**Proposed Research Project**

**The link between art and law: drawing as a tool to improve first-person witness memory and reduce wrongful convictions**

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**Background**

What is the link between art and criminal law? And if there is indeed any link between these two disciplines, can we transfer insights from the world of art to that of criminal law and drawn information from them to improve legal policy by making appropriate adjustments from one discipline to another?

We hypothesize that the variable connecting these two ostensibly very different disciplines—criminal law on the one hand and art, in particular drawing, on the other—is human memory. Thus, criminal law can and will benefit if it takes on board insights from scientific research in the field of art. These insights can be used to improve police investigations involving first-person witnesses around the world, increase the quality of witness identifications, and reduce the rate of mistaken identifications and, subsequently, of wrongful convictions.

With regard to the legal field,

In the professional research literature , particularly American and Canadian, it is almost unanimously agreed that mistaken identification is the most common cause of miscarriage of justice and is the primary cause of wrongful convictions.

In Shmueli-Meyer doctoral dissertation[[1]](#footnote-1), It was asserted that it is not possible to come to terms with a situation in which a criminal conviction can rely upon a single piece of evidence that is so unsound[[2]](#footnote-2).

 There are defects both with respect to the inadequacies of human perception and memory, and in the functioning of the various investigatory units with regard to obtaining identification evidence. At times these units work without adequate supervision and oversight and there are no binding rules set forth in legislation to guide them. It is not surprising, therefore, that this situation leads to an unacceptable number of cases in which an individual is convicted of a criminal offense and only through forensic examinations at a later stage is he proven innocent. In Shmueli-Meyer's dissertation, she provided a basis for the assertion that the time is ripe to engage in a comprehensive reform of **Israeli law** relating to conviction of a defendant based on a single piece of identification evidence.

Shmueli-Meyer proposes a model for structuring a new approach to identification evidence, including an amendment to the law and implementation of a requirement for an evidentiary supplement that is contained in a proposed bill for “**Conducting Lineups, 2016**,” which was formulated for this purpose and which was presented at the end of the thesis. This model is in effect a code, a comprehensive legislative enactment, that regulates all of the various aspects of the lineup in criminal law and which is based on four principal layers: (1) a comparison and confrontation between the underlying legal presumptions and the underlying psychological scientific presumptions regarding identification evidence (2) the requirement for additional evidence in Israeli law, (analogous to the requirement for “additional scintilla of evidence,” to convict on the basis of a defendant’s confession given outside of court) (3) the court’s invalidating rule as set forth in the **Yissacharov** case[[3]](#footnote-3); (4) English law.

Prior to setting forth the proposed model, Shmueli-Meyer dealt In her dissertation with the difficulty inherent in the interface between Israeli law and identification evidence .As shown, This difficulty is multi-faceted. It stems, first and foremost, from the fact that although identification evidence is evidence of an inherently problematic nature, (difficulty evaluating its trustworthiness; susceptibility to many biases liable to influence the identifying witness and to lead him to make a mistaken identification; and great risk of wrongful convictions arising from this evidence) the Israeli case law has failed to establish a requirement for supplementary evidence as a condition for conviction based upon this single evidence.

Conclusive proof of the great risk involved in convicting a defendant on the basis of a single piece of identification evidence is provided by findings from **the *Innocence Project***,[[4]](#footnote-4) the initiative of two scholars, Barry Scheck and Peter Neufeld, of Cardozo School of Law, Yeshiva University. These findings demonstrate that 84% of wrongful convictions—where the defendants were later exonerated through the work of the Innocence Project in the wake of DNA examinations—have been based (at least in part) on mistaken frontal identification by eyewitnesses or victims of the crime. Such mistaken identifications occurred sometimes as a result of inherent biases and weaknesses of human memory and sometimes as a result of defects in the conduct of the identification process by the investigatory unit. In other words, 84% of all convictions proven wrongful relied, at least to some extent, upon identification evidence

In Israel, the only thing that exists with respect to identification evidence is case law. A well thought out and comprehensive doctrine of identification evidence has yet to be created. Moreover, an examination of the rules demonstrates that they are often unable to provide the defendant with appropriate protection against wrongful conviction and many of the rules are inconsistent with scientific research in the field of human memory and cognitive psychology.

Indeed, alongside the case law, the Israel Police has made an effort to formulate the rules for holding a lineup, and they are included in the internal guidelines of the Investigations and Intelligence Branch. However, these guidelines do not have normative binding force, and when violated entail no sanction of a punitive or evidentiary nature whatsoever. Furthermore, many of the guidelines are drafted solely as recommendations. Moreover, as with the case law, a careful analysis of the internal guidelines shows that some of them are not consistent with scientific research and at times even clearly contradict it.

This lack of a well-regulated body of law with respect to identification evidence, including the absence of rules set forth in legislation, has a clear impact at all levels of this issue.

An additional aspect of the problems existing in the interface between the Israeli law and the identification evidence is expressed in the fact ,that the case law has yet to set forth a clear and well-regulated evidentiary ranking of various kinds of lineups. This is particularly incomprehensible, in view of the findings from many scientific studies in the field which demonstrate different evidentiary weights for different types of lineups.

Moreover, Israeli law, generally speaking, does not sufficiently recognize the problematic and complex characteristics of the issue of identification and is therefore insufficiently equipped to grant defendants the protection necessary from wrongful convictions. For example, it would seem that up to now both the judiciary and the legislature have failed to understand the anomalies of identification evidence, anomalies that are expressed, *inter alia*, in the one-time nature of this evidence. As discussed extensively in Shmueli-Meyer's doctoral dissertation , normally the investigatory unit has only one opportunity to obtain such evidence, with no possibility of “improving” or “amending” it later. For the defendant it is difficult, and indeed almost impossible, to refute such evidence after it has been obtained. Granting this, there is great importance in being scrupulous with respect to the rules that are intended to ensure the propriety of the lineup. However, because the courts and the legislature have not internalized that what is involved is an unusual and “one-time” piece of evidence, one will search in vain in the legislation or regulations for any binding rules regarding the manner of obtaining identification evidence or a well-regulated doctrine in the case law.

Lately, moderate yet significant changes have taken place in the Israeli law relating to evidence as the Justice Minister has appointed a public committee chaired by (retired) Supreme Court Justice Yoram Danziger to examine and correct false convictions.

The first topic chosen by the committee is the failure to identify. Recently (on September 2, 2019) the Commission published its interim report[[5]](#footnote-5), in which most of in Shmueli-Meyer's suggestions on her doctoral dissertation were integrated regarding necessary changes in police work and the need to change police internal procedures. While the Commission has not yet accepted in Shmueli-Meyer's final proposal to regulate the issue of identification in primary legislation, it is also clear that its recommendations in the interim report are an important step toward changing and correcting potential false convictions as a result of the courts' practice of single-identification evidence.

A preliminary review of the Danziger Commission's interim report indicates that—after conducting many sessions in which it heard from renowned experts on eyewitness testimony and identification evidence and from representatives of the Israel Police who routinely handle such testimonies and evidence—the Commission found that identification evidence should be regarded with extreme caution and granted little weight. The Commission further found that a defendant should not be convicted solely on the basis of a single identification, and that mugshot identification should only be granted the weight of supplementary evidence.

In addition, the preliminary review of the Commission's report indicates that the Commission concluded that the time is ripe for change in all aspects of the approach to identification evidence. Its conclusion was based in part on the insights of Shmueli-Meyer's doctoral dissertation and from the dramatic data that was presented as part of **the Innocence Project** in the United States, and the insights in **Simon’s** inspirational book ***In Doubt: The Psychology of the Criminal Justice Process*** [[6]](#footnote-6)regarding the inherent difficulties in the manner in which investigators are often influenced by biases and trapped by mistaken conceptions with regard the identification evidence primarily on matters relating to the decision regarding the type of lineup used, the manner in which it is conducted, and the behavior of those conducting the lineup at the time**.**

The Commission found that the investigatory unit should be instructed to give utmost consideration to **extra-systemic variables** beyond its control, to which Shmueli-Meyer referred to in her research, and which could potentially reduce the evidentiary value of identification evidence, including: the criminal incident itself; the characteristics of the identifying witness; the length of exposure to the event; the distance between the identifying witness and the suspect; the level of lighting during the event; cultural-social characteristics; the age of the identifying witness and the like.

In the spirit of the aforementioned, the Commission found In addition that the investigatory unit should be instructed to give utmost consideration to the **systemic variables** within its own control, to which Shmueli-Meyer referred to in her research, and which could potentially reduce the evidentiary value of identification evidence, including: the type of lineup that the investigatory unit uses; the awareness of the policeman in charge of conducting the lineup as to the identity of the suspect and his/her placement in the lineup; whether the policeman in charge has given instructions or warnings to the identifying witness (prior to the lineup and during the course of it) the significance of feedback given to the identifying witness (prior, during or after); the number of people, suspects, and identifying witnesses taking part in the lineup; documentation of the lineup by the investigatory unit; the level of confidence the identifying witness expresses and how it is documented by the investigatory unit. One of the many resulting recommendations is to conduct lineups as soon as possible after the criminal incident under investigation, when details regarding both the incident and the suspect (in particular, his or her facial features) remain fresh in the memory of the identifying witness and require the investigatory unit to include these variables in its report of the lineup.

One of the Commission's significant recommendations in this context is not to rely solely on a single piece of identification evidence obtained by reviewing a mugshot album.

As we can see, in recent years criminal law in Israel has come to recognize that human memory is deceptive with a tendency for many failures and biases, such that it is difficult to trust eyewitness memory and establish convictions on identification evidence alone. This recognition has fully permeated into Israeli law and is expressed in the Danziger Commission’s recommendations and in Shmueli-Meyer’s comprehensive study, which called for changes in the way that lineups are carried out and suggested the law be amended to include a requirement for an evidentiary supplement for conviction, based on the outcomes of various lineups depending on their type. These changes are needed to prevent, or at least reduce, the risk of wrongful convictions.

Alongside the recommendations made by Shmueli-Meyer and the Danziger Commission in Israel, significant insights have emerged in the United Kingdom in studies concerning the reliability of human memory. These insights have come from the field of art. In a study conducted at Central Saint Martins in London in 2015[[7]](#footnote-7), Michelle Salamon made important findings regarding the links between (figure) drawing and memory improvement. In her paper, Salamon explains that:

Initial interest in the relationship between drawing and memory stemmed from a booklet originally published in 1848, on *The Training of the Memory in Art* by Horace Lecoq de Boisbaudran, a nineteenth century Art professor who developed techniques for teaching drawing through memory (de Boisbaudran 2011-). These teachings provided a springboard for this pilot project, which explored how the creation of drawn images can express and document the act of remembering. It examined whether drawing as an innate human ability can be employed to . make sense of memory The project informally piloted a space where drawing extends beyond traditional expectations and is used as a research tool for developing thinking, improving concentration and enhancing memory. The workshops aimed to identify a series of mnemonic devices to record and recall information from episodic memory and use them to develop a tool for use in Art and Design learning .environments

The purpose research project was to construct a case for recognition of the value of drawing as a learning tool, whilst ensuring the learner’s experience fostered critical reflectivity. The relationship between observation and movement in drawing, led this project to consider whether the physicality of drawing, as sensory information, might serve as an efficient mnemonic tool.

As part of her study, Salamon recruited approximately 20 students to participate in five weekly sessions of around three hours each, which took place between May and June of the same year. Each session focused on personal drawing assignments that the students were given. There was no prerequisite for the students taking part in the study to have any artistic ability or talent for drawing.

The aim of the study was to examine whether the motor activity involved in drawing (sketching on paper) could improve memory by encouraging the semantic, visual, and motor aspects of memory.

During the fourth session, participants were asked to recall childhood memories about their first pair of shoes. The participants reported that, when they were asked to draw the shoes from memory, they were able to progressively recall additional information about them. The motor action of grasping the pencil and drawing on paper boosted their ability to retrieve details about their childhood from their memory, and this helped them construct a coherent, clear memory about the shoes.

Salamon’s study showed that the motor actions involved in drawing (without any prerequisite for any creative skills for this purpose) boosted the ability of participants to retrieve details stored in the memory (including the long-term memory), and to sharpen and refine these to the point of improving a visual experience stored in the memory and making it concrete and precise. Moreover, as Salamon’s study showed,

The potential uses for drawing as a tool to enhance or focus memory are varied and cross disciplinary. In conclusion the Drawing Lab article suggests that drawing can play a valuable role in encoding and distilling visual experience and transforming it into a concrete and substantive form.

Thus, against the background of the need for comprehensive reform of Israeli law around identification evidence, and the significant new data on how human memory can be improved and refined through the simple motor action of drawing on paper, we propose an interdisciplinary study that aims to improve identification evidence work in Israeli criminal investigations.

We believe that, inasmuch as our research hypothesis will be confirmed, and that in a largescale study our findings will corroborate Salamon’s, i.e., that the motor activity of drawing on paper, without any prerequisite for artistic skill, increases a witness’s ability to recall details of a perpetrator fixed in their memory following a criminal incident, police investigators will be able to employ this simple, accessible method to enable first-person witnesses to recall, in an optimal manner, a suspect’s facial features.

Further, this will address the requirement set out by Shmuel-Meyer in her study, and by the Danziger Commission in its opinion, that investigative teams give their opinion on the systemic variables under their control, which may directly affect the reliability of lineups and subsequently reduce rates of witness identification error.

**Research proposal**

It is proposed to extend the Drawing Lab into a tool that can be used for a social purpose, where the attributes of drawing can be used as a tool for bettering social influence. A proposed collaboration with Drawing Lab and legal research presents a cross disciplinary incentive between criminal law and communication, to investigate whether drawing can be used as a tool to enhance the recall abilities of first-person witnesses in order to bring offenders to trial.

And to avoid, as much as possible, mistaken identifications and false convictions.

Therefore, in light of the fallibility of human memory, a phenomenon that is recognized in both art and law, and of the insights emerging from Salamon’s work, we propose a comprehensive study that combines these two disciplines with a view to improving legal policy regarding the conduct of lineups.

Our proposed study is a collaboration between Central Saint Martins in the U.K. and the University of Haifa in Israel and consists of multi-participant experiments conducted simultaneously in both countries. Participants will “witness” simulated criminal incidents by watching two 30-second pre-produced videos, each showing a different incident.

Prior to the experiment, we will ensure that none of the participants possess any exceptional drawing ability.

After screening the videos, we will divide the participants into four subgroups:

1. Study group one, which viewed the first video
2. Study group two, which viewed the second video
3. Control group one, which viewed the first video
4. Control group two, which viewed the second video

Prior to participating in a mugshot album lineup, and before they are questioned about identification, members of the study group will be asked to try and recall, to the best of their ability, the suspect they saw in the video. They will then be asked to sketch the suspect using pencil on paper.

In this part of the experiment, these “identification witnesses” will not be asked any guiding questions. All they will be asked is to sketch the image fixed in their memory on the paper provided.

After members of the study group have completed this illustration work (drawing the image of the offender that they recall from watching the videos), they will be asked to participate in a mugshot album lineup (which will be prepared in advance). This lineup will comprise eight photographs, each of a similar-looking individual, including the offender who appeared in the relevant video.

Regarding the control group: immediately after viewing the video, members of the control group will be asked to take part in a mugshot album lineup regarding the offender they saw in the video (which will be prepared in advance). Members of the control group will not be asked to draw an image of that offender. The mugshot album lineup will consist of eight similar individuals, including the offender who appeared in the video.

Once we have obtained a significant mass of data, we will be able to confirm our research hypothesis, which is that the motor activity of drawing on paper, without prerequisite for any kind of artistic skill, increases the ability of a first-person witness to recall details of an offender fixed in his or her memory from a criminal incident under investigation, compared with the control group; and that this is a result of the opportunity afforded through drawing to improve the ability to retrieve data from memory and to accurately identify an offender. The hypothesis will be confirmed if we can show that the rates of correct identification of the offender from the mugshot album lineup are higher in the study group than in the control group.

We are in no doubt that the large-scale interdisciplinary study proposed here, which will be conducted in two countries simultaneously, and which combines two different bodies of knowledge (that share the common challenge of finding ways to improve human recall) will improve criminal law policy. Said policy will be better, more effective, and fairer, if it is based on a body of knowledge that draws from other disciplines, rather than being determined in a way that is disconnected from other bodies of knowledge that are based on similar, or even unrelated, disciplines.

It is clear that, if the scientific validity of substantial, large-scale research studies (as we intend this proposed study to be) is strong, then it is right and proper to draw information from them to make appropriate policy improvements, cross-pollinating from one discipline to another. This is based on the assumption that human psychological and functional processes, in particular those related to memory, are so basic that they behave in a similar way in the majority of people.

1. NOGA SHMUELI-MEYER, A New Approach to Identification Evidence: Proposed model amendment to Israeli law and implementation of the demand for supporting evidence ,University of Haifa, Faculty of Law, November 2016. [↑](#footnote-ref-1)
2. Doron Menashe and Rabeea Assy’s paper “Mistaken Facial Identification of Suspects,” which is the theoretical starting point for Shmueli-Mayer’s research, is the most comprehensive and in-depth academic study conducted to date in Israel on the issue of facial identification, and has been cited many times in Israeli case law. [↑](#footnote-ref-2)
3. CrimA 5121/98 *Yissacharov v. Chief Military Prosecutor*, IsrSC 61(1) 461 (2006). [↑](#footnote-ref-3)
4. BARRY SCHECK, PETER NEUFELD & JIM DWYER, ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED 246 (2000). [↑](#footnote-ref-4)
5. Interim Report of the Public Commission for the Examination and Correction False Convictions, chaired by Justice Yoram Danziger. [↑](#footnote-ref-5)
6. Simon, Dan. In doubt: The psychology of the criminal justice process. Harvard University Press, 2012. [↑](#footnote-ref-6)
7. Michelle Salamon: ‘Drawing Laboratory’: Research workshops and outcomes Spark: UAL Creative Teaching and Learning Journal. Vol 3, No. 2, 2018 [↑](#footnote-ref-7)