Madras High Court
Elumalai vs Subbaramani on 3 January, 2011

IN THE HIGH COURT OF JUDICATURE AT MADRAS

DATED : 03.01.2011

CORAM

THE HONOURABLE MR.JUSTICE S.PALANIVELU

C.R.P PD.No.3173/2009

Elumalai ... Petitioner / Defendant

vs.

Subbaramani ... Respondent / Plaintiff

Civil Revision Petition filed under Article 227 of the Constitution of India against the order

For Petitioner : Mr.T.Dhanyakumar

For Respondents : No appearance.

O R D E R

The petitioner is defendant in O.S.No.220 of 2008 on the file of the First Additional District Munsif Court, Thirukoilur. The respondent has filed the suit on a pro-note against this petitioner for recovery of a sum of Rs.40,000/- alongwith interest and costs. The suit was taken for trial and when it is in part-heard stage, the petitioner filed an application under Section 151 of CPC praying the Court to send the suit pro-note to the expert to ascertain the difference between the inks which were utilised for signing his signatures in the suit pro-note and other signatures contained in the printed form which is a filled up pro-note.

2. In the affidavit, he has alleged that while P.W3, one Rajavel was examined in cross, he has admitted that inks used for signatures of the defendant and one Gopal are similar and the ink used for signatures of others have difference. However, in the re-examination, he has stated that Kali and Elumalai signed, exerting pressure and the difference occurred due to this. Hence, the suit pro-note has to be sent for ascertaining whether there are differences between the inks used for signatures in the suit pro-note and other printed form.

3. In the counter filed by the respondent, it is stated that the petition is not maintainable and that by means of document examination, the period of writing could not be accurately ascertained. The petitioner has not produced any registered documents of contemporaneous period to that of the suit pro-note for comparison of ink. The petition has been filed to procrastinate the proceedings. On 30.06.2008, the suit was filed. The plaintiff's witnesses were examined and the case was posted for defendant's witness on 18.06.2009. There is no explanation in the affidavit, for what reason this petition has been filed one year after the date of filing of the suit. The opinion of the handwriting expert is not conclusive. Hence, the petition may be dismissed.

4. The Court below dismissed the application by observing that no valid grounds are made out to refer the disputed document to the expert. Hence, the petitioner is before this Court.

5. The learned counsel for the petitioner Mr.T.Dhanyakumar would contend that the evidence adduced by P.W3 by name Rajavel constitutes a good ground for supporting the contention projected by this petitioner, that by means of comparison and opinion of the expert, the respondent will not be prejudiced and that it is permissible under law to refer the disputed document to ascertain the difference in the inks utilised for different handwritings in a disputed document. Even though it is presumed that the document is true, invoking Section 118(a) of the Negotiable Instrument Act, sufficient opportunities must be given to the person who is stated to have delivered the negotiable instrument.

6. The learned counsel for the petitioner in support of his contention placed reliance upon a decision of the Honourable Supreme Court reported in (2008) 5 SCC 633 [T. Nagappa v. Y.R. Mudaliar] in which it is held as follows:

"7. When a contention has been raised that the complainant has misused the cheque, even in a case where a presumption can be raised under Section 118 (a) or 139 of the said Act, an opportunity must be granted to the accused for adducing evidence in rebuttal thereof. As the law places the burden on the accused, he must be given an opportunity to discharge it."

7. In this decision, the Supreme Court has extracted Section 20 of the Negotiable Instruments Act and made an observation that the proviso to Section 20 has a rider, namely, no person other than a holder in due course shall recover from the person delivering the instrument anything in excess of the amount intended by him to be paid therein. Though a presumption could be drawn under the Act, it is a rebuttable presumption and as per the mandate in the above said decision, the party has to be accorded with ample opportunity to rebut the same.

8. In the above noted decision, earlier decision of the Supreme Court in (2007) 2 SCC 258 = (2007) 1 SCC (Cri) 577 [Kalyani Baskar v. M.S.Sampoornam] has been referred to, which passage is as follows:

"The issue now almost stands concluded by a decision of this Court in Kalyani Baskar (Mrs.) v. M.S. Sampoornam (Mrs.) [(2007) 2 SCC 258] (in which one of us, L.S. Panta, J., was a member) wherein it was held : "12. Section 243(2) is clear that a Magistrate holding an inquiry under CrPC in respect

of an offence triable by him does not exceed his powers under Section 243(2) if, in the interest of justice, he directs to send the document for enabling the same to be compared by a handwriting expert to compare the disputed signature or writing with the admitted writing or signature of the accused and to reach his own conclusion with the assistance of the expert. The appellant is entitled to rebut the case of the respondent and if the document viz. the cheque on which the respondent has relied upon for initiating criminal proceedings against the appellant would furnish good material for rebutting that case, the Magistrate having declined to send the document for the examination and opinion of the handwriting expert has deprived the appellant of an opportunity of rebutting it. The appellant cannot be convicted without an opportunity being given to her to present her evidence and if it is denied to her, there is no fair trial. "Fair trial" includes fair and proper opportunities allowed by law to prove her innocence. Adducing evidence in support of the defence is a valuable right. Denial of that right means denial of fair trial. It is essential that rules of procedure designed to ensure justice should be scrupulously followed, and the courts should be jealous in seeing that there is no breach of them."

9. The above said decision indicates the duty cast upon the Court and dictates the Court to afford opportunity to the accused for having a fair trial before it. It is the quintessence of the decision that to prove the innocence of the accused, fair trial has to be ensured. In Kalyani Baskar's case, the Apex Court has stressed that if the disputed document would furnish the accused a good material to rebut the presumption, he should not be deprived of that opportunity. It is applicable to the objection to be raised by him in the matter of the age of the ink too, which is a good material available in the document. Both the decisions are squarely applicable to this case on hand.

9 (a). In a decision rendered by me in Crl.R.C.(MD) No.145 of 2010 [A.Sivagnana Pandian v. M.Ravichandran] (Madurai Bench of Madras High Court) dated 23.12.2010, I have taken up the following discussion in the light of the enlightening judicial pronouncements and authorities on this subject which are furnished hereunder.

10. In a decision of mine reported in CDJ 2009 MHC 2077 = 2009 Indlaw Mad 1077 = AIR 2009 Mad.166 [V.P. Sankaran v. R. Uthirakumar] I have referred and followed the decisions in T.Nagappa's case and Kalyani Baskar's case. I have also referred to a decision of the Andhra Pradesh High Court in AIR 1994 AP 90 [Uppu Jhansi Lakshmi Bai v. J.Venkateswara Rao] wherein the learned Judge has held that the opinion of the hand writing expert is not totally irrelevant factor for adjudication of the dispute and his opinion can be sought for determining the age of disputed handwriting. In this decision, a judgment of the Honourable Supreme Court in AIR 1964 SC 529 [Shashi Kumar Banerjee v. Subodh Kumar Banerjee] has been referred. The relevant portion of the Apex Court judgment is as follows:

"(23). Finally we may point out that the expert admitted in his evidence that it was only by a chemical test that it could be definitely stated whether a particular writing was of a particular year or period. He also admitted that he applied no chemical tests in this case. So his opinion cannot on his own showing have that value which it might have had if he had applied a chemical test. Besides we may add that Osborn on "Questioned Documents" at page 464 says even with respect to chemical tests that "the chemical tests to determine the age also, as a rule are a mere excuse to make a guess

and furnish no reliable data upon which a definite opinion can be based. In these circumstances, the mere opinion of the expert cannot override the positive evidence of the attesting witnesses in a case like this where there are no suspicious circumstances."

11(a). In the case before the Supreme Court, the expert did not perform any chemical test. Hence the Supreme Court has observed as above. Even in the said authority "Questioned Document" by Albert S. Osborn, the other portions were looked into and referred to by the leaned Judge of Andhra Pradesh in his decision above. The extraction of relevant excerpts of the authority in the decision in Uppu Jhansi Lakshmi Bai's case is as follows:-

"There are those also who pretend to say how old a writing is by merely examining it with a hand magnifier or a microscope. This always is an exhibition either of ignorance or of dishonest presumption. The chemical tests to determine age also, as a rule, are a mere excuse to make a guess and furnish no reliable data upon which a definite opinion can be based as can easily be demonstrated by fair tests on documents of known age."

The learned author also expressed the view that:

".....By recording the color as first seen, any observer with good eyesight can on second view answer the question whether an ink is still undergoing a change in color. This kind of an ink examination often furnishes conclusive evidence that a document is not as old as it purports to be.

.....

It is important to know that the color of the ink on a suspected document, if it is promptly examined, may thus be the means of showing that the document is not genuine. If a writing of this kind purports to have been written long before and it can be shown that the ink has not yet reached its final depth of color, and it actually goes through those changes that are characteristic of ink during the first months or year of its history, it is only necessary to prove this fact to invalidate the document."

The author Albert S. Osborn in other part of his book has opined that by adopting certain experiments, the age of the ink could be established.

11(b) In Shashi Kumar Banarjee's case (supra), the expert had not offered any opinion as to the age of the ink. He had admitted in his evidence that it was only by a chemical test that it could be definitely stated whether a particular writing was of a particular year or period. He also admitted that he did not apply any chemical test in that case. So, the Supreme Court reached a conclusion in the above said circumstances that mere opinion of the expert cannot over ride the positive evidence of attesting witnesses in a case like this where there are no suspicious circumstances. It is to be noticed here that in the said case, the handwriting expert did not say that no test was available to ascertain the age of the ink. He has categorically, indubitably and positively stated that the dispute as to the age of the ink could be definitely resolved by a chemical test. This position prevailed even earlier to 1964. As observed by the Honourable Supreme Court, the opinion of the expert has to be

subjected to scrutiny of the Court and that mere opinion of the expert cannot override the positive evidence of attesting witnesses. When positive evidence emerge from the materials in a case, then the opinion of expert cannot prevail.

12. On a later occasion, this Court in a judgment in 2010 (1) CTC 424 [R. Jagadeesan v. N. Ayyasamy and another], has opined that sending the documents for opinion in respect of the age of the writing on documents should not be resorted to hereinafter by the Courts unless, in future, due to scientific advancements, new methods are invented to find out the age of the writings. The learned Judge has sought for aid of the learned Additional Public Prosecutor of this Court to gain the view of the responsible officials in the Forensic Science Department, Chennai, on this issue. Accordingly, before the learned Judge, one Mr.A.R. Mohan, Assistant Director, Document Division, Forensic Science Department appeared. The learned Judge quizzed him as to the present practice in the Forensic Science Department for settling the issue. The following is the text in this context as regards the statement made by the above said Assistant Director before the learned Judge:-

"7. ... ... According to him, he is the Head of the document division of the department. On a query made by this Court regarding the above position, he would explain to this Court that there is no scientific method available anywhere in this State, more particularly, in the Forensic Science Department, to scientifically assess the age of any writing and to offer opinion. However, he would submit that there is one institution known as Nutron Activation Analysis, BARC, Mumbai, where there is facility to find out the approximate range of the time during which the writings would have been made. It is a Central Government organisation. According to him, even such opinion cannot be exact. He would further submit that since it is a Central Government Organisation and confined only to atomic research, the documents relating to prosecutions and other litigations cannot be sent to that institution also for the purpose of opinion. He would further submit that if a document is sent for comparison, with the available scientific knowledge, opinion to the extent as to whether the same could have been made by an individual, by comparing his admitted handwritings or signatures, alone could be made. He would further submit that if there are writings with two different inks in the same document, that can alone be found out. But he would be sure enough to say that the age of the writings cannot be found out at all to offer any opinion."

The Assistant Director has also informed the Court that already many such documents, which were sent to them by various Courts in the State for such opinion, have been returned by them with the report that no such opinion could be offered.

13. Earlier decisions of this Court show that there had been directions for ascertaining the age of the ink and they have been performed by the experts. Following is a classical instance as seen from a judgment of this Court in 2004 STPL (LE-Crim) 24910 MAD [Amaravathi Chits Investments v. T.M. Vaidyanathan]. The observations in the said judgment are as follows:

"6. ... ... In this regard, learned counsel also submitted that the accused filed Criminal M.P. No.2077 of 1995 to send the cheque Ex.A.1 (Cheque No.991836) to the Forensic Department for obtaining the expert's opinion and the Scientific Assistant D.W.1. also, in support of the case of the accused, has stated in the report Ex.D.3 that the person, who has written S34, has not written S1 and

that in the date of cheque, the number '1' has been inserted with different ink and Q1 and Q2 have been written in ink whereas Q3 to Q5, signature and writing, are all done by using ball point pen."

"7. ... ... The hand writing expert D.W.1 has filed report Ex.D.3 and also stated in his evidence that in the cheque Ex.P.1, the writings Q1 and Q2 were made by using ink whereas Q3 to Q5 were made by using ball point pen and in the writing marked as Q1, there is a decolourisation of the figures 1993 and the figure 'I' in the month 25-12-1993 marked as Q1, has been inserted with different ink. Therefore, as rightly argued by the learned counsel for the accused and as rightly pointed out by the Metropolitan Magistrate, there have been material alteration in the date of cheque by adding '1' before '2' in the month to make it appear that the cheque was issued on 25.12.1993 so as to bring the cheque within the validity period for the purpose of limitation."

14. The above mentioned decision brings to light that the questioned documents as regards the difference in ink were referred to the Forensic Science Laboratory in this State which were subjected to ink examination and the expert who performed the test deposed before the Court and stated about the tests undertaken by him. Hence, the statement by the Assistant Director of Document Division before this Court that no scientific method is available anywhere in this State, particularly in the Forensic Sciences Department to scientifically assess the age of any writing and offer opinion, is not correct.

15. A Single Judge of the Karnataka High Court in 2010 STPL (LE-Crim) 33581 KAR [Ishwar V. Suresh] while dealing with the identical issue in the case of dishonour of cheque has followed the decisions in T.Nagappa's case and Kalyani Baskar's case of the Apex Court and directed for determination of difference in ink in the cheque and promissory note. In the said decision, it was the case of the accused that he had issued a blank cheque and bond paper to complainant which have been mis-used by entering a huge amount. The attestor admitted that the difference in ink with reference to contents of the documents. The trial Court and the Revisional Court had rejected the request of the accused. The Karnataka High Court termed the rejection of application of accused for referring the cheque and bond paper for examination by an expert only on the ground that he admits his signature in cheque, as illegal.

16. As to the view expressed by the Assistant Director, the Court has to see whether the science and technology on this subject has developed and presently whether it is impossible for the department concerned, to ascertain the age of the ink with the available experiments in practice as done by the other Countries and other States in this country, particularly on the prior occurrences, when age of the ink was ascertained by the Forensic Sciences Department in this State. When the accused is legally entitled to rebut the presumption contained in the provisions of the Negotiable Instruments Act, there is no other option for the Court except to provide opportunity to him to rebut the same so as to make certain the fair trial, as held by the Apex Court, when analytical, meticulous and regulated means are available.

17. The phraseology, "fair trial" has been defined in P. Ramana

"A trial which is fair and proper in contemplation of law, viz, that which the law secu

" 'Fair trial' means a trial in which bias or prejudice for or against the accused, th

"The failure to hear material witness is certainly denial of 'fair trial' Zahira Habibulla H.

18. This Court has waded through various authorities specifically on this subject and found out that the procedures of investigation and demonstrations are very much at hand for ascertaining the age of the ink, which should have been adopted by the experts in our country contained in upto date treatise.

19.(a) Nature of examination of ink of various categories and different experiments performed by the renowned chemists and the reagents to be utilised for such experiments have been graphically narrated in the latest edition in Bhuvan's "Examination of Disputed Documents" [2010 edition]. The excerpts in the said authority in pages 214, 222, 223, 225 and 226 are as follows:

"7. Age of Ink.- ... ...

(1) ... ...

(2) ... ...

(3) Diffusion pictures.- Inks often contain sulphate or chloride ions from the acids added to it. They diffuse into the paper with passage of time. If the paper is treated with lead acetate or silver nitrate, suphate or chloride ions precipitate out as lead sulphate and silver chloride and give diffusion pictures. The age of the writing is directly related to the extent of diffusion, indicated by the diffusion pictures."

"8. Examination of Inks :- The examination of inks is one of the most difficult and yet important tasks in the examination of the documents. The variety of inks is very large. The amount of ink available for examination is extremely small. An ounce (28 grammes) of dry ink gives six miles unblotted ink line. The examiner has to content himself with about one millimetre of the ink line which may be blotted. The analysis of ink is, therefore, undertaken, only when it is vital, by experienced workers.

The evaluation of inks on questioned documents solves many problems:

(1) Is the whole document written in the same ink?

(2) What is the age of the writing?

(3) Has the ink come from the given inkpot?

(4) Can the faded ink be restored?

(5) Can the erased writing be read?

(6) Are the additions, alternations, substitutions and cancellations with the same ink?

(7) Can the obliterated writings be made legible?

To determine whether two documents were written with the same type of ink, various physical and chemical methods are available. Thinlayer chromatography is particularly suitable for ink comparisons. In the dye inks, the separation pattern of the competent dyes is distinctly different for inks having different dye compositions, and thus provides many points of comparison between a known and a questioned ink.

(1) Comparative Table of Robertson and Hofmann For the examination of inks for legal purposes and especially to determine their nature and the difference between them, Robertson and Hofmann, the chemists, have prepared a very useful comparative table.

This table will not only facilitate the task of the professional chemist but will enable the Investigating Officer in country districts to undertake, in urgent cases, the chemical examination of a document suspected by the meidical jurisprudent or pharmacist. But we repeat that such investigation irreparably destroys a portion of the document.

The process is carried out by filling several quill pens with the reagents indicated, making strokes across the letters and numbers to be examined, and observing the changes of colour produced where the ink and the reagent meet.

The chief reagents given by the authors names are:

1.Solution of 3 per cent of oxalic acid in water.

2.Do. of 10" of citric acid in water

3.Do. of 2" of chloride of potassium in water

4.Solution of one part of proto-chloride of tin with one part of hydrochloric acidin 10 parts of water

5.Solution of 15 per cent of sulphuric acid.

6.Do.of 10" of hydrochloric acid

7.Do. of 20" of nitric acid

8.Solution of anhydrous sulphuric acid in water

9.Solution of 4 per cent chloride of gold in water

10.Do. of one part of ferrocyanide of potassium with one part of hydrochloric acid in 10 parts of water.

11.Solution of one part of thiosulphate of sodium with one part of ammonia and 10 parts of water.

12.Solution of 4 per cent of sodium hydrate in water."

10. Methods of Examination of inks:- The method commonly used for studies of inks are:

(1)Visual Examination:- Visual examination must be done with light falling at various angles and in transmitted light. The colour and shade variations must be carefully noted, which reveals apparent discrepancies and erasures.

(2)Chemical analysis:- Generally, inks are acidic, alkaline or neutral and have power of resistance against chemical reactions from oxidizing or reducing agents. So, the chemical analyst must note the action and time of reaction. In context of modern development the chemicals used for the tests are:

(1) Chlorine Water (2) Bromine Water (3) Stannouschloride Solution (4) Potassium Permaganate Solution (5) Sodium Hydroxide Solution (3)Magnifiers:- The magnifiers and stereomicroscope are the two accessories, which are invaluable in examination of disputed documents.

(4)Filters:- Different colours filters are used for detecting distinguish ink shades and evaluation of faded writings. Obscured writings obtained by obliteration or by highly coloured surfaces are also detected by help of different colours filters. A computer with good quality scanner has also colour filtering system, which will gives better result than filters of different colours.

(5)Invisible rays:- X-rays, ultraviolet rays and infrared rays are used for analysing variations in the inks of disputed document. For above studies, a Video Spectral Comparator (VSC) is useful The Video Spectral Comparator equipment have recently been developed, which facilitates scanning a document under different wavelengths, in the Ultraviolet, and Infrared range to detect alterations, additions, erasures and obliterations. It is also found useful for comparison of writing by displaying any part of the writing side by side, above, below or superimposing the signature for comparison one over the other. Besides the above equipment, Laser source is also useful for comparing ink writings to detect alterations and additions.

(6)Spectrographic analysis:- Spectrography especially with laser microscope are useful to give nature and quality of ink used in writing the document. For this purpose, suspension of metals in ink of small quantity are helpful.

(7)Spectrophotometry:- The dyestuffs used in inks can be identified with help of spectrophotometry. The chemical nature of ink can be determined by chromatography.

(8)Chromatographic analysis:- Different types of dyestuffs used for manufacturing of inks can be identified by means of Thin layer Chromatography (TLC). The use TLC separates out the dyestuffs

constituents and proved handy for ink analysis of questioned documents. This method is most frequently used for analysis of inks.

(9)Electrophoresis:- The solution of inks are subjected to electrical field created by supply of electricity. The dyestuffs constituents of inks separates in band and make it possible to identified different dyestuffs used in manufacturing of inks."

19.(b) The author has reflected above opinions on the strength of the following books of various authors:

1. Dr.B.R. Sharma, Forensic Science in Criminial Investigation & Trials, Fourth Edition with Supplement.

2. B.S. Nabar, Forensic Science in Crime Investigation, Reprint Edition,2008

3. John Adam & J. Collyer Adam, Criminal Investigation, Third Edition.

19(c) The author has detailed in the above book that the following are the often used ink categories:

(i)Iron Tannate inks: Iron gallotannate ink is a mixture of tannic acid and gallic acid extracted from wood and when mixed with ferrous salts, gives a colourless liquid, which on drying gives black colour. It is, therefore, mixed with suitable dye to give colour to the ink. The common blue-black ink used in fountain pens belongs to this class.

(ii)Dyestuff inks : Now-a-days, the most popular ink is dyestuff inks. It is manufactured from number of dyes. The most particularly used dye is nigrosine dye. It is available in many colours and shades. It is not permanent ink as it was washable and fades with passage of time. However, the fading of ink depends upon the individual dye of which it is manufactured.

19.(d) The above said authority amply amplifies that even though the assignment of ascertaining the age of the ink is tough task, yet, proved experiments are available for rendering resolution on the issue.

20. In the book Forensic Science in Criminal Investigation and Trials by B.R. Sharma [1999 edition], interalia, the following suggestions have been made to bring about such experiments in page No.402:-

"The examination of ink is one of the most difficult and yet important tasks in the examination of documents. The variety of inks is very large. The amount of ink available for examination is extremely small. An ounce (28 grammes) of dry ink gives six miles unblotted ink line. The examiner has to content himself with about one millimetre of the ink line which may be blotted. The analysis of ink is, therefore, undertaken, only when it is vital, by experienced workers."

21.(a) The writings made by a Ball point pen can also be subjected to scrutiny for this purpose. It is available in the authority "Suspect Documents their scientific examination"by Wilson R. Harrison [1996 edition first Indian reprint] in page 217, as follows:-

"The age of a ball-point writing may be estimated more accurately as the result of chemical tests on the ink. The first successful inks developed for use with the Biro pen were all based on olein. Whilst such inks have been superseded by improved products in the better pens, they are still being used in the cheaper pens."

21.(b) The author has opined that there are three categories of inks known as (1) Dyestuff writing inks (2) Iron Gallotannate inks and (3) the Alkaline inks. As far as usage of Dyestuff inks is concerned, it is impossible to estimate its age chemically or any other methods and any attempt to estimate the age of a writing by controlled fading test is certain to prove abortive. It is also stated that the estimation of the age of the dyestuff writing is one of the urgent unsolved problems confronting the document examiner. [page 218]

21.(c) Insofar as Iron Gallotannate Ink Writing is concerned, the ink line exhibits and interesting series of colour changes as it ages, and it is largely because of this that many think that it is possible to determine the age of an ink writing from the colour. [page 219].

21.(d) Another passage in page No.220 is as under:

"with a genuine document several years old, the colour of the ink will show no appreciable change over a week or so, but any darkening as shown by an increase in the red component will afford conclusive evidence that the writing is more recent than alleged."

21.(e) Even the age of dyestuff ink writing can be determined as per the author who has come out with the following version in page 124 of the book.

"Aged Ink:

As an ink ages, the dyestuffs therein slowly decompose, until nothing but a crust of ferric oxide remains. At this stage, the chromatogram of anything which can be extracted from the ink line will bear little resemblance to that derived from the original ink. It might appear, therefore, that the age of an ink writing might be determined from the appearance of the chromatogram, but experiments have shown that, as long as the ink has not decomposed, the chromatogram is not appreciably affected."

22. New procedure for experiments have been discussed in the authority "Scientific Examination of Questioned Documents" (second edition 2006) edited by Jan Seaman Kelly and Brian S.Lindblom, of suspected documents and disputed documents in pages 153 and 154, which read thus:

"A microscopic spot test the reaction of a minute drop of chemical reagent on a portion of the ink stroke viewed under the microscope helps to determine that the document was written with a

particular class of fluid ink, e.g., iron base, synthetic dye, carbon ink, or pigment. When properly performed, these tests make only a microscopic change in the document. Although not utilized as much today as formerly, they are of particular value in demonstrating that two different inks were employed on a single document. Unfortunately, spot testing does not necessarily distinguish between brands of the same class of ink.

It is possible for different inks to react similarly when examined using the non-destructive techniques described above. In this case, further discriminatory testing using a technique called thin-layer chromatography (TLC) may be appropriate. Because TLC results in a change to the document's condition, it should be considered destructive (or at best semi destructive). The method requires removing very small samples of ink from the paper, a step that may require a court order or an arrangement among all parties to the dispute. The removal technique typically employs a microdisc hole punch or a scalpel to remove small quantities of ink and paper. TLC is the most popular of chemical tests currently available.

Other instrumental analyses are now available that allow further discrimination of inks, such as gas chromatography/mass spectroscopy (GCMS), Fourier transform infrared spectrometry (FTIR), and Raman spectroscopy.

Chemical tests are an important part of the identification of inks. Chemical composition can be determined by a combination of tests and demonstrated in legal proceedings in order to show that the document has been backdated or altered."

23.(a) The authoritative methodologies recommended in the authorities supra are self-explanatory.

23.(b) The aforenoted opinions of the reputed authors on this subject as narrated above would make it abundantly clear that it is not impossible to discover age of the ink. Hence, the plea that the procedures have not evolved so far in this country is no longer available and it cannot be acceded to. Going by the above clippings in the authorities, it transpires that it is not at all difficult task to step into the experiments under the guidelines of illustrious experts in this field. The authorities and the officials concerned have to take initiatives to evolve procedures for experiments with latest technology for achieving improvement on the subject.

24. On the basis of choosy and discerning performance of researches, the authors have provided procedures and devices, with reference to the names of chemicals and reagents to be utilised, to solve the issue and it is incumbent upon the experts to put the authoritative theories and the latest proved and established technologies to empirical use. They have to take the inventiveness drawing the proven and accepted principles from well settled authorities and the Government have to provide necessary latest infrastructures in the Document Division of the Forensic Sciences Laboratory and also allot necessary funds for the constitution of sophisticated laboratory which is a full-fledged one in this regard.

25.The scientist can elect non-destructive technique where there is no scope of destruction of disputed document. When the authorities effectively suggest various methods for subjecting a

document for this purpose, it is high time for the scientists of this State and the Government committed them in use in practice. When the science has flourished to show enormous, remarkable, striking and much advanced improvements in all other fields, while sufficient ways and means are available in this sphere, they cannot be disregarded and thrown overboard. The State shall take every possible step to provide the justice delivery system to unearth actual evidence available in a case. If the scientists or experts come across any difficulties, they can very well bring to the notice of the authorities concerned. At their request and proposal, the Government shall allocate necessary means.

26.(a) The expression that there is no scientific method available anywhere in the country or State, more particularly in the Forensic Science Department for scientific assessment of the age of handwriting to offer opinion is far from acceptance. A careful survey of the above authorities would unveil a fact that settled plans of actions for experiments are very much available and when one steps into such experiments, there is further scope for upswing in the technology. It is bounden duty of the official concerned to follow the procedures. As mentioned in para 12(b) of this judgment, even anterior to 1964, in a decision rendered by the Supreme Court, in Shashi kumar Banerjee's Case (supra) before the trial Court, the expert had stated that the determination of the age could be ascertained definitely by a chemical test. It reveals that even prior to 1964, chemical tests were in application to find out age of ink. Now, the science in this branch has prospered to considerable dimensions and it cannot hereafter be contended that it is not possible to ascertain the age of the ink by scientific method and exact result could not be secured. The scientists/experts should appear before the Courts with opinionated evidence in this regard, on their successful accomplishment of this assignment.

26.(b) The advancements in establishing the facts in this field as a science continue through today. The explosion of modern technology has influenced every facet of our lives, from introducing new avenues of written communications to improvements in ink and ergonomic design of writing instruments.

27. The above said discussion on the strength of the authorities available before the Court is only indicative, not exhaustive. It is not a sole-source training manual.

28. Adverting to the facts of the present case, since various scientific avenues are available for finding out the age of the ink in a document, it must be subjected to tests as suggested by various scientists. I follow the ratio in the decisions in Kalyani Baskar's case and T.Nagappa's case above, and direct to refer the disputed document to such examination in order to provide an opportunity when a good material is available, to rebut the presumption as per law, by non-destructive method in this regard.(Emphasis supplied).

29. If the expert concerned considers that such examination would destruct a part of the document or the document itself, they may report the fact before the Court and the Court thereafter shall pass further orders for the proof of the facts on the basis of pleadings and other evidence. Latching the opportunity to the accused in the attempt at the stage of rebutting the presumption under Section 118(a) and 139 of the Negotiable Instruments Act is not at all "fair trial". As per the settled law, every

opportunity shall be extended to the party to a case to establish his defence.

30. In this situation, it is also regarded that it is the view of the Supreme Court that some delay in taking steps for referring the document to the wisdom of the expert cannot be a legal embargo for entertaining the plea.

31. In view of the above said study and discussion, I am fortified in my view that the disputed document has to be referred to the expert for ascertaining the age of the ink and practical hardships, if any, sustained by the expert shall be brought to the notice of the Court and the Court shall thereafter act according to the settled principles and procedures, in affording appropriate opportunity to the petitioner/defendant to prove his case. Hence, interference with the order challenged before this Court has become inevitable, which is set aside. The revision deserves to be allowed.

32. in the result, the Civil Revision Petition is allowed. No costs. I.A.No.719 of 2009 in O.S.No.220 of 2008 on the file of the First Additional District Munsif, Thirukoilur is allowed. The Presiding Officer shall observe the settled procedures for referring the document for the comparison of the expert.

rgr/ggs To The I Additional District Munsif, Thirukoilur