

Next, part of the document in question, entitled "Proving the reliability of forensic results", refers to the process of accreditation in forensics: *Quality and competence assurance are topics that are most relevant when exploring new techniques and procedures. ENFSI should promote the continuation of support in quality and competence assurance matters and also in relation to new demands that are relevant to new techniques or methods that are not yet fully established in the forensic community. Dissemination of information/training activities (including e-learning) on an expert working level and the conduction of proficiency tests/collaborative exercises are important tools to achieve this goal.*

At the end of this paper, they would state the fact that the application of modern techniques and technologies in forensic sciences and criminal investigations is of great importance in the direction of precision and reliability of the results of forensic examinations and criminal investigations. However, as Mykhailo Vasylovych Salteviskyi stated in his works, only with the help of experienced and well-trained forensic experts, who can think outside the box, only then can we have an optimal application of modern techniques and technologies, as well as artificial intelligence in forensic sciences and in an efficient manner, solve and investigate criminal offenses.

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Chronological discrepancies in forgery

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Forgeries are usually produced later to justify several claims based on the past. Forgers are often unable to reproduce the correct chronological frame because they currently experience different historical parameters in relation to the crucial date they refer to, making fatal errors of discrepancy.

Keywords: forgery; discrepancy; chronological; pathological.

Хронологічні розбіжності в підробці

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Підробки зазвичай виготовляються постфактум, щоб підтвердити заяви, які базуються на подіях, що вже відбулися в минулому. Часто фальсифікаторам не вдається відтворити правильну хронологічну послідовність, оскільки вони спираються на різні історичні параметри, щодо важливої дати, на яку вони посилаються, і роблять фатальну помилку невідповідності.

Ключові слова: підробка; невідповідність; хронологічний; патологічний.

Forensic Document Examiners are nominated by the court regarding the ascertainment of authenticity of the questioned documents or eventual manipulation of authentic documents in order to change the content or meaning. Forgery is the most common case though. The estimation of the authenticity of testaments is a quite often case in practice.

The aim of forgery is usually connected to the desire of arrogating the property of deceased people, who may be a relative of the forger or not. In these cases the execution of the forger's plan is necessarily connected to the reproduction of the handwriting and signature to imitate in a presumed handwritten specimen of last will. Simulating someone else's handwriting is not as simple as it might seem, since many people erroneously consider that the reproduction of the form of the letters is enough to deceive not only the other inheritors but even the whole judicial system, since the legal validity of a testament is estimated by the court through the control of law restrictions and provisions, in order to recognize the legitimacy of it.

Undoubtedly, there are forgers who are much more efficient in reproducing the handwriting of a third person. There is a whole procedure and methodological steps though that a forger unconsciously follows so as to arrive to the desired result which is difficult to be successful. First of all, he has to analyze the morphological aspect of the letters or form of the signature. In the same time he understands that he has to block his graphic automation, which means that he has to prevent the reproduction of his personal ideological conception of the form of the letters or signature. The second stage refers to the imitation of the original letter fonts. In order to succeed in this attempt, apart from blocking his personal graphemes, he has to adopt the graphemes to imitate and also adapt both his ideological conception of handwriting and the function of his neurological system to the model to replicate. Till this stage, all the procedure remains in the mental elaboration of the procedure of imitation and action could regard only eventual training of the forger. The third and last step is the most difficult one, since the forger has to apply in practice contemporaneously all the above actions and in the same time he has to be effective in the whole extent of the document [3]. A testament necessarily contains not only handwriting but even a signature. Because of the length of it, the aim of the imitator is not so easily fulfilled. Although he might be successful in reproducing the form of the letters, the length is a serious parameter of error, since his

graphic automation returns as more as he writes [1]. That means that although he is hardly trying to reproduce the letters of another person in the beginning, after some rows of text there may appear letters of different conception which derive from his own original handwriting. Hence, testaments remain a more insidious field of forgery.

A forged testament is usually written by a younger person who wants to appropriate the heritage. Deceased people are logically persons of a certain age or ill persons whose clinical condition has been affected. This fact has a negative impact on the graphic skill of the authentic hand, impact which is not familiar to the forger regarding the function of his neurological system which is used in order to produce the handwriting. For this reason a forger tries to diagnose the morphological aspects and effects of these clinical parameters on the authentic handwriting without being able to understand and conceive the qualitative background of them and how they really affect the hand's movement in the graphic production or the graphic skill. Sometimes the bad selection of the comparative material is quite restrictive. If the forger has at his disposal specimens that do not represent the real graphic capacity of the presumed testator in the date he has chosen as a date of the forged testament, then he may try to reproduce other graphic characteristics that the correct ones. The time of deterioration of a person's clinical condition is crucial information for the forger, since he might recreate a text with graphic fluency that was not compatible with the condition of the testator in the date of the testament.

The clinical condition of the testator creates further problems in forgery. Trying to reproduce an apparently debilitated gesture is not an easy task. A younger forger has not really experienced such effects on his personal handwriting, so he can't really understand the source of it, so as to reproduce it in a convincing way. The date of the forged document is often related to fatal errors. Graphic tremor [5, 6] as an effect of age or clinical problems is connected to the time of appearance of them. Sometimes the forger does not take into consideration the real time frame in which he chooses to place the testament creating anachronism. Although the attempt might be quite successful, this chronological discrepancy reveals the fraud. Let's see a case study.

The testator died in 2004 and his will was presented in the court in 2022, dated back on 1982, when the testator was 54 years old, period when he had no clinical problems and no other effects due to age, since he was quite young to present a deterioration

of his graphic skill. Since, the forged testament was presented by the daughter she had in mind the last image of her father in the last period of his life, who passed away 18 years before the forgery. The forger tried to place the date in a period that could be more convincing according to historical facts of the family, but he made the fatal error to refer to clinical problems of the testator that back in 1982 did not exist, since they hadn't yet appear in the father's

clinical history. In the same time he tried to recreate an impression of fake graphic tremor (red arrows in the following image in specimen X) so as to simulate the deteriorated skill of an elderly person. The comparison between the forged testament and authentic specimens of the same year (1982) where the graphism is fluent (green arrows in specimen A in the following image) reveals the discrepancy and proves the fraud.

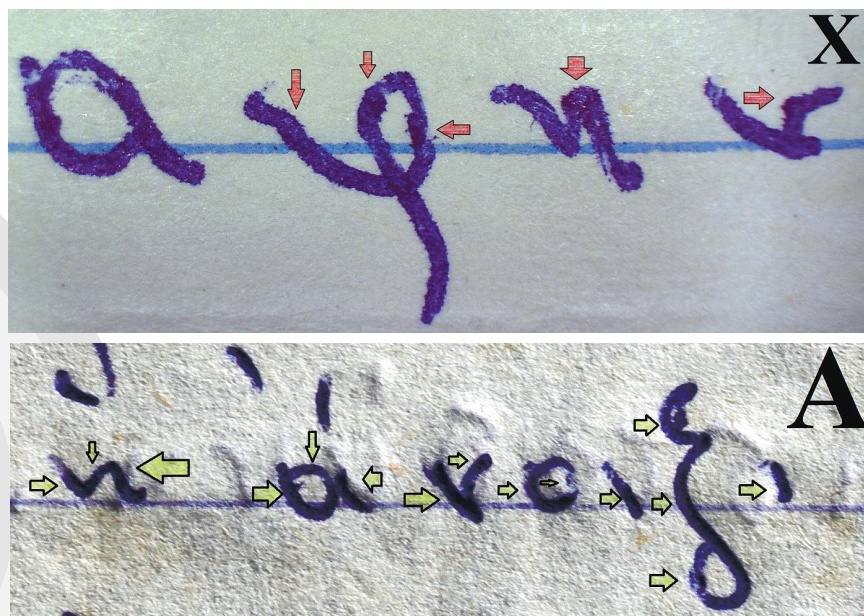


Fig. 1. Discrepancy is proved by the fluency of forming the letters in specimen A in relation to the fake graphic tremor of specimen X.

According to bibliography [2, 4, 7] fake tremor is one of the most important indicators of forgery. In the aforementioned case the forger's fatal errors concern the chronological discrepancy of both clinical condition and age in the date of presumed production of the testament.

Forgery is usually the result of desire of deceiving or appropriating another person's property. Apart from the action itself in the production of it, there are historical or other parameters external to it, which may affect negatively the result, condemning the whole attempt in a foregone conclusion. Age and clinical condition of the presumed testator in the date referred to in the forged document may automatically prove the fraud.

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