat, 2016, p. 628 (arguing that the first trend that identifies sub-groups in relation to standards in negligence is not sufficient, and there should be a move to the second trend). It will therefore be possible, for example, in a case in which a person died intestate, to analyze choices that he made in his lifetime, with the aim of formulating a standard that will better comport with his assessed wishes, as compared to the current situation in which the law fixes general rules as the default standard for such cases (Porat and Strahilevitz, 2014, pp. 1419-1420).

In this context, the possibility of utilizing specific data from the files of litigation between the parties for various purposes, including prediction of the preferences of the parties in the case at hand will be examined. The argument will be that such personalization is even more natural, and may predict the preferences in what may be an even more efficient manner than use of Big Data. Thus, underlying this Article is the argument that it is possible to depart from the classical conception of the law, whereby the law is general, objective and does not concern itself with the individual. According to this argument, in certain cases it is both possible and desirable to apply different legal rules to different people. This conception, which seeks to personalize the law, has to date sought to use statistical information for the purpose of personalization. According to the proposal in this Article, it is possible and even preferable to use IPD, which can help in characterizing the party to the legal proceedings, both for the purpose of personalization –tailoring the law to him– for example, introducing certain changes into the law and making it more subjective, or to use IPD simply in order to apply the existing, objective law in a better, more accurate manner.

The Article will therefore show that IPD can help the court in the present case with its various perspectives and in various areas of law, both in establishing the truth and deterrence; in the more efficient and successful conduct of the proceedings; in the better application of the existing law to those parties; and in order to tailor the law –substantive, procedural and evidentiary and also in relation to remedies and sanctions– to various purposes. In this sense of the ability to improve the process of decision making of the court, the Article can contribute not only to the field of personalized law, but also to the literature in the field of evidence-based judicial decision making (Wolff, 2008),[5] inter alia, in order to further important goals of the laws of evidence, such as reducing possible mistakes as well as reducing costs (Stein, 2005).[6]

The Article proceeds as follows: In Part I presents the general argument of the Article for use of IPD and describes the types of information that can be obtained from previous legal proceedings. Part II demonstrates the practical significance of use of IPD through the presentation of a series of cases from different fields. The demonstration will be from the substantive legal aspect, the evidentiary aspect and the procedural aspect, as well as in relation to relief and sanctions. Part III presents a set of criteria for effecting personalization. Even though we do not presume to determine definitively the technical form of actual implementation of the proposal in this Article, since that will be a matter for the legal system that adopts personalization in practice, Part IV nevertheless offers a few alternative proposals, relating both to the proper technical means for identifying IPD and submitting it to the court hearing the concrete case and to the proper procedures for exposing the information to the parties. Part V presents several advantages of use of IPD as opposed to information from Big Data. Part VI tackles the possible difficulties involved in the implementation of the proposal. The Article concludes with a call to move to use of standards based on concrete IPD in the appropriate cases, and to prefer it over the use of other information as a default, or to integrate IPD with other types of information in certain cases.

II. THE GENERAL ARGUMENT: PERSONALIZATION OF THE LAW VIA THE USE OF INTERNAL INFORMATION OBTAINED FROM PREVIOUS PROCEEDINGS

A. Departure from the Principles of the Generality of the Law and the Exclusion of Reference to Previous Acts

The law traditionally advocates the principles of generality of the law and non-adaptation of the law to individuals. Personalization, at base, is a departure from these principles. The proposal in this Article continues along this line of departure. Of course, the intention in this Article is not to expound the basic principles of personalization of the law, per se. This has already been done in earlier writings, and it is to be assumed that it will continue to be done in the future. However, it will contain a response, even if only partial, to the question of why there should be a departure from the principle that recourse is not had to previous acts of the parties –in most cases, the accused or the defendant (Brook and Nelson, 2014).[7] Personalization of the law through the use of IPD

[5] See, e.g.: Wolff, 2008, 1389; also, Bar-Siman-Tov, 2016.

[6] These are two primary objectives of evidence law analyzed by Stein: "(1) enhancement of accuracy in fact-finding or, in other words, minimization of the risk of error; (2) minimization of the expenses that fact-finding procedures and decisions incur." Stein distinguishes between substantive and procedural costs. He suggests making a certain tradeoff between the objectives (Stein, 2005, p. 1-2).

[7] Lathram and Nelson, 2014, p. 149 argue that the law in Tennessee, which restricts reference to a person's previous acts, must change. According to them, the law should change so that it applies both to the civil law and to the criminal law, and not just to the latter, as is the case today. For this purpose, they discuss FED. R. EviD. 404 of the Federal law.

offers many advantages, which are capable of responding to the possible disadvantages of departing from that principle of not referring to previous acts. We have chosen to discuss the possible difficulties of this process in a separate Part, towards the end of the Article (Part VI). The reason for this is that we believe that it is best to first present the entire thesis at length and to demonstrate it in relation to various areas of the law, and only then to tackle the possible difficulties in theory and application, including the traditional reasons on which the objection to reference to precious acts –even if only in certain cases– relies.

B. In Support of the Use of Internal Information Obtained from Previous Proceedings in Cases of Repeat Players

Omri Ben-Shahar and Ariel Porat call for an extension of the use of personalization of the law to other areas that have not yet been sufficiently studied (Ben-Shahar and Porat, 2016, p. 688).[8] In the next Part there will be an attempt to demonstrate the process from areas which indeed have not had adequate exposure in this context, among them mediation and compromise in the course of the legal proceedings and after the action has been brought, punitive damages, credibility of witnesses, interpretation of contracts and more (Porat and Strahilevitz, 2014).[9] However, the purpose of the Article is not just to implement the idea of personalization in some areas in order to achieve a more efficient or successful outcome as compared to the existing situation in those area; it is mostly to promote the idea of personalization by means of the law via the use of data from legal proceedings that have already taken place with the participation of the relevant players, which are more precise and relevant than those supplied by Big Data, and presumably the costs of information in IPD are lower on average than in Big Data. IPD will in fact provide information that already exists in the system about repeat players, in order to use the information concerning possible preferences of the players in the current case. This is a more natural, and probably also cheaper process than resorting to Big Data, and therefore, if such information exists, its use is preferable, even if only from the point of view of efficiency, although additional advantages, above and beyond efficiency, will be described below.

Use of IPD can serve the purpose of better decision-making in two different ways, and thus contribute to better judicial evidence-based decision-making. First, by changing the legal rule in order to tailor it to the individual himself. The second way of using IPD is by personalization of the existing law. Thus, tailoring the law to the particular person, at the level of the substantive law, the laws of evidence and the procedural law, as well as in relation to relief and sanctions, can help the court arrive at better decisions. Tailoring the general law to different people, in departure from the conception that requires the law to be blind to the differences and variations amongst people, will allow for better legal outcomes to be obtained, even if the law itself does not change for the purpose of individual tailoring to the party or parties to the case. The substantial amount of information that can be obtained regarding a person or a body from previous proceedings in which he was involved could provide the court with additional tools for making a more intelligent and accurate decision. When the court becomes aware of a person's traits, his worldview, his resources, his biography, his serial behavior etc., then the judicial decision in relation to the case before the court can be a better and more accurate one. However, it must be emphasized that the decision-making of the court will never be based solely on IPD. This information merely helps the judge to arrive at a decision in the particular case (Bar-Siman-Tov, 2016, p. 110).[10] Make no mistake: as opposed to the proposal to implement personalization and to change the existing, objective law by tailoring it to the individual, the use of IPD in order to better apply the existing law is not necessarily a departure from the existing law. In other words, the judge cannot use legal presumptions, and award punitive damages and so forth in the matters specified below on the basis of IPD if doing so is not part of the existing law: all that he or she can do is to follow the path of the existing law, but in a more intelligent way, assisted by IPD.

Information from previous litigation in which at least one of the parties participated may, therefore –according to the argument– be of great value for the purpose of the legal conversation taking place at present. Therefore, one should prefer this path. In certain cases IPD should also be cross-

8 Ben-Shahar and Porat, 2016, p. 688.

9 Porat and Strahilevitz (2014) took their examples from inheritance law, consumer law, medical malpractice, real property law, and labor law. Ben-Shahar and Porat (2016) dealt with negligence in torts. Sunstein (2013) dealt with other subjects, although very briefly.

10 "The basic idea of evidence-based decision-making is 'the conscientious, explicit and judicious use of current best evidence in making decisions […]' The idea, of course, is that 'decisions are based on evidence and not made by evidence.'" [references omitted].

checked with information that is received from other sources, among them Big Data, in order to get a clearer picture.

The call for personalization of the law on the basis of IPD challenges the fundamental concepts of the existing law; it is liable to give rise to many concerns, and it requires preliminary, deep examination. However, as long as one is prepared to accept the notion of personalization on the basis of statistical information which is sourced in Big Data, *a fortiori* she must accept the call to use IPD, which should in fact be regarded as more natural. A person who objects to personalization on the basis of statistical data might be placated if the personalization is based on the use of IPD, for use of this type of information has several advantages over the use of statistical information. It would appear that even those who object to personalization on the basis of IPD could at least agree that even if IPD is not to be used for personalization, for example, changing the law itself and tailoring it to the person or factor that is a party to the litigation, such information can be of use to the court in arriving at a more intelligent and efficient outcome in the case at hand, through a more precise application of the existing law, without changing it, to the circumstances of the case.

The Article will move from the specific to the general (also challenging Porat and Strahilevitz's conclusion from unexpected directions). The general argument will be that the possibility of using IPD for the purpose of optimal deterrence of the injurer should broaden Porat and Strahilevitz's fundamental conclusion concerning the need to formulate default rules that are individually tailored, and possibly to expand the areas to which it applies. The conclusion will therefore be that the default of legal rules must change such that at least in certain cases, recourse to IPD will be preferable, because it may be more precise and relevant than statistical information as a result of Big Data. This conclusion may constitute an introduction to a broader conclusion, which will need to be examined separately; but this Article can be a first step in the direction of this broader conclusion, whereby there is room for invoking objective rules only as a residual matter, in cases in which sufficient concrete information does not exist or when there are weighty policy reasons against personalization.

C. The Types of Information that can be Obtained from Previous Proceedings

There are several types of information that can be mined from previous proceedings. Some of them will be mentioned below; at times there may be a certain overlap between the different types. Similarly, it may sometimes be possible to learn from one type of information about other types. This is a matter of *learning* only, to provide the court with an additional tool in the decision-making process, and not necessarily one of *decision making* on the basis of that information, for the judge will naturally consider the circumstances of those previous events, the contexts etc. After describing the types of information that are obtainable, as elucidated in this Part, the following Part discusses what can actually be done with each type of information for the purpose of the concrete case presently before the court.

a) *Attributes and Abilities*: it is possible to learn about a person's attributes and his abilities from previous proceedings in which he participated. Here are a few examples: if a person attacked a neighbor who complained about noise, one can surmise that he is a violent and impulsive person; a person who was arrested at a human rights demonstration may be considered an idealist and as one who is prepared to fight for his world view; it may be surmised that the director of a company that was in liquidation who succeeded in rebuilding that company is a person with developed managerial skills, the ability to emerge from crises, staunch and determined; and the serial harmful behavior of a person or body may indicate that he or it is prone to taking risks, is indifferent to harming others, and profits at their expense repeatedly.

b) *World View*: IPD may say something about a person's world view. Thus, if a person was arrested in the past at a human rights demonstration, or, on the contrary, accused of belonging to a racist organization, these proceedings can tell us something about his world view –is he a liberal who is pro-human rights and against violence, or a racist-nationalist who advocates the use of violence? Does he advocate violence despite his liberal views?

c) *Biography*: One can learn about a person's background from previous proceedings. For example, if a person was involved in criminal proceedings, information about his background, which is often presented as part of the sentencing process, may be obtained from previous proceedings. One can learn about a person's family, where he grew up, the circumstances of his life etc. from various previous proceedings, including family matters. This background may be significant for the current proceedings, as it will be shown and demonstrated below.

d) *Resources*: One can also learn from previous proceedings about the financial resources available to a person. For example, a person's financial resources are mentioned in bankruptcy proceedings, in various family law matters etc.

e) *Credibility*: Sometimes, the court expresses its opinion about the credibility of the parties or the witnesses, Therefore, one can learn about the credibility of the parties to the present dispute from earlier proceedings in which they were involved, either as witnesses or as litigants. One can learn about a person's credibility from statements such a "The witness was not credible", "His testimony was full of contradictions", "I found it difficult to believe his story" etc.

f) *Serial Behavior*: IPD can help in identifying serial behavior on the part of a person and in its characterization. Thus, for example, one can learn that a person has a repeated tendency to act violently on the sports field, if in the past he has been involved in several similar proceedings for violence on the field. One can simply check if a person is a serial, vexatious plaintiff. Serial behavior is also relevant with respect to tortfeasors. The fact that they cause injury not for the first time can be relevant for various matters both substantive and evidentiary, and in relation to relief. Inappropriate serial behavior on the part of an insurance company *vis-à-vis* its clients can also be found in previous proceedings. Similarly, one can learn about a person who was involved in previous legal proceedings that he has a history of setting up companies in which his own property is mixed in with that of the company –and as such there is no true separation between the assets of the company and his assets as a shareholder– that he is a person who repeatedly fails to maintain the company's separate corporate identity. As mentioned, serial behavior can in fact show that a person is prone to repeated risk-taking, for profit, due to a particular interest and in the knowledge that it is apparently worth his while because in some of the cases he is not caught.

g) *Intentions*: IPD can help in understanding intentions. Any attempt to determine what a person's intentions were encounters problems, but IPD can be useful in clarifying them. For example, if a court is struggling in its interpretation of a particular term in a commercial contract, examination of previous proceedings in which the same person was involved can help in understanding the correct interpretation of that concept. Similarly, if a person is accused of making threats, and the question arises if real criminal intent to threaten lay behind his aggressive words, since they could be understood in more than one way, it is possible that if it had emerged in earlier proceedings in a family matter that he threatened a family member with physical violence using similar language and in similar circumstances, his intention in the present case might be better understood. Thus, external circumstances and factual conclusions from the previous case can definitely help with the correct legal interpretation of the current case.

Therefore, different types of information can be learnt from previous legal proceedings. The information will not necessarily determine the fate of the litigant. It will help the judge to draw conclusions in the case before him, alongside other auxiliary tools available to him, including, as we have said, the use that the parties themselves in any case make of the information about previous events (not necessarily from legal proceedings), insofar as this is permissible, under various conditions, in each legal system. Through use of this information the judge will decide whether or not there is room to introduce some change in the application of the law *vis-à-vis* a particular litigant, or how to apply the existing law in a better and more accurate manner (without changing it) by using information from similar proceedings.

In the following Part the practical significance of the potential of use of these different types of information will be discussed.

III. THE PRACTICAL SIGNIFICANCE OF THE USE OF INTERNAL INFORMATION

IPD can help the court in the present case with its various perspectives and in various areas of law. Its purpose is not to decide the case. Of course, changes may come about with the passage of time since that information was produced, and any different material in the cases may not be ignored. IPD has a definite potential to do several things, among them: to help in establishing the truth, to deter and to assist the court in conducting the proceedings in a more efficient and successful manner; to improve application of the existing law to those parties; and to tailor the law to various purposes, as will be shown below.

A. For Substantive Purposes

The use of IPD has various substantive purposes. One example is the interpretation of contracts. Of-

ten, the court is called upon to decide how to interpret a contract (Posner, 2013).[11] The default course of action is to assess, through interpretation, the intentions of the parties at the time of making the contract (Schwartz and Scott, 2010, pp. 926, 939). However, this is particularly difficult to do: should the emphasis be on the literal interpretation of the contract or should the circumstances of its making be the focus? (suggesting to bridge the different approaches, see Burton, 2009,). Use of IPD can help in determining the interpretation of a particular contract. To clarify: the personalization here is the very use of IPD. Indeed, every legal system has its own rules of interpretation; in principle, however, interpretation that seeks to chart the subjective intentions of the parties focusses only on the concrete contract, its wording or the circumstances surrounding its making. The use *per se* of information that is not directly connected to the making of the contract in dispute reflects personalization. Without at present going into the theory of contract law and deciding at which exact stage in the interpretative exercise and in which exact cases it will be possible to implement personalization and to use IPD for the purpose of interpretation of the contract, the proposal here presents the possibility of implementing personalization in certain cases. It will also be noted that this is particularly true in relation to standard contracts, for the more instances there are of the same contract with its various relevant arrangements, the easier and more correct it will be to implement personalization.

For example, there is evidence that one party to previous proceedings who is also a party to the present case attributed a particular interpretation to a contractual term that is currently in dispute. It is logical that the court should be able to consider the information that already exists in the system about that party's interpretation of the term, in relation to a similar contract, with similar circumstances –particularly if the previous case was fairly recent– and to use this information for the purposes of the present case.

Information from previous judicial proceedings may be used not only for the purpose of the literal interpretation of the contract. It is also possible to interpret a current contract based on its circumstances, while referring to the circumstances from earlier proceedings. For example, there is a contract between a landowner and the owner of a textile factory. The contract states that "the land will be leased for approximately 20 months". After 17 months, the factory owner notifies the landowner of the immediate termination of the lease, and he relocates his factory to another piece of land within a week. According to him, the word "approximately" that appears in the contract means that he has the possibility of terminating the contract before 20 months have elapsed. Therefore, leaving the land after 17 months does not constitute a breach of contract. As opposed to this, the landowner contends that the word "approximately" was added only because they, the parties, signed the contract not at the beginning of the month, and therefore it did not run for 20 full months. However, the landowner argues that he certainly did not agree that the factory owner would be able to terminate the lease prior to the completion of 20 months, and he therefore demands payment of rent for the three remaining months. IPD shows that the factory owner has a history of breaching contracts, albeit in different contexts (for example, he was in breach of a contract with a wool supplier). It further emerges that several years ago, too, he terminated a contract before the time specified in the lease. There, the property was a residential apartment that he rented for himself and his family, and that matter, too, reached the courts.

Moreover, in a divorce dispute between himself and his (former) wife, which came before the court for family affairs, it emerged that he was a silent partner in land that at that time was undergoing a change in zoning, from agricultural land to industrial land, and that his ex-wife demanded to receive half the value of the land according to its anticipated value after the rezoning and not its value as agricultural land. From a check that was carried out in the course of those proceedings it emerged that the land that was involved in the divorce proceedings was the same land to which his factory was relocated, and that the rezoning process had been completed a few days before the factory moved.

All that information shows that the factory owner has no problem with being in breach of contract, particularly leases, and that in the present case he had a significant financial motive for pulling out before the lease had expired since he could relocate the factory to land of which he was the partial owner. Note that all this information lies beyond the wording of the contract and the circumstances of its making. However, according to the proposal, use could be made of IPD in order to determine that the interpretation of the landowner is to be

[11] Posner, (2005, pp. 1581, 1582) explains that a great many of the contractual disputes between commercial entities arise in relation to questions of contractual interpretation. See also the work of Schwartz and Scott (2003, p. 541), which suggests a theory of interpretation that is particularly suited to commercial contractual disputes.

preferred, even if in the present case, the circumstances are not necessarily identical. Note that the law is not changed here; IPD is used only to reach a better, more accurate decision.

Another, similar example was cited above in relation to determining whether a person's intention in saying something that sounds like a threat was to actually threaten or not, where there is information from previous proceedings in which a similar threat was involved, even if in a different framework, for example, a family dispute.

Yet another example is the use of information from legal proceedings and not simply from the media in order, for example, to prove that a person who claims that he was libeled and his reputation was damaged in that he was called a racist or a fascist indeed holds such views. This type of information can arise from legal proceedings in which it was mentioned that he participated in a fascist or racist demonstration, or belongs to an organization that holds such views. In such a situation, this information can be of help in determining that the person's reputation was not harmed, or that even if it was harmed, there is both truth and public interest in the publication, and this constitutes a defense in an action for libel.

Use of IPD for substantive purposes by way of changing the legal rule and tailoring it to the specific parties and circumstances, can also be demonstrated in connection with lifting the veil in corporate law. Lifting the corporate veil means removing the barrier separating shareholders from the company as a separate legal person (Vanderkerckove, 2007). IPD can provide support for lifting the veil. The way in which this is done, both substantively and procedurally, naturally varies in accordance with the arrangements that exist in each state (Elkin, 2012, pp. 131, 148).[12] Thus, for example, according to some court rulings, the separate legal personality of a company and limitation of its liability are intermeshed with the company's duty to act in good faith and fairness in its business dealings (Kibbutz Mishmar Ha'emek v. Adv. Tommy Manor, 2009).[13] Part of the duty of fairness is also the duty to use the corporate advantages of separate legal personality and limited liability in a fair way.

The Court has explained that as long as the company conducts itself properly, the principle of separate legal personality and limited liability pertain and are relevant; however, if that veil of separation between the company and its shareholders is abused; for example, exploited for improper activity on the part of the company, such as for fraud, avoidance of repayment to a creditor, oppression of minority shareholders, evasion of the law or of contractual obligation or action that is harmful to the company's goals by assuming unreasonable risk in view of the ability of the company to repay its debts, then it is possible, under certain circumstances, to lift the corporate veil. This means disregarding the separate legal personality of the corporation and holding its shareholders liable for its debts.

For example, under Israeli law, several conditions must be fulfilled in order to lift the corporate veil:[14] (1) In the circumstances of the case, it is "right and proper" to do so; (2) when use is made of the separate legal personality in order to defraud a person or to avoid repaying a creditor, or in a manner that is detrimental to the goals of the company in that unreasonable risks are taken in view of the company's ability to repay its debts; (3) The shareholders must be aware of the improper use that has been made of the separate legal personality of the company. Awareness includes deliberate indifference, but not negligence; (4) The level of the shareholder's holdings in the company must be considered. Thus, for example, where the level of the shareholder's holdings in the company is such that he has no actual involvement in or control over the actions of the company, it may not be right and proper to lift the corporate veil in relation to him; (5) Consideration of the extent to which the shareholder fulfills his obligations towards the company.[15]

In the case at hand, personalization can be implemented, even if only in relation to some of the criteria, in accordance with the circumstances of the case and IPD. For example, let us assume that the application to lift the corporate veil relates to a person with a controlling interest in the company, who in the past set up several companies for the purpose of defrauding people. If in the present case, the claim is that this person sought to use the

12 For a discussion on lifting the corporate veil in the U.K., see Prest v. Petrodel Resources Ltd. [2013] UKSC 34, [2013] 2 AC 415.

13 CA 4263/04 Kibbutz Mishmar Ha'emek v. Adv. Tommy Manor, Liquidator of Efrohei HaTzafon Ltd., IsrSC 63(1) 548, para. 54 per Justice A. Procaccia (2009) [Isr.].

14 Sec. 6 of the Companies Law, 5759-1999 [Isr.].

15 Under secs. 192-193 of the Companies Law, quoted, these provisions determine the duty of the shareholders, the controlling members and the decision makers in the company to act in good faith and in the customary manner towards the company and towards other shareholders in exercising their rights and fulfilling their obligations in the company.

company in order to defraud another person then it may be possible to change the required criteria. Thus, the burden of proof could be shifted to that controlling shareholder in relation to some of the criteria (For example, in relation to the criterion that it is "right and proper" to do so and/or the criterion that he indeed exploited the company in order to defraud another), or even in relation to all the criteria. Let us now assume that the claim is different –that the company tried to hide its assets in order to avoid repaying its creditors.

As stated, one of the criteria is also awareness. In the present case, the controlling shareholder claims that he was not at all involved in the company's activity. Apparently, therefore, he at most was negligent, and therefore the corporate veil cannot be lifted in order to attribute to company's debts to him. However, if IPD shows that this is a controlling, obsessive person with respect to control (such information may also be obtained, for example, from proceedings in family or employment matters), and that in his other companies he was involved down to the last detail, and in one of the cases in which he was involved as a witness it was ruled that he is not credible, it may not be possible to lift the veil, since in this specific case he may not have been involved in the company's activity, as he claims, but the requirement of awareness may be personalized. It will be possible to determine that in these circumstances, in relation to this person, even negligence is enough in order to lift the corporate veil, or alternatively, that the burden of proof of lack of awareness will be shifted to him. It is important to emphasize that even in the framework of personalization, the internal logic of company law, which regards lifting the corporate veil as a drastic remedy that must be used sparingly, must be preserved. Therefore, personalization on the basis of IPD may often be helpful in lifting the corporate veil, but it must not be disproportionate.

B. For Evidentiary Purposes

IPD may also be used for evidentiary purposes, without changing the legal rule. One example is examination of the credibility of a party to the present case based on IPD as to his credibility either as a party or even a witness. This relates not only to a determination that the party or the witness is credible or a liar, or to statements such as one saying that his testimony was full of contradictions, or that it was difficult to believe his version of events. We are talking about general credibility, or credibility in relation to a particular matter that is under discussion in the present case as well. Thus, for example, IPD can be used to check the extent to which a person who engaged in deceitful corporate or financial practices is liable to act similarly at present. The IPD can help at the level of raising the burden of proof, or in shifting it to the other party.

Another example is the importance of information about the defendant in the present case being a mass or serial tortfeasor. Mass tort is injury caused by the same action to many people simultaneously, such as injury due to their exposure to dangerous radiation. In certain cases we would want the court to have before it information about the fact that the defendant in the case caused similar damage in the past, and the present action is another link in the chain, or that by his action, the defendant apparently caused harm to many people, even if he is only being sued by one person rather than many, and no class action has been brought against him – at least not for the moment.

Thus, for example, application of the increased risk doctrine can and should be affected by such information. If there is uncertain causation and it is difficult for the plaintiff- victim to prove factual causation between the defendant's wrongdoing and the harm caused to him, there may be room for evidentiary lenience in relation to proving the causation, particularly in cases in which there is information about other victims of that tortfeasor who suffered similar harm to that of the plaintiff, and it is necessary to prove the actual – and not merely theoretical or hypothetical – existence of such victims. In such a situation, IPD can of course be very helpful, and there will be courts that will not be prepared to apply the doctrine of increased risk without this parameter being established (Carmel Hosp. Haifa v. Malul, 2010).[16]

[16] This is understood as one of several substantive parameters for applying the increased risk doctrine. See, e.g., CA 4693/05 *Carmel Hosp. Haifa v. Malul* (8.29.2010) [Isr.], English summary available at https://supreme.court.gov.il/Pages/fullsearch.aspx, at pp. 6-7, Rivlin J. concurring: "Of course, the proportional liability rule must apply both when the probability is higher than 50% and when it is lower, in order for the advantages of this rule to be achieved. Therefore, it is to be expected that both plaintiffs and defendants will attempt to prove the conditions set for the application of the proportional liability rule (of course not in the same case). Any party who wishes to apply a proportional liability rule must prove the existence of 4 conditions: the existence of a tortfeasor, of a group of plaintiffs, a joint and repeated risk, and a recurring distortion in the application of the preponderance of the evidence standard (hereinafter: 'a recurring distortion'). The group of plaintiffs must be actual and not theoretical or hypothetical, although the plaintiff does not necessarily have to identify the individual members of the group. The party attempting to prove these conditions will naturally have to also

C. For Procedural Purposes

IPD can also serve various procedural purposes without changing the legal rule. For example, the fact that a person is a serial plaintiff may be relevant to the present case. This does not necessarily mean that his actions are frivolous or that they are brought in bad faith, but the matter should be looked into, and how much more so if the suits are directed time and time again against the same or similar factors. The cost of obtaining such information is not high, and no expert psychological analysis is required in order to make use of the information. For example, we might, as a society, wish for the court to have in front of it information as to whether the plaintiff brought dozens of actions in recent years pursuant to the laws of spam or laws pertaining to technicians turning up late in order to be awarded compensation, even though the law permits these actions. Similarly, we might wish for the court to have information as to whether a person is sued dozens of times by different people for similar acts and it is possible that he committed a tort or breached a contract and caused minor damages; but to many people in some states there are statutory limitations which grant the court discretion in the matter of the number of small claims that a person can bring in a year.[17] Such information, which today is received in a certain manner upon an action being brought which exceeds the limit, can also be received in other similar cases. At the same time, in all these cases, care must be taken not to violate a person's right of access to the courts.

Another example is information about the resources of a party to the proceedings. If, for example, the court is supplied with information from previous proceedings or proceedings which are being conducted at the same time from which it emerges that the defendant in this case is nearly bankrupt, the court might change its decision in accordance with this information; it may, for example, freeze the proceedings or even quite the opposite, speed up the judgment so that the defendant will not be able to avoid some payment on the argument that the action against him was brought after his bankruptcy.

Another example relates to evaluating the chances of the litigants to reach a compromise within the courtroom or in ADR under the aegis of the court. Dispute resolution proceedings have in recent years begun to spread to the stages preceding the bringing of actions, and there are states which at least in some areas (such as family disputes or financial disputes involving relatively low costs) require proof of a preliminary attempt to conduct such proceedings, with an unsuccessful outcome, as a condition for coming to court. However, even when the action has already been brought, there is still a chance of reaching a compromise, and the court itself may be involved in an attempt to reach a compromise by various means. At this stage, IPD may be used in order to determine the preferences of the litigants with respect to the chances of reaching some kind of compromise in the case at hand.

If in previous litigation between the same parties who are repeat players, there was an attempt to resolve the dispute inside the courtroom (Cardozo, 2015; also, Alberstein, 2015, p. 879), or there was an attempt at mediation to which the court sent the parties after it identified an opportunity to end the dispute in an extra-legal manner (and in the meantime froze the legal procedures) (Negot, 2010),[18] the court hearing the present case may make use of such information, whether the earlier proceeding was successful or whether it failed for some reason or another. This is important, valuable information, which is relatively easy to collect, and there is also no need for special analysis and extensive professional knowledge in order to make use of this information.

Several outcomes are possible here. Success in the former extra-legal attempt may indicate that the chances of such a course in the present case are higher, since the parties displayed willingness to resolve the dispute between them by way of compromise, and the attempt was indeed successful.

supply the court with evidence regarding the probability that there is a causal link between the tortious act and the injury. This evidence may be scientific or statistical evidence. As the court's perspective shifts from a single-plaintiff to a group of plaintiffs, many of the difficulties associated with relying on statistical evidence become irrelevant, and the court may rely on such evidence, as long as it is credible and relevant to the case."

17 See, e.g., CA CIV PRO § 116.231, West's Ann.Cal.C.C.P. § 116.231 ("(a) Except as provided in subdivision (d), no person may file more than two small claims actions in which the amount demanded exceeds two thousand five hundred dollars ($2,500), anywhere in the state in any calendar year. (b) Except as provided in subdivision (d), if the amount demanded in any small claims action exceeds two thousand five hundred dollars ($2,500), the party making the demand shall file a declaration under penalty of perjury attesting to the fact that not more than two small claims actions in which the amount of the demand exceeded two thousand five hundred dollars ($2,500) have been filed by that party in this state within the calendar year.").

18 See, in the context of family disputes, Shmueli, 2010, p. 201.

Even if the circumstances in the current case are different, the very willingness in the earlier case might indicate higher chances of success at present and incentivize the court to attempt a similar path in the current case.

If the IPD indicates an earlier attempt that failed, the court need not necessarily conclude that the same process has no chance of success this time, for the reason for the failure of that earlier attempt is also a matter of interest and can help. If the reason for the earlier failure pertains in the present case –especially if both parties are repeat players in general, and have confronted each other in previous cases– it would seem that the cost and effort involved in attempts at convincing the parties to turn to ADR and to temporarily freeze the present proceedings should be saved. Nevertheless, even if the former attempt failed, but the circumstances of the current case are substantively different (and certainly if the failure occurred in a case in which only one of the current players participated), it may point to willingness to try, and this may have value for the current case.

However, if the reason for the earlier failure is not relevant to the present case, even if the very same two players confronted each other in the past, then the fact that the parties were willing to embark on such proceedings in the past may underlie a recommendation to the judge to use his discretion and propose to the parties to do so this time as well.

According to some data, repeat players in the legal arena demand more judicial intervention, if only in certain legal fields.[19] This means that in these cases there are in any event additional costs, derived from such greater judicial intervention. The court in relation to this aspect should also consider IPD.

Another question that may be considered is whether there is room to examine the attitude of the parties' legal counsel, for example, their lawyers, to compromise proposals in earlier cases in which the same lawyers represented the same players, or even only the same lawyers, particularly if the circumstances of the earlier case were similar to those of the current case. Because the lawyers clearly have a great deal of influence on the tendency and the consent to embark on a process of compromise, this fact might bear great significance. Some lawyers are more willing to compromise than others. This, too, is important information, in addition to information about repeat players, and even repeat commercial players such as insurance companies. If the same player or players are involved in the current case, then in any case it is possible to use such information about the parties' legal counsel in the framework of the proposal in this Article as well. (If different parties are involved, this could be the subject of future research.)

Nevertheless, extra caution must be adopted here, for after all, the parties' attorneys are not the parties themselves, and the identity of those attorneys is significant, even if only regarding settlements, primarily in light of common powers of attorney that allow them to settle in the names of the clients, even without consulting them.

D. In relation to Remedies and Sanctions

Earlier, serial and mass tortfeasors were discussed from the aspect of increased risk and uncertain causation. Information from previous proceedings may be used in general, and with respect to serial tortfeasors in particular, also in relation to relief and sanctions and may lead to a change in the legal rule in light of the information from earlier legal proceedings. IPD may show that a particular factor –usually the defendant– behaves in a particular manner consistently and in serial fashion, but he manages to avoid liability time after time, e.g., for evidentiary or procedural reasons.

Hence, it may not bother him to be sued, and it is not enough to impose liability upon him for the present act only in order to direct his behavior, as long as liability has not been imposed on him in earlier cases. Sometimes the previous proceedings can show us that he indeed bore liability and was sued in the past also, but the liability was diminished, e.g., since it was mentioned that it was only the first time that he committed that tort etc. In many cases we would not want this to be repeated in the next case to be opened against the background of similar deeds, and we would want the court to have the information in order to decide, for example, not to be lenient this time with that defendant or not to accept a compromise arrangement. Unlike the situation in criminal law, there is no prescription in tort law; as such there is not necessarily any documentation about a tortfeasor

[19] According to unpublished study, conducted by Ayelet Sela, Nurit Zimmerman and Michal Alberstein, it emerged in the context of insurance and subrogation files, which undoubtedly involve repeat players, that some 17% of the files are closed at the stage of the trial and another 23% at the pretrial stage. According to them, these rates are higher than those of the general files in the sample, of which 11% are closed at the trial stage and another 19% at the pretrial stage. They claim that these figures indicate that repeat players require more judicial intervention.

who is repeating his actions. In this case it is only logical to use IPD in order to impose appropriate sanctions on the serial tortfeasor.

For example, one can use this information for the purpose of imposing substantial exemplary damages (or a high rate of interest on sums that were not yet paid out to the insured client) on insurance companies who repeatedly attempt to evade paying out, based on strict interpretation of contracts. Such information can act against the company in the present case as well, and from a distributive perspective, such a result is desirable. As stated, the information does not decide the company's fate, but it can indicate a calculated, serial pattern of behavior, and as a society, we would want the court to be exposed to this information. It should be borne in mind that the purpose of insurance is to spread the risk of particular injury over many individuals, so that the insurer takes the risk away from the individual and transfers it to a large group of individuals. On the one hand, the goal of every commercial insurance company is to maximize its profits and to minimize its costs insofar as possible; on the other hand, insurance exists in order to pay out to each insured person the amounts that are due to him in the event that the insured event occurs. This clash of interests causes many insurance companies to make things very difficult for insured persons when they try to realize their rights to payout. This conduct of the insurance company wrongs many insured persons, who are experiencing stressful times, and just when they need the payouts from the insurance company, the company tries to brush them off insofar as possible, sometimes in bad faith (Grisham, 1995).[20]

Personalization on the basis of IPD can help to limit such conduct on the part of insurance companies. Insurance companies are repeat players in the legal arena; they are permanently involved in legal proceedings. Legal proceedings in which insurance companies are involved must be regarded as being connected to each other, types of "mini-battles" which are part of a large "war." The insurance companies, as mega-corporations with enormous power and resources, aim to maximize corporate profits. Its conduct in a particular case cannot be examined in isolation from its conduct in other cases. Therefore, this is a classic case for implementing personalization on the basis of IPD, on the applied level as well as on the normative level and on that of the outcome. On the applied level, a great deal of information is amassed from similar previous proceedings in which the insurance companies were involved.

The information is from many proceedings, which are varied and spread over many years, but still have similar characteristics. Therefore, it will be possible to make extensive use of all the information that has accumulated about insurance companies. On the normative level, taking conduct in previous cases into consideration in dealing with insurance companies in a particular case allows for correction of the ongoing wrong. Why? Because an asymmetrical situation is created, in which the insurance companies calculate their actions and their conduct in legal proceedings on the basis of wide, ongoing strategy, whereas the legal system operates differently on the merits of each case, ignoring the fact that there is an inseparable connection between the various proceedings in which the insurance companies are involved. This asymmetrical situation gives the insurance company a real advantage, and allows them to persist in their harmful conduct vis- à-vis those they insure.

Personalization on the basis of IPD can help correct that situation and create symmetry between the conduct of the insurance companies and that of the legal system, so that the later, too, may conduct itself *vis-à-vis* the insurance companies on the basis of broad and ongoing legal strategy. The level of the outcome derives directly from this understanding.

To date, the legal system, including the legislator, the courts, and insured persons, have not always succeeded in changing the conduct of the insurance companies, inter alia, due to that asymmetrical situation. True, sometimes there is a specific success, for example, in the form of an "educative" judgment that rebukes the insurance company for its harsh treatment of the insured client, but usually these judgments do not take into account that such conduct is a daily, ongoing phenomenon, and the companies' past is not necessarily examined. Personalization on the basis of IPD which will therefore be able to create a symmetry, supplying the legal system with tools that will allow it to attain better and more appropriate outcomes in the heretofore unsuccessful battle to change the conduct of the insurance companies.

A tool that can be used in these cases is the award of punitive damages (Braun, 2013),[21] or, as men-

[20] Cfr. Grisham, 1995, in which the policy of the insurance company was to reject insurance claims without examining their merits.

[21] For a comprehensive review of punitive damages, particularly in the United States, describing the trend towards awarding even higher punitive damages, albeit within the limits set in the case law, see Braun, 2013, pp. 449, 472.

tioned, imposition of a high rate of interest on payments to the insured client. The level of the award, the circumstances in which punitive damages can be imposed and the willingness in principle to do so vary from one state to another. Concrete discussion of the exact implementation of punitive damages is beyond the scope of this Article. However, it seems that personalization can be of significant help in encouraging recourse to punitive damages with the aim of bringing about a fundamental change in the conduct of insurance companies.[22]

Personalization may manifest itself in several ways, for example, in the circumstances in which it is possible to award punitive damages: (a) some of these ways change the legal rule in accordance with the circumstances and the conduct of the company, and some do not. For example, if there is a requirement to prove that the insurance company acted in bad faith, personalization could do away with this requirement, and determine that even if the insurance company acted negligently and not necessarily in bad faith, it will nevertheless be possible to impose punitive damages on it; (b) in proving the existence of the circumstances. For example, if there is a requirement to prove that the insurance company sought to avoid paying out sums that were not the subject of dispute, personalization could shift the burden of proving that this circumstance did indeed exist onto the shoulders of the insurance company; (c) and in the amount of compensation that may be awarded. If the law allows for punitive damages, for example, to a maximum level of half the payout that should have been made to the insured person, personalization will allow punitive damages to be paid to a maximum level of the entire amount of the payout. Similarly, if according to the case law it is possible in general to award punitive damages at a level of nine times the damage itself, this might be a deviation from this rule. As stated, exceptionally high interest and linkage may be imposed on payments to the client. Here, therefore, it is possible to tailor the existing law and to implement it in a better way and it is also possible to change the law and to create bespoke sanctions – even ones that do not appear in statutory form.

Another tool that can be used is evidentiary (shifting the burden of proof to the defendant with respect to proving the entire action). Thus, personalization will make it possible to shift the burden onto the shoulders of the insurance company, and if it does not lift this burden, it will have to make the payout to the insured person. Today, an insured person who wishes to receive a payout from the insurance company must prove that he is entitled to such payment on the basis of the policy. Personalization will make it possible to create a presumption, whereby the insurance company must indeed pay out. If it wishes not to do so, it will have to prove to the court that it need not pay.[23]

Another similar example is the imposition of punitive damages on allegedly serial injurers –an issue lying at the heart of the discussion about the non-application of law and economics approach to punitive damages– The Multiplier Approach[24] (in the U.S. Supreme Court in recent years).

For various reasons, many injured parties do not actually sue,[25] and many tortfeasors end up not paying (Pierce, 1980, pp. 1295-1297). Therefore, the result of merely requiring serial tortfeasors to pay for the damage they cause when being sued in practice would be under-deterrence (Englard, 1993, pp. 145-46). For example, a tortfeasor causes a harm of one hundred dollars to each of six persons, but only three of them are expected to sue him. This tortfeasor is expected to internalize

[22] Cf. State Farm Mutual Automobile Insurance Company v. Campbell, 123 S. Ct. 1513 (2003) (the United States Supreme Court dealt there with huge punitive damages, amounting to 145 million dollars, imposed on an insurance agent in the lower court due to the fact that it pursued a nation-wide policy of misleading its clientele with the aim of avoiding payouts, relying on previous information. For various reasons, the Supreme Court disallowed such a high award of punitive damages, setting a limit to them).

[23] A thorough examination of all the ramifications in every legal system will give rise to obvious questions and answers, such as: on the basis of what information can personalization be effected? In what cases is personalization possible? As stated, insurance companies are repeat players; will it be possible to implement personalization only in a one-off case, and then examine its effect, or rather, only in a series of cases? Is this not over-penalization or unjustified harm to the insurance companies?

[24] Here the basic multiplier model of Shavell and Polinsky (1998) will be mentioned. Over the years, certain reservations to the model were expressed, but they concentrated mainly on the methods of calculating the effective multiplier in various tortious situations, and they do not affect the essence of the model (Hylton and Miceli, 2005, p. 410; Craswell, 1996, p. 463; Bebchuk and Kaplow, 1992, p. 365; Mookherjee and Png, 1994, p. 1039).

[25] Victims do not sue, *inter alia* because of the victim's disinclination to do so, his assessment of the cost of filing and conducting a suit as opposed to the compensation he might expect, the unwillingness of his attorney to manage the claim because of issues of cost-effectiveness, evidentiary problems and uncertainty, and even because of various errors made in the enforcement process. And cf. Englard, 1993, pp. 145-146 (1993); Polinsky and Shavell 1998, p. 888; Ellis, 1982, pp. 25-26; In re Zyprexa Products Liability Litig., 489 F. Supp. 2d 230, 247 (E.D.N.Y. 2007) ("Despite this effective civil prosecution network, there are usually a substantial number of potential harmed plaintiffs who never press their claims.").

a cost of three hundred dollars only, even though the cost of the negative externalities of his acts totals six hundred dollars (one hundred dollars for each of six persons). Polinsky and Shavell explain that imposition of punitive damages thus increases the level of deterrence against potential (mostly serial and mass) tortfeasors, and provided that the correct amount of punitive damages is awarded, optimal deterrence is ultimately achieved (1998, pp. 873-74, 888-890). In other words, if punitive damages for reprehensible conduct are imposed in cases in which tortfeasors already pay damages, then even though this represents a certain overpayment locally, overall these tortfeasors will be paying at most for the wrongs they caused, which would create optimal deterrence (or something proximate to it) and not over-deterrence.

As Polinsky and Shavell explain, if tortfeasors were to consider this possibility in advance, their actions would be more efficient and aggregate welfare would consequently increase. In the above-mentioned example, if the tortfeasor would be found liable with a three-in-six (50%) chance, damages should be $600 –the $300 harm (100x3), multiplied by 2 (=1/.5). The total damages should be $600: $300 represents compensatory damages and the remainder, $300, is the optimal amount of punitive damages.[26]

Similar approaches were invoked in federal courts fairly recently by two judges who are among the founding fathers of the school of (tort) law and economics. In *Ciraolo v. City of New York*, Judge Guido Calabresi used the same substantial approach as the multiplier, calling it "socially compensatory damages" (Ciraolo v. City of New York, 2013).[27] In *Mathias v. Accor Economy Lodging Inc.*, Judge Richard Posner also applied the multiplier approach in practice (Mathias v. Accor Economy Lodging Inc, 2003).[28]

These judgments were delivered prior to recent developments in the U.S. Supreme Court whereby the multiplier approach was rejected, *inter alia* in that it is contrary to due process and that it does not allow the defendant to defend himself in practice in cases in which torts are as it were attributed to him, but no decision is handed down, and they are nevertheless relied upon for the purpose of the multiplier and the calculation (Calandrillo, 2010, p. 774, for an overview of the denial of the multiplier approach in U.S. Supreme Court judgments).

In any event, in order to apply the multiplier approach, information is required relating to similar harms caused by the same serial tortfeasor in earlier cases (as described above in relation to uncertain causation and increased risk – there, for deterrence purposes). Such information can be obtained from previous legal proceedings that ended, for example, in compromises or in withdrawing the suit for various reasons, and also from other information that is not connected to legal proceedings, which indicates that for various reasons, the tort liability was not completely exhausted *vis-à-vis* that defendant, and now is the time to do so by way of punitive damages, that will be calculated in view of the previous cases.

In this context, the approach of Catherine Sharkey is interesting. She argued that "[p]unitive damages have been used to pursue not only the goals of retribution and deterrence, but also to accomplish, however crudely, a societal compensation goal: the redress of harms caused by defendants who injure persons beyond the individual plaintiffs in a particular case" (Sharkey, 2003, pp. 347, 351-352).

Sharkey therefore suggests that in cases of intentional torts, "societal damages" should be awarded. These are actually extra-compensatory damages awarded to the plaintiff, but from the defendant's standpoint this is merely what he must pay, because society is interested in reducing this type of behavior, but not necessarily through criminal sanctions.

The significance of Sharkey's call to award punitive sanction for societal damages is that not only should the victim who is standing before the court be considered, but other victims as well, which means that the conduct of the tortfeasor should be regarded from a much wider perspective. Her call is very similar to personalization, which seeks to examine the conduct of the injurer from the

[26] The formulae for calculating punitive damages according to optimal deterrence examine the expectancy that the court will impose liability on the tortfeasor as opposed to the scope of the damage. See Polinsky and Shavell, 1998, pp. 888-90. Expanding on this question is beyond the scope of this Article. Examining this data and predicting –even approximately– in which cases litigation will ensue and in which cases it will not, is difficult; the question therefore arises whether these formulae can in fact be applied in practice. Under this approach, the award of punitive damages does not amount to over-compensation: rather, it aims to preclude under-deterrence and under- enforcement, thereby displaying an element of efficiency.

[27] *Ciraolo v. City of New York*, 216 F.3d 236, 243 (2d Cir. 2000). Also, Calabresi, 2005.

[28] *Mathias v. Accor Economy Lodging Inc.*, 347 F.3d 672 (7th Cir. 2003).

perspective of general conduct, beyond the concrete case under discussion.[29]

Notwithstanding concern about preconceived notions and stigmas and about inequality between those for whom IPD exists and those for whom it does not, as well as concern about different attitudes to IPD amongst different judges in different cases, as well as others, it must be recalled that use of IPD is not intended to determine any issue, but rather, to supply the court with an additional tool to improve the conduct of the case in the aspects that have been mentioned in this Part. A holistic picture that relies on concrete IPD in relation to one or both parties in legal proceedings can help the court in achieving its purpose, often better than statistical information that is not personal and concrete, or personal information that is external to the legal system.

IV. CRITERIA FOR IMPLEMENTING PERSONALIZATION

In this Part, several criteria that may help the courts in deciding whether to implement personalization on the basis of IPD in the case before them will be presented. These criteria are not cumulative and they are not necessarily intended to decide the case. Their purpose is to create a framework for judicial discretion regarding the decision whether to implement that process which tailors the law personally on the basis of IPD or uses this information without changing the legal rule. Each criterion per se is subject to interpretation and to adoption to some extent or other, and the list of criteria is not closed. The dynamics of life will surely require the courts to develop and fashion additional criteria.

A. The Nature of the Information Obtained from Previous Proceedings

The court must decide whether the IPD is information that required the court in the previous proceedings to draw conclusions, such as the identification of personal characteristics of one of the litigants, or identification of his world view in accordance with his behavior – for example, if he holds fascist or racist views; or if the information does not require processing and the drawing of conclusions, such as information about a person's resources or his biography. Moreover, it is necessary to determine if the process of drawing conclusions requires a certain professional expertise. For example, creating a profile of a person's personality on the basis of his behavior usually requires some clinical expertise. Similarly, the court must ask itself whether the IPD is based on the discretion of the earlier courts, such as the question of a person's credibility. The more that the information requires the exercise of discretion and the drawing of conclusions, the more the scales will tip against implementing personalization, and vice-versa.

B. The Quality of the Information

A court that wishes to use IPD must also determine the level of credibility of that information, and the basis for it. For example, if a person's life-story has been told by the person himself and not (also) by a third, objective party, the court must rate this information as being of relatively low quality, in light of the concern that that party had an interest in telling a story in a particular way in order to advance his interest in the case. This will also pertain if one of his relatives, or a person who testified in his favor, told the story, insofar as that person has a personal interest in the party winning his case. This will certainly be so with respect to information on the part of another party or a witness in the previous proceedings who had a counter-interest to that of the party, or who had suffered from him in the past, such as the party's ex-spouse: such information will be less valuable. A higher value will be attributed to similar information coming, for example, from an independent expert such as a psychologist or psychiatrist, teacher, principal etc.; a determination by the court in a previous proceeding as to the credibility of a person will be deemed high-quality information, and then there will naturally be more of a tendency to implement personalization. There are examples of this in legislation, such as in the cases of an admission by a party that can serve against him in the current case,[30] or the declaration of a deceased person against his economic interest.[31]

The more time that has elapsed since the previous proceedings, the greater the likelihood that that information is less current and less relevant. Thus, information about a person's resources a decade

[29] For a similar approach, see Galligan, 2003. Maimonides' approach to double and four- and five-fold payments for theft and robbery in Jewish law, which bring to mind the punitive damages in modern law, may be viewed as an approach, which is situated, from a substantive point of view, between the multiplier –the economic approach– and Sharkey's societal approach. See Sinai and Shmueli, 2019 [forthcoming].

[30] See, e.g., FED. R. EviD. 801(d)(2).

[31] See, e.g., FED. R. EviD. 804.

ago is very likely not to be current, and there may have been substantial changes since then. However, some information, which was correct many years ago, may still be considered relevant. Thus, it is possible that a person who was violent and impulsive a dozen years ago still retains those characteristics, at least if he did not undergo some type of therapeutic process. A person who committed some sort of fraud in the past, even in the distant past, as reflected in previous legal proceedings, may be assumed to be prone to act in a similar manner again more so than a person who did not do so. However, in principle, the tendency to personalize will decrease as the time lapse increases.

C. The Level of Harm

Personalization on the basis of IPD is liable to cause harm to one of the parties in the present case. If the information harms the plaintiff, the defendant may benefit from this, and vice versa. Therefore, before the court implements personalization in a particular case, it must examine the level of harm that will be caused thereby. For example, creation of a presumption in a proceeding for lifting the veil that a person mixed his personal assets with those of the company in the present case, because he had done so in the past, is liable to attribute to the shareholder huge company debts, even millions, and that outcome might be extreme. However, as mentioned above, it must be borne in mind that personalization does not necessarily have to be determinant in legal proceedings, but only to help the court to arrive at a decision. Hence, causation must be examined. Is the personalization the *sine qua non* of the legal result, for example, had the presumption not been made, would the veil probably not be lifted? If the answer is affirmative, this means that there is a direct causal connection between the personalization and the harm to the shareholder. However, if the court in any case inclined towards lifting the veil on the basis of other evidence it had in front of it, and the personalization was the last trigger, the causal connection between the harm and the personalization is significantly weak. Therefore, the greater the harm that is anticipated, the more significant will the considerations need to be in order to incline the scales in favor of personalization.

D. Breach of Privacy of the Information from Confidential Previous Proceedings

Prima facie, no problem of privacy arises in the use of IPD, for this is information from within the legal system that is used for the purpose of exercising discretion in order to make a new judicial decision in the present case. But sometimes, the consideration of privacy is relevant. Most of the decisions and the judgments are public and are available to the public. However, certain types of proceedings are conducted in camera (including family matters, sex-related crimes etc.), and publication of such proceedings is subject to restrictions. If the present legal proceeding is public, such that any decision in it may be published without restrictions, use of IPD from a previous case that was conducted in camera is liable to constitute a breach of the right to privacy, since the restrictions on publication in the previous case will thereby be removed de facto. For example, a person is being prosecuted for fraud and breach of trust. In his divorce proceedings several years earlier, it emerged that this person was deceitful, a liar, and manipulative. Apparently, information concerning these attributes is certainly relevant to the present case. However, use of information that emerged in family matters constitutes a breach of a person's right to privacy, since when the decisions in family matters are published, the names of the party usually remain confidential so that the information that appears in the decision cannot be connected to the relevant person. Therefore, in actual fact, a person enjoys confidentiality in all that is connected to information that is discussed in family matters. Use of previous information from that proceeding removes the curtain from that information and renders it public, if in the present proceedings that information is revealed both to the court and to the other party.

Therefore, publication of such information from previous proceedings constitutes a violation of a person's expectation that the information that was revealed about him will not reach others. Apart from the ethical and legal problem that arises here, a negative incentive is also liable to be created for the parties to reveal important information in proceedings that are not public. For example, the victims of sex crimes will be scared to reveal information for fear that it might be used against them in future. The feeling of freedom to say almost anything and the feeling of intimacy that characterize the courts for family affairs are also liable to suffer, and each of the parties is liable to choose his words very carefully for fear that what he says there may hurt him in future proceedings that are not confidential.

Therefore, the more that the use of IPD is liable to breach privacy and confidentiality, and is based on information from previous proceedings that are not public, the less inclination there will be to use that information for the purpose of personalization in the present case. One could suggest, apparently, that the court make use of such information but not reveal the source. But such lack of transparency is not "healthy"; it does not allow for

review of the decision, so that it is difficult to lodge an appeal without indicating this source, and it will be difficult for the appeals court to understand the sources underlying the decision.

E. The Type and Nature of the Proceeding

Before embarking on the use of IPD, the nature of the proceedings must be examined. Thus, a family law proceeding is usually characterized by extreme emotions. A commercial case, as opposed to this, will usually be colder, more rational and reasonable. Similarly, a civil case that deals, ultimately, with money or property is different in nature from a criminal case, the outcome of which is liable to be the deprivation of a person's liberty and the attachment of a negative social stigma to him. The nature of the process is also affected by the circumstances of the case. An action for medical malpractice against a family doctor who has attended the family for some two decades is different in nature to a case of a motor accident against a stranger. As such, the more that the type and nature of the earlier proceedings are similar to those of the present case, the greater will be the tendency to use IPD in order to implement a process of personalization.

F. Internal Logic of the Law and the Branch of Law

Implementation of personalization in a particular case must take into account the internal logic of the relevant law and branch of law. The process of personalization, which seeks to introduce a change into the existing law and tailor it to the specific individual, must consider the arena in which that law is operating, and ask whether the desired personalization indeed comports with the rationales and the principles upon which the said law is based. For example, use of IPD in order to award punitive damages in a torts case must take into account the goals of tort law and the conception that punitive damages constitute –even if only according to some opinions– a departure from the principle of *restitutio in integrum.* Similarly, adoption of presumptions in a proceeding for lifting the corporate veil on the basis of IPD must take into consideration the aims of corporate law, and the importance of the principle of the separate legal personality of the company. Therefore, to the extent that personalization is not compatible with the internal legal logic of the law and the branch of law, there will be less inclination to implement it.

G. Justice and Fairness

This is a blanket criterion, which grants the court wide discretion to examine the case from a wide, normative perspective. In the framework of this criterion, the court may look into the behavior of the other party, the ramifications of personalization on third parties; something which, for example, goes beyond the principles of Aristotelian corrective justice (Weinrih, 1987);[32] the conduct of that party since the inception of the present proceedings; meta-principles of the legal system, such as good faith and more. The importance of the criteria is due to the dynamics of life and the unique circumstances that may pertain to each and every case.

H. Policy Considerations

This, too, is a blanket criterion, but as opposed to the previous criterion, which focuses on the parties to the dispute and to the circles that are close to them, this criterion seeks to take a bird's- eye view of the case and to examine the broad implications of personalization, For example, is the judgment liable to promote or create social stigmas; how will use of IPD affect, from an institutional point of view, the relations between different courts (in a situation in which there may be an open or secret conflict between different courts (Perez, 2012, p. 97; Shmueli, 2013, p. 823); potential harm to society or the commercial market; is implementation of personalization in a particular case liable to lead to the courts being flooded with multiple similar actions or to a slippery slope etc.

V. THE TECHNIQUE AND THE PRACTICAL PROCEDURES

In the framework of this Article, which lays down a preliminary blue-print for the use of IPD, we cannot accurately chart the ways in which, in our opinion, the procedures for effecting that use should be fashioned. This question is undoubtedly significant, and requires in-depth treatment, in order to effectively realize both the goals of personalization and the goals of civil procedures. This Article, however, aspires to lay the foundation, for example, the preliminary, fundamental and theoretical conception, and does not presume to determine the final form of personalization in practice; particularly when this for, as opposed to the substance and the bare bones of the idea, must be influenced

[32] See, e.g., Weinrib, 1987, p. 407, explaining the notion of correlativity in the basis of the Aristotelian corrective justice and describing it as "immediate normative connection between what the defendant has done and what the plaintiff has suffered."

by the principles of the legal system that adopts personalization. Nevertheless, in this Part we will propose several alternatives, both with respect to the technical means for locating the information and bringing it before the court that is implementing personalization in the case before it, and with respect to the nature of the procedure of exposure of the information to the parties and transparency in relation to them.

A. The Proper Technical Means of Locating the Information and Submitting it to the Court Hearing the Concrete Case

Today, too, the process can be activated by the secretariat of the court delivering to each court hearing the case the list of earlier files in which the parties participated (as litigants or witnesses), as well as the list of cases in which each party participated alone, especially in recent years, possibly with the emphasis on cases from the same legal field and similar disputes. The court may, at its discretion, order the secretariat to hand over to it the files themselves, and it may read them and determine whether the documented information in the previous proceeding is also relevant at present. Thus, for example, in doing so it may examine whether earlier attempts at some kind of compromise were attempted in that earlier file, and what was the outcome of these attempts, in order that this information will be of help to the present court when it seeks to arrange a settlement between the parties or to freeze the proceedings and to send the parties to mediation. But this, of course, is a very cumbersome, costly process.

A simpler process may be considered. Each legal system will have to decide for itself, in accordance with the guiding principles of its system, the form of implementation that suits it with respect to the technique of locating the information and making it available to the judge in the current case. For example, one could suggest a computerized search of the protocols and the judgments in all the courts, so that for every case submitted to the court, there would be a cross- check between the names of all the parties and a key word that is relevant to the present case, for example, “compromise” or “mediation” in the above case. If there is indeed a correlation, the court will be informed and it will be able to follow the link and find those scanned files (the protocols and decisions) with relative ease.

An alternative possibility, which seems more efficient, is to issue an instruction that every file will be given a code from a list of codes. For example, a file in which there has been a successful attempt at compromise will be given a certain code, and a different code will be given to files in which there was an unsuccessful attempt at compromise, as a matter of routine. A case involving violence will be given a different code, and one in which there was false testimony – yet another. Each file may be given more than one code. The court or the secretariat that is conducting the search for the purpose of the new case will be able to cross-check the names of the litigants with those codes, thus obtaining similar results in a quicker, more efficient manner.

In addition to or instead of the above possibilities, this obligation could be imposed on the parties themselves; for example, a person who is a repeat player in the legal arena could be required to fill out a form or certain rubrics regarding those earlier proceedings. This could be a default requirement, or it could be a requirement in response to an explicit request of the court at any stage of the proceedings. On the one hand, it may be that from a technical point of view, it may be preferable to use Big Data that anyway exists in the system and is more reliable than depending on the parties to provide the information, but on the other hand, this alternative might have other advantages. For example, if the parties have to provide information regarding a former compromise or mediation only in response to a specific request of the court, this might hint to them and their attorneys that the possibility of sending them to a compromise proceeding is now being seriously considered by the court, because they are repeat players in the legal arena (although it must be said that judges who are interested in promoting compromise in many cases simply tell the parties so, either explicitly or implicitly). It is also clear that the information is usually very accessible to the parties themselves, although operating an efficient system of computer-based search tools and automatic content-analysis tools will supply the information quickly, easily and presumably at a reasonable cost.

B. The Proper Procedure for Exposing the Information to the Parties: Transparency vis-à- vis Costs

Each legal system will also have to decide for itself how and when the parties will be exposed to the information from previous legal proceedings used by the judge in the current case. One possibility, which is fairly restrictive, is that the parties will be exposed to use made by the judge of such information – if he indeed decided to make any such use – only in the framework of the decision or the final judgment. The judge will be required to note his reliance on that information, and the parties will not have an advance opportunity to relate to this information and its implications other than in the framework of an appeal. Should this possibility be adopted, the procedure will be more internal and

less monitored, which may be a disadvantage from the point of view of transparency, but it would appear to significantly reduce costs and the case will not be prolonged too much.

Another possibility, more expansive, a few versions of which will be presented, is to actually conduct a process of exposure, in which the judge will inform the parties in writing and explicitly of his use of certain IPD (he will indicate the citations of the cases to allow the parties to access the material themselves, if they have not already done so), and the parties will be able to address the material (in writing or orally, as will be determined), and if they do not react before a certain time set by the judge, this means that they do not object to the use in the way that it was done.

It would of course be possible to arrange a hearing, and not to settle for a written note. The judge will decide on use of the information after completion of this mini-process. It is possible to allow the decision to be appealed, like any decision that is not a final judgment, with the leave of the appeals tribunal, or such a possibility might be blocked, and an appeal allowed on the decision only in the framework of the judgment itself. The main advantages of this expansive possibility, with its various alternatives, are transparency (as exists when it is the litigant, rather than the judge, who brings the information), and giving the parties the opportunity and the right to have their say on the matter; the disadvantages are the high costs and prolongation of the legal proceeding.

It may be possible to sketch out interim and other possibilities, more expansive or more restrictive, including, for example, giving the judge discretion on the question of whether to expose the information which was used prior to the decision or judgment, and if he decided to expose that information –discretion as to whether to hold an oral discussion or to allow only written reactions etc.

Hence, the option that will be chosen in each legal system will derive from the degree of balance that was achieved between the different principles of that system, such as transparency as opposed to costs and prolongation of the proceedings.

VI. ADVANTAGES OF USE OF THE INFORMATION OBTAINED FROM PREVIOUS PROCEEDINGS OVER STATISTICAL INFORMATION FROM BIG DATA

Even though Porat and Strahilevitz's conclusion concerning preference, in many cases, for information obtained from Big Data over the general default rules (2014, pp. 1461-1463). seems convincing, it would appear that when there is the possibility of gathering even more accurate information, via IPD, about at least one of the parties and *a fortiori* about both parties, the aspiration should be to make use of IPD. Below several advantages to using IPD over use of statistical information from Big Data will be presented. Of course, these advantages may not necessarily be manifest in each and every case.

A. Accuracy

Statistical information is sometimes less accurate than IPD. One reason is that statistical information is not based on acquaintance with the concrete person whose matter is presently being heard. The information is based on a set of people with characteristics similar to that person, and unlike IPD, statistical information is blind to the personal traits of the person and his background. As such, it is IPD that can be much more accurate. However, it must be admitted that IPD, too, is based on a certain probability, and does not predict credibility absolutely, for several reasons.

First, people change and their life circumstances change. Second, even if a person and his life circumstances have not changed, there is still a speculative aspect in the attempt to make a decision about a person based on his characteristics or the circumstances of his life. For example, even if it is possible to learn from previous proceedings that a person is risk loving, this does not mean that this attribute will find expression in the present case. Third, there may be relevant information in the previous proceedings which is not direct and which must be mined from those proceedings by drawing conclusions and making assumptions.

While information that is connected to a person's financial situation is a dry statistic that does not require the drawing of conclusions, an attempt to sketch out a person's traits on the basis of previous proceedings requires assumptions to be made and conclusions drawn. For example, a person who refuses a settlement or a plea bargain in a previous proceeding is not necessarily risk loving or a contentious person. It may be that there were certain emotional circumstances or other motives that led to his earlier decision. Therefore, reliance on IPD is not devoid of speculation; however, it still would seem to be more accurate than reliance on statistical information.

Nevertheless, it must be admitted that it is sometimes possible to extract useful information about a person from Big Data also. For example, conclusions can be drawn from Big Data about the levels of risk-taking of a person from his tendency to im-

pulsiveness, or from his involvement in dangerous activities, or from his willingness to take risks in financial investments (Ben-Shahar and Porat, 2016, pp. 681-83). However, from IPD it is sometimes possible to learn about his risk-taking proclivity (which is concrete, and not based on statistics and analysis of mass data) from the impressions of the court in which earlier hearings were held, from the protocol of the session etc., and such information is liable to be more accurate, although there is nothing to prevent the two types of information from being used together where necessary.

B. Costs

Use of statistical information is usually more expensive than use of IPD. First, accessibility and availability involves costs. IPD is much more readily available and accessible than statistical information, certainly for the court itself, since the information is in the system. Second, the actual obtaining and processing of the information sometimes involve costs. Whereas IPD is available to the courts at no cost, statistical information – certainly if it is of high quality – will certainly have a cost. This is true both with respect to information that can be purchased from companies specializing in the mining and processing of information, and with respect to information that the authorities themselves may decide to gather and process.

C. Deterrence and Directing Behavior

Information from previous proceedings which is specific to a particular defendant and is not simply a collection of general statistics that applies to a set of defendants of his type may indicate serial behavior, which might impact both on evidentiary matters and on matters related to relief and sanctions. These sanctions imposed on serial tortfeasors will be more accurate and will combat the proclivity for taking risks, which cause harm to others. Such sanctions will also take into consideration previous conduct on the part of those who acted in a serial manner in the past and they have been through at least one earlier legal proceedings and have not sufficiently internalized their liability. Possible examples for that are a driver who has committed many driving offenses, and neither revocation of license nor multiple fines have succeeded in changing his ways, or a company who has received multiple fines due to non-compliance with certain regulatory requirements and still continues to act in the same manner

D. Inequality and Breach of Autonomy

Distinctions that are based on predictive stereotypes breach the autonomy of the individuals so distinguished, in that they do not allow for an examination of the personal attributes of each individual. Rather, they saddle together certain attributes of individuals, or assume that they characterize certain individuals simply by virtue of their attribution to a particular group, thereby harming the right of each such individual to equality *vis-à-vis* others against who are not subjected to similar treatment (Moreau, 2004, pp. 291, 299, 302; Réaume, 2003, pp. 645, 673).

This is very typical of generalization on the basis of discrimination, such as religion, race, sex, and sexual orientation, for example, the screening policy of the policy of the border police which is not random but which focuses on external appearance or origin, and tries to focus mainly on groups that have a higher crime rate, such as Afro-Americans or Hispanics in the United States (Floyd v. City of New York, 2013).[33] Use of IPD with respect to that particular individual does not breach his autonomy, since it relies entirely on his own biography, on his unique attributes and on his circumstances.

Sometimes, drawing conclusions from a person's earlier actions can also constitute lack of equal treatment and a violation of autonomy, since it involves a certain disregard for his changing circumstances, and for the fact that a person can change his ways. However, even if there is harm in the use of IPD, it is certainly less serious than the harm caused by use of statistical data.

E. Breach of Privacy

Whereas the gathering of statistic information often involves a breach of privacy, IPD is public in most cases, as discussed above. Thus, the gathering of statistical information is often not done openly, but rather, indirectly, and the person is therefore not aware that information is being gathered concerning him. For example, many applications, sites, search engines etc. gather information about users. Even if those users gave permission to that entity to gather information about them, both directly and implicitly by virtue of the actual use, they are often not aware of all the consequences of giving their permission, including the extent of information that is mined and the entities to which that information will be sold. Most

[33] Floyd v. City of New York, 2013 WL 5225319 (S.D.N.Y. Aug. 12, 2013) (NO. 08 CIV. 1034 SAS, 12 CIV. 2274 SAS).

of the statistical information is gathered by giant hi-tech firms, including Google, Facebook, Yahoo and Amazon, which collect, store and sell information about users to anyone who is prepared to pay. These companies collect enormous amounts of information about users and they analyze it creating for themselves unprecedented data banks which sometimes even the government does not have. Awareness of the serious harm that this conduct causes to the privacy of users has recently appeared on the international agenda, and has found expression in regulation and fines.[34] In our context, use of statistical data by the legal system is particularly problematic. As mentioned above, gathering of statistical information involves a significant and ongoing breach of the right to privacy. Obviously, the legal system may not use statistical information while ignoring the manner in which the information was obtained.

VII. RESPONSE TO POSSIBLE DIFFICULTIES

A. The Problem of Using Personal Information from Data Bases

At first glance, there would appear to be certain risks, primarily a concern about invasion of privacy, in setting up databases and using personal information that exists in these bases (Porat and Strahilevitz, 2014, pp. 1467-1469). At the same time, in our context this would not seem to be particularly problematic, in light of the fact that use is being made of existing legal information, which is internal information from within the legal system, and not external information.

Information such as this is not in any way meant to reach the public or anyone else outside the legal system, for this information is intended only for the judges for the purpose of deciding which steps to take in the case before them, and such information is anyway available to them in that they are part of the system. It would also appear that litigants have no expectations that judges will not make use of such information. As stated above, there is a particular problem with IPD from confidential proceedings. However, the courts know that a file that they are given to read is confidential; this is information that already exists and they will have to limit themselves, insofar as possible, in their use of such information in the non-confidential proceedings that are presently taking place. This does not mean that they may not make any use of the information, but they may need to cover their tracks, although, as mentioned above, that may create a problem of transparency with respect to the parties and *vis-à-vis* the appeals court.

B. Departure from the Principle of the Exclusion of Previous Acts of the Parties

Above, the issue was raised of the departure of the proposal underlying this Article from the general, traditional principle in the laws of evidence,

[34] Below are several recent examples: In July 2017, the Italian authorities announced that they had imposed a fine of 3 million euros on WhatsApp, because it had shared information about its users with Facebook (which acquired it in 2014). According to the announcement, WhatsApp forced its users to share their information with Facebook *de facto*, and therefore the fine was imposed. See http://www.agcm.it/en/newsroom/press-releases/2380- whatsapp-fined-for-3-million-euro-for-having-forced-its-users-to-share-their-personal-data-with-facebook.html; in October 2016, the Privacy Commission in the European Union remanded that Whatsapp stop sharing its information about its users with Facebook. The Privacy Commission expressed concern about Facebook's intention to use the data concerning WhatsApp's users, and called upon the companies to refrain from doing so, until they could prove that this was legal. See http://ec.europa.eu/justice/data-protection/article-29/press-material/press- release/art29_press_material/2016/20161028_wp29_press_release_yahoo_whatsapp_ enforcement_en.pdf.

In October 2016, the representative of Protection of Privacy and Freedom of Information in Hamburg, Johannes Kasper, announced that he had issued an administrative order against these companies that prohibited them from sharing information between them concerning German citizens, and requiring them to immediately erase any information that had already been gathered in the process of cross-checking lists of contacts of the WhatsApp users with their information on Facebook.

See: https://www.datenschutz- hamburg.de/fileadmin/user_upload/documents/Press_Release_20160927_Adminstrative_Order_Facebook_WhatsApp.pdf.

On April 25, 2017, the decision was approved by the court in Hamburg, which upheld the decision. See https://www.datenschutz-hamburg.de/fileadmin/user_upload/documents/Press_Release_2017-04- 25_Facebook_and_WhatsApp.pdf.pdf.

The giant hi-tech corporations indeed receive most of the media and public attention, but beginning in May 2018, a revolution in the protection of privacy in the European Union will be launched, and it is expected to affect every company that stores or purchases information. As of that time, new regulations for the protection of privacy in the European Union will come into force: See: Regulation (EU) 2016/679 of the European parliament on the protection of natural persons with regard to the processing of personal data and on the free movement of such data Directive (General Data Protection Regulation). The GDPR (General Data Protection Regulation) is a new law of the European Union that lays down limitations and rules for the protection of privacy and information security. The GDPR is ex-territorial, intended to apply to every company that gathers and manages personal information while providing services or goods to the European market. It also applies to companies that create behavioral profiles for residents of the European Union. This law reflects the increasing world- wide concern about the threat of technology and the internet to the right to privacy.

whereby information from past events in a person's life is not to be considered in the framework of the present case or, in other words, the principle that reference to previous acts of the parties is excluded. Now, after a relatively extensive discussion of the thesis of the Article and the examples from different areas of law, as well as presentation of the criteria for application of the thesis, the time has come to deal with the need for this departure. Let us begin by saying that the benefits presented by personalization in general, and the proposal to use IPD in particular, are many, and they outweigh the possible disadvantages entailed by use of IPD, which apparently underlie that principle prohibiting reference to earlier such acts, thus justifying the departure. But we will say even more than this.

First, the principle from which there was –at least *prima facie*– a departure in this Article will be examined.

1. The principle of exclusion of reference to previous acts: Applications, rationales and exceptions

The principle that excludes reference to previous acts may be applied both in civil law and in criminal law,[35] or alternatively, only in criminal law.[36] The principle may relate both to positive information about the party and to negative information, for example, information that may incriminate him or affect his chances of winning (United States v. Curtin, 2007),[37] or alternatively, only to negative information (Acorn, 1991, p. 63). In addition, the principle may apply only to one of the parties (in civil law, to one of the parties, and in criminal law, only to the defendant), or it may also apply to the victim of the crime and even to the witnesses.[38]

The basis for applying this principle does not derive from a lack of relevance of the previous information with respect to the subject's personality. On the contrary: such information might be very persuasive (State v. Rodriguez, 2008).[39] However, there is a concern that for this very reason, that even unwittingly, significant weight may be attributed to that information, such that a stigma will attach to that person, depriving him of a decent opportunity to defend himself (Old Chief v. United States, 1997).[40] Additional reasons for applying the prohibition have been mentioned in the case law and in the literature. Thus, the concern was raised of wasting judicial time, for dealing with previous information is liable to develop into a type of "mini-trial", in which it will be necessary to hear additional witnesses simply to establish whether that information is correct and relevant for the present case (Huddleston v. United States, 1988).[41] On the normative plane, it has been explained that learning from earlier cases may constitute a breach of autonomy, since it is based on the assumption that a person does not change.[42] On the inferential-logical plane, the assumption that past experience is a tool for predicting the future is based on inductive inference. Often, in order to attribute to previous information about a person weight in the present case, the inference from the evidence must make sweeping generalizations, such as: "Anyone who acted in a certain way in the past continues and will continue (or at least, tends to continue) to do so in future", or "anyone who committed a criminal act in the past will tend

35 According to the Federal law, it applies in principle in both areas. See FED. R. EvID. 403 and 404. For a discussion see: Lathram and Nelson, 2014, p. 151; Huddleston v. United States, 485 U.S. 681, 685 (1988), in which it was mentioned, as obiter, that Rule 404(b), which provides that information about a person's previous actions cannot be used to learn about his personality, for the purposes of the current case "applies in both civil and criminal cases"; Agushi v. Duerr, 196 F.3d 754, 760 (7th Cir. 1999) ("Neither the plain language of Rule 404(b) ('a person'), nor any other consideration, suggests that a court should distinguish between the criminal and civil contexts when determining the admissibility of [other acts] evidence.") .See, generally, also Porto, 2001, p. 483.

36 See, e.g., Tenn. Code Ann. § 24-7-125 (West 2014).

37 United States v. Curtin, 489 F.3d 935, 943 n.3 (9th Cir. 2007).

38 For example, in Tennessee this principle applies not only to the parties, but to each person related to the case, including victims and witnesses. See Tenn. Code Ann. § 24-7-125 (West 2014). This is also the case in the Federal law. See FED. R. EviD. 404(b) (1). See also Wynne v. Renico, 606 F.3d 867, 871 (6th Cir. 2010) ("Federal Rule 404(b) applies to all propensity evidence, whether used to show that the defendant or another individual acted in conformity with their prior misconduct."). For discussion, see Lathram and Nelson, 2014, p. 15.

39 State v. Rodriguez, 254 S.W.3d 361, 375 (Tenn. 2008); Lathram and Nelson, 2014, p. 152.

40 Old Chief v. United States, 519 U.S. 172, 181 (1997); Lathram and Nelson, 2014, p. 152.

41 Huddleston v. United States, 485 U.S. 681, 689 (1988); Lathram and Nelson, 2014, p. 154.

42 For arguments concerning the importance of the principle of individual autonomy, see, generally: Hart and Honoré 1985, p. 136; Raz, 1986, p. 369: "The ruling idea behind the ideal of personal autonomy is that people should make their own lives. The autonomous person is a (part) author of his own life. The ideal of personal autonomy is the vision of people controlling, to some degree, their own destiny, fashioning it through successive decisions throughout their lives." For a link between the importance of preserving individual autonomy with the prohibition on reference to previous acts, see: Menashe, 1997, p. 115 (n. 26).

to continue along that road in the future as well." These generalizations are extremely problematic from an inferential point of view (Menashe, 1997, p. 115, referring to Cohen, 1977, pp. 199-202).

However, this principle is not absolute, and there are cases in which the law permits reference to previous information about a person. Thus, the Federal Law states as follows: "[Crimes, wrongs, or other acts] may be admissible for another purpose, such as proving motive, opportunity, intent, preparation, plan, knowledge, identity, absence of mistake, or lack of accident".[43]

According to another principle: The court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.[44]

In relation to the above, the case law ruled as follows:
Thus, a federal district court, when considering an offer of "other acts" evidence for a non-propensity purpose, must: (1) require the proponent of the evidence to identify the specific non-propensity purpose for which the evidence is being offered; (2) determine whether the purpose identified by the proponent is material-that is, "in issue" in the case; and, finally, (3) if the court finds that the identified purpose is material, determine whether the probative value of the evidence is substantially outweighed by the danger of unfair prejudice or one of the other risks identified in Federal Rule 403 (United States v. Merriweather, 1996).[45]

Thus, for example, use of information from previous criminal proceedings is allowed in the framework of an action in tort (Hamilton v. District of Columbia, 1994).[46] In particular, it is common to allow use of previous information in order to prove the existence of a *modus operandi* that emerges from previous acts (Wigmore, 1940).[47] In most cases, this practice is invoked in criminal law, but there are legal systems which permit the use of the exception for *modus operandi* for civil cases as well, for example, regarding the forgery of checks etc. (Kedmi, 2009, pp. 720-723; which affirms that in Israel, the law is that evidence of a system is admissible in civil law too, in certain circumstances).

2. Why is it preferable to depart from the principle for the purpose of using data about previous proceedings? A response to possible concerns

In our context, the Article is indeed based on the use of previous information, and therefore, apparently, it is not consistent with the principle according to which information about previous acts cannot be brought as evidence in the present case. However, this inconsistency is not absolute.

First, we saw that in different legal systems, evidence may be brought about previous actions of the parties, but there are condition and reservations. The purpose of this Article is not to discuss the question of bringing evidence of the type of previous acts. Given that there are situations in which this is possible, the Article issues a call to allow not only the parties to use such information but, in suitable cases, to give the judge the opportunity to use IPD, subject to those and other reservations. As opposed to the aim of the party who is using that information –which is to try to prove something, usually negative, about his adversary– the aim here is different, as explained in this Article.

The information might be relevant to both the parties or to only one of them; it might be negative or positive, or it may be neutral in the sense that it attempts to predict a general state of mind, such as willingness to compromise, and other matters that are not included in that principle the excludes reference to previous acts. At the same time, there is no doubt that we are not remaining necessarily within the confines of the exceptions to the principle prohibiting the parties from referring to previous acts, for it is possible that personalization deviates from this and applies to different kinds of information that tell us about the person, his personality or character; it is not certain that all will agree that this information is sufficiently relevant

[43] FED. R. EvID. 404 (b) (2).

[44] FED. R. EvID. 403.

[45] United States v. Merriweather, 78 F.3d 1070, 1076-77 (6th Cir. 1996). See also: United States v. Feagan, 472 F. App'x 382, 388-89 (6th Cir. 2012); Lathram and Nelson, 2014, p. 154.

[46] Hamilton v. District of Columbia, 152 F.R.D. 426 (D.D.C. 1994); Hensley v. Harbin, 782 S.W. 2d 480 (Tenn. Ct. App. 1989); Hall v. Stewart (Tenn. Ct. App. 31.1.2007) 2007 WL 258406.

[47] A classic example of this is the permit, in the case of murder, to use previous information to prove the commission of serial murder. See Makin v. Attorney General for New South Wales [1894] A.C. 57 (H. L.).

according to the exceptions to the prohibition (at least on the parties) to bring evidence about previous acts.

Similarly, the novelty in our Article lies in the implementation of personalization as a default position. In other words, it must be the rule, as opposed to the prevailing law on the parties bringing evidence about previous acts, whereby the prohibition is the rule, and the reservations are the exception. The novelty is also in the possibility of changing the law in suitable cases (alongside the less novel option, of more accurate application of the law, as part of a more correct mechanism of judicial decision making in evidence-based cases). This is the very lifeblood of personalization.

Secondly, even if we were to envisage a system of law that does not permit the parties themselves to bring evidence about previous acts (even not with some restrictions and qualifications), there is no doubt that the Article's proposal regarding personalization, alongside similar and earlier proposals on this matter, is not necessarily consistent with certain fundamental legal principles. It is only natural that such a proposal necessitates the re-examination of many principles, even of the kind that have prevailed for many years.

Needless to say, this Article does not seek to provide definitive answers to the many, varied and difficult questions that arise from the proposal to introduce personalization on the basis of IPD. It aspires to broaden, even if only a little, the path of personalization that is being paved of late. As such, even though the proposal in the article may not be entirely consistent with the principle whereby information from previous proceedings may not be used in a current case, this is not fatal to the proposal. On the contrary, this difficulty ought to constitute an invitation to engage in additional discussion and research of the question of personalization. Moreover, and in actual fact, as we have seen, this Article joins other calls of scholars to engage in personalization of the law. These calls, too, seek to rely on information about the person and thereby to characterize him.

As we saw above, to the extent that the argument concerning the need for personalization is accepted, it is preferable to base it on previous information rather than on statistical data. However, as stated, in any case there are exceptions to the principle prohibiting reference to previous acts, and it would appear that this prohibition has not necessarily been breached by the proposal in this Article. Indeed, we have already seen that this principle is not absolute, and its application in different circumstances and different cases fluctuates between a restrictive approach and an expansive one. As such, even the advocates of the expansive approach to the principle, and certainly according to the advocates of the restrictive approach, there are cases in which use can be made of previous information. Therefore, the scope of the disagreement shrinks.

Our intention is not necessarily, as stated, to restrict our proposal to cases in which, traditionally, there has been recognition of exceptions to the principle excluding use of information about past acts, for it is possible that personalization deviates from this and applies, as we have said, to different types of information that tell us about the person. However, even if we were to restrict our proposal to apply to such exceptions only, our proposal would in effect highlight a particularly efficient and practical possibility of extracting such acts from IPD, as compared to Big Data or other possible means of extracting such information.

Thirdly, we saw that the case law and the literature sometimes differentiated between positive and negative information, and between information about one or another party. In this sense, our proposal does not seek to use information only to the detriment of a certain party in general, and to the detriment of the defendant or the accused in particular. Accordingly, it aspires to be symmetrical, in the sense that if IPD exists about both litigants – well and good; but if such information does not exist, and there is only information about legal proceedings in which each party appeared separately, and not against the other party in the current case, use will be made of this information too. Even if there is information about one party only, it will be possible to make cautious use of it, despite the lack of symmetry in the current case, on the understanding that from a general perspective, this is not a lack of symmetry, but symmetry in many cases and lack of symmetry in others: in general, however, it does not seem that a distortion will be created in favor of or against certain parties – plaintiffs or defendants. The rationale of providing a basis for better, more efficient judicial decision making must suffice in order to accept the exceptions to the principle (as discussed in the above literature and case law).

Fourth, although in our opinion, the existence of reservations to the principle of excluding reference to previous acts allows for easier acceptance of our proposal, even were it not so, we believe that the rationales for not using information from previous proceedings are less significant in the context of the proposal in this Article. With respect to the concern about stigma and bias, Porat and Strahilevitz, too, discussed general difficulties

in relation to predicting behavior, including concerns that the use of statistical data will create stereotypes by attributing traits to people that do not necessarily characterize them.[48] Prima facie, in our case too there is a concern that a judge who receives IPD, might stigmatize any of the litigants in some way or another, and if information about one litigant exists and no such information exists about another litigant, the result may sometimes be bias and a distorted attitude towards each litigant, one way or another. Such stigma or distortion might be an impediment to objective decision-making, appropriate for the case at hand, on the part of the judge.

According to Porat and Strahilevitz, the stereotypes will persist, but it is possible that the proxy in the use of statistical data is better than in the use of other means.[49] In our case this concern does exist, but one must rely on the judges that prior information concerning earlier litigation, intended only to help direct their discretion, which remains totally independent, will not make them less objective, but will truly provide them with additional tools that can save costs and help them be more accurate in their decisions; that is the goal. In addition, a stigma might be generated by many other parameters. In other cases, too, such as exposure of one of the parties in the media prior to the litigation, we rely on the professionalism of the judges and on their ability not to let this exposure influence their decisions *vis-à-vis* that party.

It must be recalled that these types of concerns have arisen and still arise in relation to courts that deal with disputes involving repeat players, such as family courts. In quite a number of states the world over, an understanding exists that it is better to appoint one permanent judge for disputes between the same parties –"one family, one judge"– at least in family disputes (Shdaimah and Summers, 2013). Alongside the apparent concern of stigmatization that the particular judge may develop towards one of the parties, at least, or even towards them both as a result of those earlier proceedings, there are many advantages in the fact that the judge who knows the family and its various disputes will also hear the new case from a wide perspective.[50]

Nevertheless, it must be admitted that in a jury system, there may be more of a problem of bias and prejudice than in a system in which there is no jury. Here it will be necessary to examine the overall advantages of the proposal as against that concern, and the solution for this may be to emphasize these things in the judge's initial instructions to the jury. Another solution, which may be less desirable, would be to say that in systems in which there is a jury, there will be less of a tendency to use IPD, due to the concern about those biases and prejudices and the possibility of abuse, of that information in order to procure the outcome that is preferable from the point of view of the jury, which may be very harmful to a particular litigant, without the balance that the court is able to achieve in a much better way. A more balanced interim solution would be that in a system with a jury, only the court will carry out the personalization. Thus, only the judge will be exposed to IPD, and if it is a matter of applying a special law to a specific party, the judge will inform the jury of this an instruct them accordingly.

With respect to the concern that was raised about wasting judicial time as a result of the holding of a "mini-trial", this concern would appear to be less relevant in our context, since the personalization will be based, at least in major part, on *judicial* decisions from previous proceedings. In other words, the IPD will be based mainly on information that underwent judicial examination by a professional judge, who decided that the information is indeed reliable. Indeed, the judge in the current case is always expected to re-examine the information from the previous proceedings, but in view of the aforesaid, there will be a presumption whereby the information can be used. As stated above, each system of law will decide whether the judge is obliged – or possible only permitted – to conduct a mini-hearing on the IPD, or whether the parties will first learn about use of this information at the

48 Porat and Strahilevitz, 2014, pp. 1461-63.

49 "It is beyond the scope of this Article to discuss the pros and cons of using statistical data for allocating rights and duties and for law enforcement. We note, however, that any default rule, impersonal or personalized, is statistical in nature because it assigns rights and duties to individuals according to the averaged preferences of an entire population or a subset of people. Personalized default rules are just a better proxy –based on more accurate statistics– for the preferences of the specific party. Therefore, the objection to our proposal is not that it uses statistical data as such –this kind of data should be used regardless of the type of default rule– but instead that it creates undesirable stereotypes." (Porat and Strahilevitz, 2014, pp.1461-62).

50 It would be possible to expand this course of action and to propose that if the two parties who are presently litigating (not necessarily in family matters), and possibly even one of them, litigated in front of a particular judge in that same court, even if only in recent years, that this time too, the matter will be brought before the same judge. However, this is a more far-reaching proposal requiring further study in other frameworks.

stage of the judgment itself, and at most will be able to appeal this use in the framework of an appeal on the judgment.[51]

With respect to the concern raised about a breach of autonomy and the argument about the inferential-logical difficulty, we would mention that at the heart of the Article lies a double call. The first call is for personalization on the basis of IPD. This means that the previous information will not affect the judge's decision, but rather, the law that applies to that party. The previous information will not prevent that party from proving that the law is on her side (and she will also be able to object to the use of the information in the framework of that mini-hearing, if that legal system decides that such a hearing be held), and there is no type of "double punishment" here that drags up former acts and inserts them into the new case. All that is required of the party is to prove her arguments, but in the framework of the law that was tailored to her. True, the procedural and evidentiary law directly impacts the substantive law, and therefore, the law that applies is certainly liable also to impact the substantive decision and the ability of the party to prove her case. However, this impact is only indirect. Moreover, the way in which IPD is used is a matter for the discretion of the judge.

The criteria that were proposed in this Article are intended to give direction to the judge's discretion, so that use of the previous information will be as cautious and accurate as possible. If we were to join these two arguments together, it would be possible to conclude that the assumption whereby it is possible to predict future events on the basis of past events has a relatively marginal effect, since personalization on the basis of IPD does not seek to use previous information for the purpose of ruling in the current case, and because of the fact that the judge has discretion as to how the previous information is to be used. Since the concern about breach of autonomy and the argument concerning logical inference both rely on opposition to the assumption that it is possible to predict future events on the basis of past events, the conclusion that the effect of the starting assumption is restricted in the case of personalization also extends, in any case, to these concerns. Furthermore, as stated, our proposal is also relevant for positive information, as well as negative information; it is symmetrical, and it also applies to matters that seek to examine efficiency and economy, such as willingness to reach a compromise, which are not necessarily positive or negative matters with respect to a party.

The second call in the Article is to apply the law using IPD. The argument concerning autonomy is in any case less relevant with respect to this call. This is because personalization on the basis of IPD is based less on the assumption that past events can predict future events, as opposed to the regular use made of IPD. The de facto meaning of application of the law using IPD is perfectly parallel to the present use, and in this Article, all that we did in this context was to call for this to be applied in a more efficient and successful way through the use of IPD. As such, if the argument is based on the use of previous information being less problematic for the purpose of personalization, it is less relevant in relation to the call of the Article to apply the law using IPD.

The matter of prediction is also apparently difficult from the technical aspect of concern about unsuccessful ability to predict, and not only form the substantive aspect of breach of autonomy. Does not a person undergo changes in his life? Is it really possible to predict, on the basis of his past actions, how he will act in a later case?[52] The logical inference has already been discussed. Here we will add a number of relevant points. Ben-Shahar and Porat explain that in certain cases, past behavior of the

[51] It must also be recalled that, in various cases, the law allows reference to previous legal proceedings even for the purpose of transference of the substantive law. For example, the arrangements that allow for use of findings and conclusions from a criminal judgment for the purpose of the civil action, for the sake of efficiency and saving costs, and use of evidence that was proved beyond a reasonable doubt in a case in which the evidence needs only to be proved according to the preponderance of evidence (e.g., Dickman, 2009, p. 1687; Morse, 1986, p. 526). It is not our intention here to recommend the use of findings and conclusions from one case in another, of course. The goals are significantly more modest, and it would therefore seem that surely there should be no flaw in this process.

[52] Porat and Strahilevitz (2014, pp. 1469-1470) mention another general difficulty in predicting behavior, with respect to the dynamic nature of human beings and the possibility of changes –even drastic changes in human characteristics, which could be problematic with respect to use of the information. They explain that the personalization of the rules, as they propose, should be based on the characteristics and values of a person, which tend to be stable after a person reaches maturity, and are connected also to genetics, and moreover, Big Data will also help to track these changes. They add that "[w]e think that most choices about default rules are partially driven by values and personality characteristics, which longitudinal research shows to be quite stable once a person reaches adulthood. Personality seems to have a strong genetic component and be heritable. That said, we recognize that people sometimes change in ways that might cause them to want wholesale revisions in their preferences. We therefore want to underscore that personalization is itself a default rule that can be waived."

parties is indeed not a good index for predicting future behavior, but sometimes it is, and they try to draw the borderline between the different cases.[53] This difficulty is also relevant to IPD, for example, about behavior – as distinct from facts (such as the defendant being a serial tortfeasor) such as violence, fraud and forgery, acts based on lifting the corporate veil, and also the willingness of the parties to negotiate a compromise inside or outside the courtroom.

For example, even if a person was violent or committed fraud, and this was reflected in the previous proceedings, it does not mean that he was violent or committed fraud in the present case. Similarly, even if compromise was reached in the earlier case, a similar outcome may not be reached in the present case. Furthermore, and specifically in relation to compromise, the argument that if in the past, some kind of compromise ended the dispute and these two parties have nevertheless turned up again in court and have not resolved the dispute between them this time in general, or by means of compromise prior to reaching the court in particular (on the assumption that there is no legislation requiring this), it is not at all clear that the same path can be embarked upon once more.

Moreover, there are compromises that fail due to the character of the parties (such as a growing proclivity for concessions and compromise, or stubbornness). This is something that is very suited for the purpose of prediction in future cases, whereas there are compromises that fail due to the nature of the dispute and the reason for it, or even due to the difficult nature of the person whom they are facing and his ability to create antagonism, and this is something that changes from case to case. Furthermore, it is not always possible to discern, from the documentation of the compromise or the mediation (for example, from a mediation agreement) the factors underlying the success or failure of the process, and the emotional elements motivating the parties and that sometimes lie just below the surface.

If one connects this to the previous difficulty raised by Porat and Strahilevitz, in the present case it will be difficult to track the changes in character traits and even in the prosperity of the party, for the behavior in the earlier case, and his general situation, were perpetuated there, and there is no documentation of any changes that occurred in the meantime. As mentioned above, for this reason recent information is to be preferred, but even such information is liable to be insufficiently updated.

Even if it is not possible to ignore these difficulties, the use of IPD about the character of the parties only, or only when the entire range of data exists (for example, when beyond the mediation agreement itself, there is also documentation about the wishes of the parties, the steps that were taken on the road to the mediation agreement, motives and so forth) is not necessarily to be recommended. It must be borne in mind that the basic argument is not that the IPD predicts a 100% chance that in the present case, too, the course of action will succeed and there will be no change in the conduct. The argument points out that the IPD should be considered for the purpose of helping and as a tool for understanding the present case for the purpose of the possible substantive evidentiary, procedural, or relief-related ramification. For example, with respect to compromise, this is a type of attempt at predicting, at most, the extent of willingness of the parties to reach some kind of compromise in the present case, *vis-à-vis* cases in which no such data is available.

These relatively better chances signal to the court that it is worthwhile for it to use its discretion and try to propose an external compromise to the parties (ADR), under its supervision, or an

[53] "We distinguish between similar past behaviors and different past behaviors. Similar past behaviors can often be a good proxy for the defendant's abilities and tendencies regarding risk creation and precaution taking. Thus, a driver's record of traffic violations could be used to personalize her standard of care. Information about a doctor's past malpractice behavior might also be used by the court in personalizing the standard of care. On many occasions, this kind of information is available through official records. More problematic is the usage of information about different past behaviors of the defendant and learning from these about her capabilities as a potential wrongdoer. As we have explained, in the era of Big Data it is no longer difficult to collect information about the defendant's past behavior as a consumer, driver, employee, patient, student, and in many other capacities. As we have demonstrated, this past behavior might be associated with specific capabilities and traits which are relevant to the process of personalizing the standard of care. Using past behavior as a predictor of risk and as a factor in determining the optimal precaution is a hallmark of insurance actuarialism –a practice known as experience rating. Every driver is familiar with the increase in insurance premium after an accident. This technique –personalizing the premium charged to each policyholder based on past behavior – is founded on the same tailored-treatment logic as personalized standards of care. In the insurance context, the use of Big Data and high- intensity information models is their bread and butter. Auto insurers, for example, invite policyholders to install data recording devices in their cars, which transmit information to insurers about driving habits, risk taking, and the competence of the driver – information that is then factored into the personalized pricing of the auto insurance policy. While courts cannot base judgments on similarly installed recorders of conduct, they can tap into any available resource of personal information to observe past behavior and adjust the standard accordingly" (Ben-Shahar and Porat, 2016, pp. 684-685).

internal compromise that it conducts, whereas in other cases it is a pity to invest time and energy in a course of action whose outcome is doomed in advance or, at least, when the chances of success are low. That is all. Clearly, too, if the court decides to invest time and energy (for example, at the pre-trial stage) even though the IPD does not predict good chances of success for the course of action, or there is no relevant information, the course might succeed. In the cost- benefit analysis this is sometimes of great benefit, even if only from the point of view of the economic efficiency of the savings in legal costs.

Nevertheless, we might not want judges to invest considerable effort in each case in pushing the parties towards compromise, not only due to concern about the waste of judicial time, but also because a person of weak character who is very respectful of the judge –and often this is the weaker party to the litigation– is liable to concede too much and to succumb to pressure. Neither would be want a person's violent past to accompany him, in civil cases as well, throughout his life and to unfairly affect all future proceedings concerning him, or that a cheat could not be reformed. A good deal of caution is therefore required in every case, and the IPD (or absence thereof) must serve as an ancillary tool only, accompanied by the knowledge that not only the circumstances may have changed, but also the nature and characteristics of the parties. It is also clear that it will be possible to integrate IPD with the information received from Big Data, if Porat and Strahilevitz' approach is adopted. It will then be easier to track any changes in characteristics and in the financial situation etc., as well as to use data from previous cases in order to make more accurate predictions by cross-checking the two types of information.

C. Concern about Inequality

Apparently, in certain cases use of IPD is relevant only to repeat players in a legal proceeding, who litigated against each other, or at most, against others, as in the case of compromise, if in relation to each of them there was an attempt at compromise in the past, even not with others, and thus making it possible to examine their willingness on principle to compromise in the current case as well. When such information exists only in relation to one of the parties, and the other party has not engaged in litigation in the past, or has engaged in litigation but has not been engaged in an attempt at mediation (as opposed to having been engaged in failed mediation), it is even more difficult to predict and to say what the preferences of both parties will be in the specific case. This is not the case when it is claimed only against the defendant in a particular case that he forged or acted violently, which clearly is irrelevant to the plaintiff.

Moreover, if there is no IPD at all relating to any of the parties, or if there is very little, old or insufficient information, the treatment of these parties will be objective without recourse to IPD, as opposed to treatment of the parties in relation to whom information exists: the result will apparently be harmful to the principle of equality in all cases (and not only in relation to compromise).

However, here too it must be borne in mind that at most, such information seeks to provide the court with tools for evaluating, and does not require the court to adopt any particular course, and certainly not to decide according to that information. In the case of compromise, the value of the information lies in the fact that it provides the judge with an additional perspective on whether it is worthwhile suggesting to the parties to engage in some type of track leading to compromise; the court does not force this on the parties.

Therefore, such information is liable to have value even if it is known that only one of the parties to the present case, when he litigated in the past even against a different party (possibly in a similar case from the point view of the substantive legal discussion) was prepared to compromise or mediate. Here too, there will be a greater chance of evaluating the success of an attempt to embark on a compromise course in the present case, backed by knowledge of great willingness of that party to embark on such a course or of adamant refusal to do so in the past. Even though the evaluation may be inferior to a case in which both parties to the present litigation participated in the earlier litigation, it is still better than having no prior information at all.

It is also clear that the types of other information that exists about the parties, such as information from the media, are not equal, but this still may not be regarded as breach of the right of equality.

When no information exists about any of the parties, they will not necessarily be harmed, for the court has less information for the purpose of evaluation, but this means that it has no prior "positive" information about either party, nor does it have "negative" information. Such a situation would seem to be preferable, in any case – at least to the supporters of personalization – to a situation in which all the legal rules are objective and are not at all tailored to the parties. This situation would also seem to be no less preferable than information that is received only from Big Data, for there will not necessarily be Big Data that is suitable for

each player in the legal proceeding. For example, if the information is received from use of the social media, and a player in the legal proceeding does not use these networks, this would apparently be a breach of equality.

D. Concern about Abuse by One Party of Information Regarding the Other Party

Sometimes, the IPD from earlier proceedings is open to the other party as well, and he has access to it, for example, through legal data banks and even through a simple internet search. Therefore, the potential exists for an attempt to abuse this information, possibly even prior to bringing the action. Thus, for example, if a person knows that someone who spoke badly of him was sued in the past for libel involving similar statements, this will spur the potential victim to bring an action and to refer the judge to the existing information, knowing that the judge may certainly rely on such information. Similarly, parties will pressure the courts to determine that the other parties are not credible etc.

However, even today it is possible to manipulate such existing information. Moreover, it must be recalled that this is only a tool, and it is to be hoped and believed that the courts will withstand the pressure and will identify when such claims of the opposing parties are merely provocative. Moreover, it will not always be bad for the parties to bring the court's attention to the existence of such information about other parties. By doing so they might be useful to the judicial system in obtaining the information and reducing the costs of doing so. If the court is able to extract from the information only that which can help it in its decision, that might not be bad, and vice versa.

VIII. CONCLUSION

This Article demonstrated the use of personalization which tailors the law personally on the basis of IPD or uses this information from earlier legal proceedings without changing the legal rule, in different test cases, in relation to substantive matters, evidentiary matters, procedural matters, and matters of remedies and sanctions. Personalization of the legal rule is clearly possible in all those cases and in similar ones. Using IPD may well increase efficiency, save on costly and lengthy legal proceedings and improve the judicial making process.

The real potential of the use of personalization of the law has been pointed out here in an extremely broad manner, in various branches of law and in various consumer and commercial matters, particularly when the cost of collecting data is low and there is no need for a special scientific analysis of it. The personalization that is proposed in this Article is therefore liable to increase efficiency and to save on expensive, lengthy legal proceedings, as well as improving the process of judicial decision making, in cases, which are evidence-based. The novelty therefore lies in the substance, but also in the means of arriving at the information – by way of a properly arranged process which is internal to the court system – as well as in making use of information from previous legal proceedings the norm, instead of the present system in which parties may bring evidence of previous acts only as an exception, subject to conditions and reservations.

We hope that the Article will contribute to the attempt to create personalized law in its more subjective and innovative form which seeks to tailor the legal rule to the individual himself. This trend, which certain scholars deem desirable, can assume a personalized form here by using information that is not necessarily statistical and is not necessarily based on Big Data, but draws on concrete information which is likely to be more accurate and more directed and therefore preferable to use of Big Data in those and similar cases. At the same time, in certain cases, as shown above, it is possible and advisable to combine the IPD with information from Big Data, and thus to present the court with a more accurate picture.

Such a process seems, from one aspect, more daring as compared to the present situation, for it involves unique personalization, and not simply personalization of default rules by way of statistical data about people of the injurer's type; but from another aspect it ought to seem extremely natural. This process of using IPD should therefore lead to thoughts about the need not only to strengthen Porat and Strahilevitz's conclusion, but also to take it to new, unfamiliar realms, and possible even to challenge it to a certain extent, by calling for IPD to be preferred over information from Big Data, which might be less relevant and accurate in the particular case.

The Article may constitute an opening, in the sense of a first step or examining a broader conclusion – which will require separate discussion – whereby there is room for objective rules only as a residual matter, for example, where there is neither concrete earlier information nor even any statistical information as a result of Big Data. According to this line, in all other cases, recourse should be to a database that is sufficient for the purpose of creating standards and mechanisms that are personalized to the situation, and IPD must take priority for this purpose.

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