## ARTICLES

## A New Paradigm for Understanding Judicial Notice and its Implications in the Modern Digital Era

## DORON MENASHE<sup>\*</sup>

Judicial notice is the legal term in English for what is known in Israeli law as "judicial knowledge," *yedia shiputit*. In our view, the terminology gets at the crux of the matter before us: what does judicial notice mean? Is there such a thing as judicial notice that may be presumed without facts (henceforth, "the irrefutable model")? Does the application of judicial notice require some sort of warning or alert that it is about to commence? Would giving each side the opportunity to present arguments justifying or rebutting this notice be a more appropriate alternative, based on the circumstances of the case (henceforth, "the participative model")?<sup>1</sup>

It appears that the basis of the exemption from bringing proof lies in the following assertion: judicial notice is an exception to the great

<sup>&</sup>lt;sup>\*</sup> Prof. Doron Menashe, J.S.D is a Senior Lecturer and Head of the LL.M program for Adjudication and Criminal Procedure in the Faculty of Law at Haifa University, Israel. Prof. Menashe especially thanks Ms. Adva Segman-Arnon, Mr. Nahshon Shohat, Mr. Eyal Gruner, Ms. Moran Schlesinger and Mr. Guy Sender for their contributions to this research.

<sup>&</sup>lt;sup>1</sup> Morgan argues that once the judge *indicates* that he will take judicial notice of a fact, it is conclusively established and rebuttal evidence is inadmissible, while Wigmore takes the position that notice of a fact by the court is not conclusive and may be challenged by rebuttal evidence. *See* CHARLES T. MCCORMICK ET AL., MCCORMICK ON EVIDENCE 934 (3d ed. 1984); *see also* John T. McNaughton, *Judicial Notice—Excerpts Relating to the Morgan-Wigmore Controversy*, 14 VAND. L. REV. 779, 779 (1961).

principle that law requires facts to be offered into evidence. Therefore, it is used sparingly, in cases in which the execution of a full probative procedure is unanimously viewed as not exigent.<sup>2</sup> These cases are selfevident, require no proof, and every individual who has been educated to the average<sup>3</sup> contemporary<sup>4</sup> standard is aware of them. Alternatively, these cases are based on easily discoverable, detailed data that can be gleaned by referring to authoritative, undisputed sources. According to this approach, the exemption from a full probative process introduces basic, widely-accepted information into the legal proceedings, subject to no substantial dispute as to its nature, with the intent of making the speedier,<sup>5</sup> simpler, judicial proceedings and more effective. accommodating them to the basic worldview shared by the majority of the public and prevailing in that time and place.<sup>6</sup>

Analyzing Israeli jurisprudence reveals that the general inclination has always been to embrace this model of judicial notice.<sup>7</sup> Nevertheless, this model has been utilized implicitly, without setting out the analytical fundamentals, which might demonstrate its superiority to the model that requires forewarning and allows rebuttal from either side.

In this article, we will seek to think anew about the view that one should adopt concerning judicial notice. We seek to set out the argument

<sup>6</sup> In addition, the institution of judicial notice can help strengthen the link between the judge and the citizen who sets foot in the courthouse because the judge relies on the existence of an accepted informational basis shared by the broader public. Indeed, judicial notice may be said to contribute to judicial consistency and equality before the law, as it dictates similar treatment of similar cases.

<sup>7</sup> See, e.g., CrimA 3-527722-0 State v. Israel, 5744(3) PM 177 (1984) (Isr.) (concerning the conclusive recognition of the Doppler Effect as judicial notice).

<sup>&</sup>lt;sup>2</sup> See McNaughton, supra note 1, at 779–80.

<sup>&</sup>lt;sup>3</sup> This is not to be confused with an individual having a broad education, specific professional expertise, or advanced education in a specific field such as Jewish studies. This criterion stresses that information included in this category must be extremely basic, accessible, and a part of the awareness of every person living in the relevant time and place.

<sup>&</sup>lt;sup>4</sup> CA 219/63 Kashpizky v. Gravelsky (*Kashpizky*) 18(1), 413, 418 (1964) (Isr.). *See also* CA 515/63 Nagar v. Dahari 18(2) PD 169 (1964) (concerning judicial notice about the habits of horses and the debate).

<sup>&</sup>lt;sup>5</sup> Eliyahu Arnon, *Applying Judicial Notice: When and How, Iyunei Mishpat* 4(1) 5, 5 (1975) (Isr.) ("This means that the court determines facts without the presentation of evidence, because they are well-known and require no proof. This is a short cut which saves the litigant the trouble of presenting evidence."). See also Varcoe v. Lee, 181 P. 223, 226 (Cal. 1919) ("Judicial notice is a judicial short-cut, a doing away with the formal necessity for evidence because there is no real necessity for it").

that the time has come to abandon or to limit severely the irrefutable model and to adopt, at least to a great extent, the model of offering proof on a participative basis, as wholly justified by reasons of legal epistemology and the need to guarantee an appropriate probative process overall.

Our fundamental assumption hinges on the theory of the laws of evidence. According to this assertion, the rules of evidence must be designed in such a way as to allow the epistemic maximization of the weighted evidentiary benefit of the proofs.<sup>8</sup> This benefit seeks to maximize the weighted gap between the anticipated gain of using a certain proof or fact and the weighted damage of using that proof or fact. This criterion is so thoroughly basic that it even describes, to a great extent, the laws of evidence as currently practiced.<sup>9</sup> In this framework, we will not specify the full scope of this criterion, but we will try to apply it to the issue of judicial notice while we note, incidentally, certain points about the general character of the criterion.

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<sup>&</sup>lt;sup>8</sup> See Robert F. Blomquist, Overinterpreting Law, 116 PENN ST. L. REV. 1081, 1100 (2012).

<sup>&</sup>lt;sup>9</sup> There are many expressions of this test, some of which have sprung up and developed over the course of the years. Thus, for example, the principle of disallowing hearsay has some exceptions in cases in which the epistemic benefit anticipated from admitting the evidence is higher than its weighted epistemic damage. The best evidence rule is not a hard-and-fast principle in civil proceedings. To a certain extent, as long as the issue is secondary evidence, such as copies, facsimiles, or the output of electronic evidence, it is only a caution concerning the weight to ascribe to such items. *See* CA 6205/98 Unger v. Ofer 55(5) PD 71 (2001) (Isr.). In criminal law, evidence with a prejudicial effect is still admissible, but only when its probative value overwhelms this effect. *See* Boardman v. DPP [1974] 3 All ER 887. This is in order to express the superiority of the weighted epistemic value of vindicating the innocent over convicting the guilty.

On the contrary, in an instance in which the rule is expressed in a way that is not sensitive to the balance of epistemic benefit, it tends not to survive—taking, for example, the rule which invalidates testimony that calls for speculation or calls for conclusions not based on specific professional expertise. The interpretation associated with this rule is prima facie evidence, which is dependent on balance and linked to the question of what testimony is meant to accomplish—whereas the description that produces the experience for the witness or specifically the products of processing that experience, the decision is, as always, at the court's door. The rule does not require invalidating any speculation but rather judicial discretion that is directed to bring the testimony to the level of deconstruction at which the weighted epistemic benefit from the evidence will be optimal as compared to all other levels of deconstruction of that testimony. *See* A.A.S. ZUCKERMAN, THE PRINCIPLES OF CRIMINAL EVIDENCE 59–62 (1989).

Firstly, since this criterion includes an epistemic test alone, it should utterly disregard issues of convenience, consistency, efficiency, and even equity, as these do not meet acceptable standards of reliability and credibility. Just as one must not accept irrelevant proof for the sake of consistency, equity, or any non-epistemic consideration, similarly in the framework of applying judicial notice and in the name of considerations such as these, it is inconceivable to accept facts, generalizations, or factual assumptions which are not endowed with true reliability. In the context of the technological revolution, this means that accessible sources of knowledge that are easy-to-use and open to all, such as search engines, various forums, and social networks, cannot serve as a source to produce judicial notice as long as qualitative and reliable evaluation of their content is insufficient.<sup>10</sup>

Secondly, it appears that such a criterion negates the threshold determination of "practical certainty" for the sake of utilizing judicial notice as a threshold requirement for using any information for legal Are evewitness testimony, confessions in criminal purposes.<sup>11</sup> proceedings, and concessions in civil proceedings required to establish certainty about a subsequent finding? Seeking practical certainty springs from the assumption that judicial notice must enjoy conclusiveness and from the fear of the exclusion of the regular process; however, it is understood that all of this begs questions. The issue is whether there are situations in which information, which is not endowed with certainty but has a high degree of apparent reliability based on common-sense tests, should be utterly rejected by the judge; or whether there should be an attempt to introduce it into the proceedings, while giving a warning and the opportunity for each side to rebut it. An American court in Texas decided that Wikipedia could not be included in the sphere of judicial notice, since content may be uploaded freely and without editorial interference.<sup>12</sup> In relation to this, we may muse, for example, about the possibility of retroactive influence by others upon a witness's memory,

<sup>&</sup>lt;sup>10</sup> An example of this might be Google's algorithm, which is based on page rank and classifies the results according to the quantity of appearances of that result on the Internet. Since there are studies that point out when those surfing the Internet naturally and consistently tend to search only the first results, it is clear that this intensifies the *argumentum ad populum* upon which using this search engine is based as it is meant to be a reliable and qualitative website for information. *See Jurisprudence in the Digital Age* 28–31 (Haifa Ctr. Law & Tech., Working Paper, May 2013).

<sup>&</sup>lt;sup>11</sup> OTIS H. FISK, PRESUMPTIONS IN THE LAW: A SUGGESTION 10 (1921).

<sup>&</sup>lt;sup>12</sup> Flores v. State, No. 14-06-00813-CR, 2008 WL 4683960, at \*2, \*4 (Tex. Ct. App. 2008).

which is like uploading cognitive content—should this invalidate, wholly and irrevocably, all eyewitness testimony? Is nothing at all better than that which is incomplete? Is it preferable to utilize information at the level of relatively high reliability and only after giving a caution and providing the opportunity for each side to bring rebuttal evidence?

It is important to remember that proving facts in law is based on the identification of fact-generating generalizations-whether it is first-order examination of the reliability of the claim (e.g. a person strolling towards the crosswalk intends to cross the street); or whether it is second-order examination of attribution of reliability (e.g. an uninvolved witness tends to cooperate with the court and testify truthfully; correspondingly, when it comes to judicial notice "information or facts of this sort are considered trustworthy and binding").<sup>13</sup> Now, the power of the finding of fact at trial depends on exposing the information or the generalization to the possibility of exhaustively refuting or rebutting the applicability of the generalization (or the accuracy of the information).<sup>14</sup> When the claim or the generalization is exposed to the various tests of refutation and overcomes them (either because no information has been presented to contradict or limit it or because the attempt to present reasons to deny the application of the generalization has been negated), then there is full power to the validity of the conclusion based on normal life experiences. In other words, the confidence in the conclusion is based on rejecting alternative conclusions in light of the evidence. This is "inductive elimination," which is based on fundamental axioms about the nature of human consciousness in general.<sup>15</sup> This also helps us understand how important it is to allow citations to information which apparently contradicts the generalization underlying the information presented for the application of judicial notice, and to require an exacting judicial examination of how much the attempted refutation succeeds or fails-all of which must precede the acceptance of certain information as reliable to a high degree.

Thirdly, when the borders of the rule of judicial notice are mapped out, one should take into account the possibility of applying it in error or at least in a problematic manner that is subject to dispute. The rule talks

<sup>&</sup>lt;sup>13</sup> L. J. Cohen, *The Probable and The Provable*, *in* FOUNDATIONS OF EVIDENCE LAW (Alex Stein ed. 2005).

<sup>&</sup>lt;sup>14</sup> See id.

<sup>&</sup>lt;sup>15</sup> *Id.* at 245–48.

about judicial privilege, allowing the use of information that may easily be ascertained by referring to or studying authoritative sources of information (e.g. information that is scientific, sociological, or cultural).<sup>16</sup> The judge may believe that a certain work of sociology is authoritative, while in fact it is subject to some dispute.<sup>17</sup> The rule speaks to beliefs commonly held by a broad swath of average educated individuals at that time, but perhaps the judge applies, for example, awareness of the behavior of abusive husbands based on that judge's general knowledge.<sup>18</sup>

In other words, sometimes the problematic nature concerns not the power of judicial notice but second-order considerations, such as identifying and applying judicial notice to a certain field of knowledge. For example: When did the sun set on a certain date? What is a reasonable amount of time to get from Point A to Point B? What is the effective range of vision for a witness? How does an attack affect the mental state of the victim? Sometimes, the problem may be created in terms of the application of information, which is in itself included in judicial notice concerning the facts of the case.

Thus, for example, we have the case of a postcard, *geluya* in Hebrew. The term literally means revealed, open, observable, as opposed to sealed correspondence in an envelope. This leads to the following assumption: "The very name of the *geluya* testifies to the fact

<sup>&</sup>lt;sup>16</sup> See generally CA 6205/98 Unger v. Ofer 55(5) PD 71 (2001) (Isr.); A.A.S. ZUCKERMAN, THE PRINCIPLES OF CRIMINAL EVIDENCE 59–62 (1989); *supra* note 9 and accompanying text (discussing the best evidence rule).

<sup>&</sup>lt;sup>17</sup> An example of this would be the debates aroused by the question of historical truth in the court in different cases and for different issues, starting with Holocaust denial and ending with local statements concerning the knowledge or actions of one prime minister or another. *See* CrimA 232/55 Attorney General v. Greenwald 13 PD 2189, 2312 (1958) (Isr.) ("The chronicles of our people and the chronicles of other peoples reflect well how much there is no intellectual consistency concerning questions which are more evaluative than factual. Yesterday's truth may become today's lie, and not infrequently, it will revert and become tomorrow's truth."); *see also* HCJ 2137/98 Elias v. Board of Directors of the Broadcasting Authority (unpublished, Nevo, May 4, 1998) (Isr.) ("As is well-known, there are many facets and many interpretations of historical truth . . . ."); CA 323/98 Sharon v. Benziman 56(3) PD 245 (2002) (Isr.) (incorporating all of the various incarnations of discussion around this question of historical truth).

<sup>&</sup>lt;sup>18</sup> See generally CA 6205/98 Unger v. Ofer 55(5) PD 71 (2001) (Isr.); A.A.S. ZUCKERMAN, THE PRINCIPLES OF CRIMINAL EVIDENCE 59–62 (1989); *supra* note 9 and accompanying text (discussing the best evidence rule).

that it is exposed to every eye, and thus, insults written on it are not read only by the addressee."<sup>19</sup> This appears correct, but it may not be appropriate in a case where the circumstances significantly reduced the chances that the postcard would have been read by anyone other than the addressee. Similarly, it may be that in Israel, free-loan societies do not generally put their loans on paper,<sup>20</sup> but in the specific context of such arrangements, there is another series of customary acts, which are solely for the sake of good order and follow-up.

Once again, forewarning and the opportunity for rebuttal will sometimes be allowed to identify the error and neutralize it. The more serious or gross the error in terms of its ramifications, the more reasonable it becomes that the adversarial sides will assist the court in spotting and eliminating its deleterious effects.

Fourthly, it appears that the principle must be sensitive to the question of measures of proof and the risk of error. This is what we have said above: the examination must depend on beneficial or deleterious *weighted* values.<sup>21</sup> Benefits and detriments must take into account the worth of a proper verdict and the seriousness of a wrongful one. In this sense, the rule of judicial notice must be dependent on the proceedings and not generalized. Using judicial notice to the benefit of the defendant in a criminal trial is not the same as doing so on behalf of a litigant in a civil trial—and it goes without saying that it cannot be equated to doing so on behalf of the prosecution in a criminal proceeding.

In this context as well, the participative model is preferable, as only through it can the epistemic, contextual flexibility exist. Such flexibility can be channeled to reflect the various differences touching on the severity of the risks of error as a function of the question of on whose behalf judicial notice is being applied.<sup>22</sup>

<sup>&</sup>lt;sup>19</sup> As poetically expressed by Justice Zussman in Kashpizky, *supra* note 4. *See also* Huth v. Huth 3 KB 32 (1915).

<sup>&</sup>lt;sup>20</sup> CA 62/52 Dayan v. Abitbol 9(1049) PD 1952 (1955) (Isr.).

<sup>&</sup>lt;sup>21</sup> See CA 6205/98 Unger v. Ofer 55(5) PD 71 (2001) (Isr.).

<sup>&</sup>lt;sup>22</sup> See Susan W. Brenner, *Internet Law in the Courts*, 13 J. INTERNET L. 30, 30 (2010) (discussing the flexibility of judicial notice in Rule 201 of the Federal Rules of Evidence). The determination is that in civil proceedings, the judge must direct the jury to relate to judicial notice as a settled matter of fact and neither side has the right to rebut or refute this finding. However, in criminal proceedings, the members of the jury must be directed to weigh the possibility that the finding is factual, while retaining the final decision for themselves. Thus, defendants have the right to rebut or refute judicial notice. This is based on the idea that

Fifthly, we must consider the question of epistemic alternatives. For this purpose, we shall return to the question we posed earlier: is it better not to utilize information which is reliable to a high degree only because there is no accompanying guarantee of its certainty?

In fact, the answer is tied to epistemic alternatives that the judge has. If the information can be verified by methods available to the judge, it seems that it is appropriate for the judge to lessen the weight of the information to be used as judicial notice to the supplementary level, based on their life experience and common sense, which is valuable when judging the reliability of other evidence.

Moreover, broad use of a type of highly reliable information, such as judicial notice, will unfairly reduce the use of experts and deny the court the valuable viewpoint of professionals in the field. When it is a matter of expert or professional knowledge, the question will arise whether to rely more on the information that prima facie has a high level of trustworthiness, or whether to allow a probative process based on experts testifying about their conclusions, based on their scientific education or professional experience, with the court testing their opinions using the accepted methods.<sup>23</sup> At this point, judicial discretion must be applied, in our view, to assess the advantages and disadvantages of appealing to experts. It should be understood that if the information under discussion or the procedure that the judge wants to utilize does not enjoy a high level of reliability, there is no alternative, as much as it is pragmatic, to not accepting any judicial finding until a process that includes expert witnesses can be carried out. But what about when it appears to the judge that the information has great reliability? It appears to us that we should not deny the possibility of relying on the information as judicial notice. Instead, under the rubric of the participative model, the existence of prior warning will allow the interested party to request the presentation of rebuttal evidence either scientific evidence or expert testimony that bears a different interpretation of what appears to be extremely clear or may contradict what is in included in that authoritative source  $^{24}$ 

assuming judicial notice as a settled matter in a criminal trial contradicts the 6<sup>th</sup> Amendment of the Constitution.

<sup>&</sup>lt;sup>23</sup> See DORON MENASHE, THE LOGIC OF THE ADMISSIBILITY OF EVIDENCE (2008) (discussing, theoretically, models of expert testimony).

<sup>&</sup>lt;sup>24</sup> In any case, we do not believe that the presence of an expert on that topic necessarily serves as a knockout punch, annihilating information prima facie included in judicial notice.

Beyond all this, one may claim that the participative model has aspects that fit it better than the irrefutable model, which makes the use of judicial notice more compatible with existing evidentiary institutions and other forms of proof. We will mention two issues.

Firstly, as we already mentioned earlier, it may be appropriate to use certain information for judicial notice in one set of circumstances but rely on judges' life experiences and common sense in another set of circumstances. The duality of this use is an illustration of the fact that the utilization of judicial notice must be integrated with other informational uses of a general, nonprofessional character, such as common sense or life experience. Indeed, common sense literally means a feeling or observation that is shared, which is a criterion that is commonly recognized by people or at least members of a given cultural community. A judge's judicial or personal life experience must be understood and accepted within the terms of that shared recognition.<sup>25</sup>

Expert testimony is not free of issues of personal trustworthiness and reliability, and the conclusions do not need to be applied automatically in law as if the court must obey the experts' decisions. We must not forget that expert testimony is provided for monetary compensation, and many times it is preceded by an extensive search for an authority whose view is most beneficial to the litigant from among a number of competing experts. As Taylor astutely points out, it is surprising to see how the professional opinions of these experts so often dovetails with the expectations and desires of the litigants who call them. See PITT TAYLOR, A TREATISE ON THE LAW OF EVIDENCE AS ADMINISTERED IN ENGLAND AND IRELAND 59 (The Boston Book Company 9th ed. 1897). There are also some distinctions on the sociological plane concerning the types of discussion that are likely to pose difficulties when it comes to the comprehension, application and interpretation of the findings of experts. See Sheila Jasanoff, What Judges Should Know about the Sociology of Science, 32 JURIMETRICS 345, 353–56 (1992) (discussing the issues that arise in court hearings that make it difficult for the expert's findings to be delivered in an understandable way). In our view, it emerges from all this that the participative model and the existence of background information or information from another source in the court's mind can enhance the possibility that there will be a fruitful learning process for the court as it listens to the experts' words. Expert testimony that is not trustworthy will not be used in the court's findings at all.

<sup>25</sup> The judge's specific knowledge is unusual in this way, as opposed to the judge's life experience, even if it too is specific. While the cognitive filter for the admissibility of ideas of concerns which spring from the life experience of the judge is the assumption that they are defined as accepted rules and widespread conceptions of reality, and in any case one may attribute them to the logic of daily judicial verdicts, specific knowledge gives power to judicial experience which is part of the specific, non-representative history of the judge having dimensions of expertise or professionalism in a field other than the law. *See* CA 248/59 Livyatan v. Nahman 13(3) PD 1903 (1959) (Isr.); CA 91/50 Mador Constr. & Fins. Ltd. v. Bick 5 PD 792, 796 (1951) (Isr.).

level of specificity of the information included in them or the level of epistemic support for that information. This distinction does not touch on the quality of the information. Therefore, there is no reason why these rules about a judge's reliance on his or her life experience or common sense should be essentially different from those that apply to judicial notice. These rules require that life experience and common sense follow second-order parameters that are designed to evaluate evidence (i.e. to determine how reliable it is and its weight, sufficiency, etc.). In a certain sense, common sense and life experience serve as a judicial guarantee that reliance on certain testimony or evidence on its merits has something to fall back on.<sup>26</sup> In another sense, the testimony or evidence is introduced in the proceeding to guarantee that the judge's life experience or common sense is in fact applicable in this case (i.e. that this case need not be excluded from the general conduct of matters in this world). If this is true, judicial notice based on the model we have set out can act alongside life experience and common sense in a comparable and complementary way. Judicial notice must be critically evaluated and subject to rebuttal. This critical examination allows the application of judicial notice as a fact, which maintains its level of specificity and the strength of its epistemic guarantee.

Secondly, an additional illustration of the significance of the participative model may be found in the context of the test of admissibility for scientific evidence. Here is how Yaakov Kedmi summarizes the law:

With the passage of time, when a certain method of examination becomes common and accepted, there is no need to repeatedly cite evidence of its scientific validity. It merits the "recognition" of case law, as an examination upon whose results judicial findings may rely. This "recognition" makes superfluous any citation of proof as to its scientific power. This is undeniable based on the consistent case law concerning this matter  $\dots$ <sup>27</sup>

Howbeit, this "recognition" is only in the context of judicial notice and based on the acceptance of the scientific reliability. If this is true, we cannot ignore the possibility that the recognition of scientific validity may now be, even if it was not initially, in error. In any case, the theory or technology, which bears this recognition, must be subject to an examination that is based on developments in the world of science and

<sup>&</sup>lt;sup>26</sup> CA 248/59 Livyatan v. Nahman 13(3) PD 1903 (1959) (Isr.); CA 91/50 Mador Constr. & Fins. Ltd. v. Bick 5 PD 792, 796 (1951) (Isr.).

<sup>&</sup>lt;sup>27</sup> 2 YAAKOV KEDMI, ON EVIDENCE 1187–88 (2003).

follows its professional standards.<sup>28</sup> An examination of this sort, open to findings that have the ability to contradict previous findings concerning the scientific validity of the given theory or technology, is demanded by the very test of the admissibility of scientific evidence<sup>29</sup> and dovetails with the previous conditions of relying on judicial notice. In this context as well, the participative model of judicial notice is preferable.

Based on all the above, our position is to seriously and deliberately weigh the replacement of the paradigm for judicial notice, while simultaneously and similarly transitioning from acceptance to judicial freedom when evaluating evidence.<sup>30</sup>

The transition we are discussing is from authoritative and harsh judicial activity, to participating in the process of determining which findings fall within the bounds of judicial notice, to collaborating with the information which starts from the public and its sources and flows through the litigants and the expert witnesses. We have no doubt that it

<sup>29</sup> In American law, the conditions for recognizing scientific validity have been formalized mainly in the context of the Daubert standard, as per Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 578 (1993). It appears that the Israeli courts, required to determine the yardstick for the admissibility of scientific evidence, have essentially relied on the Daubert standard and its tests. See CrimA 7093/10 Israel v. Drizin (2012) (unpublished) (Isr.); CrimA 9724/02 Abu Hamad v. Israel 58(1) PD 71, 79 (2003) (Isr.); Daniel Fisch, The Conditions for Acceptance of Scientific Evidence in Law: A Question of Philosophy, Not of Science, 15(1) HAMISHPAT 275 (2010). As for our question of recognizing scientific proof in terms of its Popperian nature, from which springs the principle that the admissibility of scientific evidence and its reliability must always be exposed to the possibility of reexamination and rebuttal, all of this applies both in general (i.e. the fundamentals of the approach and the investigation) and in specific (i.e. the concrete examination that is under discussion, how it was executed, and how it conforms to the scientific approach followed). Applying the idea of recognizing case law in terms of the scientific acceptance of a given theory is, regardless of the version of judicial notice, based on the irrefutable model, and thus it does not dovetail with the test for the acceptability to scientific evidence.

<sup>30</sup> See, e.g., CA 423/83 Israel v. the Estate of Vered Silverman RIP 37(4) PD 281 (1983) (Isr.); CA 6205/98 Unger v. Ofer 55(5) PD 71 (2001) (Isr.).

 $<sup>^{28}</sup>$  Indeed, the courts are accustomed, from time to time, to reviewing the validity of a theory, which has already been accepted, as well as the nature and standards of technology based on this theory. An example of this may be found in the standards determined ex post facto in using the breathalyzer as a high-quality measure of blood alcohol level, after accepting the theory of alcohol content in breath and the technology that the Breathalyzer is based. *See*, *e.g.*, 11893/07 Israel v. Ozeri (2010) (Jerusalem) (unpublished traffic file) (dictating the "safety margins" for measuring alcohol and allowing a criminal case to be brought, based on the assumption that in extreme conditions, the instrument may be somewhat imprecise, even if the instrument is calibrated and properly operated by a skilled professional).

will generally contribute to decisions that are more reliable, transparent, and compatible with the concept of a fair process.

## FINAL NOTE:

Even though we have argued in this article for the adoption of a new model to recognize judicial notice, namely the participative model, it is understood that we cannot ignore the pragmatic perspectives of the issue. Beyond the practical matter of efficiency and not wasting the court's time, there is another pragmatic issue that relates to the stage at which the court must resort to judicial notice. It is possible that these stages will arise after all the evidence has been heard or in the process of and for the purposes of issuing a verdict in writing.

If the idea to use judicial notice first arises in the judge's mind when it is time to write his or her opinion and justify the ruling (as opposed to at the evidentiary stage), then the obligation to reverse course and to give warning and the opportunity to evaluate it may very well be an excessive, extraneous step. It may be that the participative model would then be satisfied by fulfilling the obligation of justification<sup>31</sup> and explicitly expressing and detailing the utilization of judicial notice in the verdict. An obligation such as this, coupled with the right of appeal, will offer both sides the opportunity to rebut this supposition, and it may very well constitute a sufficient epistemic replacement for employing the participative model in its purest form. Nevertheless, it must be understood that using judicial notice in a verdict on appeal or in any other proceeding or issue that is final or not subject to appeal would be very problematic.

Of course, as we have already mentioned, there are simple situations in which the application of the participative model would be ineffective and inappropriate because the information is in fact axiomatic, in a judicial proceeding, for the refutation or confirmation of claims of fact or evidence such as this. It is elementary knowledge that is used to refute or confirm factual evidence or arguments. For illustration, let us consider the fact that one cannot get from Tel Aviv to Haifa by car in ten minutes. This is judicial notice requiring no warning or attempted rebuttal before being applied. Naturally, it is part of the

<sup>&</sup>lt;sup>31</sup> See Doron Menashe, *The Duty to Provide Reasons for Findings of Fact Under Israeli* Law, 11 ALEI MISHPAT 399 (2014) (exemplifying the duty to justify findings of fact).

information used to evaluate, confirm, and refute other evidence. Naturally, this information may be considered irrefutable.

Clear cases in which the participative model is integral are ones in which the proposed judicial notice is in fact a circumstantial generalization, which seems to the judge to hold great power. Such a use of judicial notice may very well be problematic. Responding to this problematic nature is achievable by using the participative model.<sup>32</sup>

Ultimately, the "participative model" need not be perceived as compulsory, but rather, is an important tool to guarantee a fair trial and a full exhaustion of the options of rebuttal. The court has the discretion to decide when to contain it.

<sup>&</sup>lt;sup>32</sup> See supra note 17 (noting the relationship between the opinion of an expert witness and judicial conclusions); see, e.g., CrimA 6359/99 Israel v. Korman 54(4) PD 653, 665 (2000) (Isr.) (expressing Justice Dorner's opinion that "the version of falling due to tripping is forced, and it required accepting a confluence of events which is unrealistic."). Not only did Justice Dorner base her determination on circumstantial generalization in a professional-medical matter, this also followed the professional opinion of the expert, Professor Hiss, which indicated from a solely medical point of view that it would be impossible to dismiss that the fatal blow caused by the fall. Another example arose in the case of Dagon. See CrimC (CT) 3815-12-08 Israel v. Dagon (2010) (unpublished); see also CrimA 6427/10 Dagon v. Israel 320-21 (2013). The issue at hand is ballistic angles. The expert witness presented by the state did not dismiss additional possibilities for the path of the bullet in the decedent's head. These alternatives would undermine the assumption that the shooting transpired while the defendant was standing over the victim, indicating an intentional shooting, as opposed to the defendant's claim that it was an accidental discharge. The defense went as far as to get the expert witness' concession concerning a certain concrete scenario that could not be dismissed. The expert stated that this scenario was indeed feasible. Despite this, the district court found the defendant guilty, determining that such an orientation of the head was illogical and only theoretically possible. This determination is essentially appealing to judicial notice or relying on life experience and common sense based on the general theory of an investigator or prosecutor, this all being in order to give only partial power to the findings and testimony of the expert. As we have said, case law determines that the court may rely on its own conclusions, beyond and sometimes even in opposition to the expert's conclusions. In these cases, the need for employing the participative model is sharpened if our judges would act accordingly.