An Imagery Analysis report on the Video and Photographic Evidence supplied

In the case of

'The Bose Mystery'

by

N.Millar MIET, MBCS, LCGI

Summary

1. Taking into consideration the similarities *and differences*, the image and footage quality, the historical nature of material supplied and modern day technical quality issues, I am of the opinion that there are ***noticeable similarities*** in the facial features, to include the ears, of both Subhas Chandra Bose *(SCB)* and the individual seen at the Tashkent Peace talks in 1966 *(TM)* and differences which could be attributed to the image quality, capture angles and items such as glasses and clothing that mask certain areas.
2. I am of the opinion that serious consideration must be given to the contention that the Tashkent Man and Subhas Chandra Bose share very similar facial features and could *potentially* be one and the same person.
3. Within the UK imagery analysis/ facial comparison arena, a common *Degree of Certainty* scale *(attached within Appendix B)* is utilised to assist an Expert in describing his or her findings in a manner that can be quantified, this is referred to as *'level of support'* scale. This is a guide and not a definitive scale as there are some variations dependent on the Expert's use of the scale and their choice of wording *(See Appendix B).*

4. If I were to utilise this scale in this particular analysis, taking into consideration my findings, I would be of the opinion that the imagery, both still and moving that has been supplied to me, in regards to the historical facial features of Subhas Chandra Bose and the individual identified as the Tashkent Man, ***lends Support*** leaning towards ***Strong Support*** to the contention that they are one and the same person.

5. Should further information be determined in regards to the potential eye conditions mentioned in *Figure 30*, and further imagery of the Tashkent Man that *might* surrender more detail such as the moles and pox marks seen on the face of Subhas Chandra Bose, I would be of the opinion that the Level of Support *might* increase to ***Powerful Support,*** that Subhas Chandra Bose and the individual identified as the Tashkent Man are the same person.

N. Millar

17th November 2015

Contents

This report consists of 62 pages which includes appendices.

Due to the format of this report, it is not suitable for Court and therefore should not be used as such.

Declaration of Impartiality

- In this particular instruction, I have been asked to review historical imagery of an individual I understand to be *Subhas Chandra Bose.* I also understand that this individual was a key political figure during the early part of the 1920's to the mid 1940's.
- I must declare that at the time of the completing this analysis, that I have no political agenda in completing this report or have I ever at any point, been involved in any political following or motivations that may affect my results.
- I have accepted this instruction purely as a professional individual.
- My duty in this instance is to independently assist my instructing party by way of an objective, unbiased opinion on matters within my expertise, in preparing a professional Imagery Analysis report. I have, *where possible*, taken every precaution to avoid *Expectation Bias* /*Confirmation Bias** and *Contextual Bias***
- I understand that this duty overrides any obligation to the party by whom I am engaged or the person who has paid or is liable to pay me. I confirm that I have complied with and will continue to comply with that duty.

N. Millar MIET MBCS LCGI

17th November 2015

***Confirmation bias:** The tendency to test hypotheses by looking for confirming evidence rather than potentially conflicting evidence.*

****Contextual bias:** The tendency for a consideration to be influenced by background information.*

Qualifications and Experience

Author — N Millar

I served in the Royal Signals for 16 years specialising in ground based telecommunication networks. My experience includes establishing, operating and engineering secure voice and data telecommunications systems, design, deployment and instruction of military line of site radio based, trunk telecommunication networks, satellite ground based systems and the management of secure networks for high level confidential information within HMG's national secure system environment.

I have applied these skills in the N.Ireland, Balkans, Iraq, Lebanon and Afghanistan.

I am also experienced in the critical assessment of telecommunications site reconnaissance imagery, CCTV control room operations in Northern Ireland and Afghanistan and processed and assessed battlefield intelligence imagery with US Central Command, Tampa Bay, Florida.

Since leaving the British Military 2008, I have been engaged in research into Cell Site Analysis but have been primarily engaged in CCTV and Imagery Analysis based casework specialising in the following areas:

- Facial mapping/facial comparison of evidence relating to both identification of persons seen within CCTV/digital, analogue video and still imagery, also undertaking tasks in relation to passport Imagery/immigration casework.

- I am experienced in tasks relating to height analysis, comparison and identification of vehicles, the analysis of events in relation to criminal activity or similar and the analysis of objects and clothing.

- Analysis of historical imagery in relation to missing person and or issues of historical interest.

I have undertaken research into the identification of an unidentified female seen on the area of the *'grassy knoll'* recorded in *'Weigman footage'*, who was a witness to the John F Kennedy *(JFK)* Assassination on 22nd November 1963, Dallas, Texas. Known as the *'woman in the sunglasses'*, I assisted the family of a woman thought to be the unidentified female by conducting a facial comparison and morphological comparison using historical imagery, which continues.

I have presented and prepared evidence for all levels of Court including the UK High Courts of Justice, Central Criminal Courts *(Old Bailey)* and International Courts.

I have the following qualifications and training:

- Certificate in 2G and 3G architecture, protocols and implementation.
- Certificate in Data Communications from the Royal Military College of Science, Shrivenham.
- Trained in Morphological and Photogrammetric comparisons as well as height analysis techniques *(2008 -2012).*
- Trained in the construction of CCTV cameras and the deployment of cameras using UK specified target templates such as Rotakin and NORMAN (2008 - present).
- I hold a BTEC level 3 qualification in Advanced Foot & Mobile Surveillance techniques, covert camera systems as well as surveillance photography techniques *(2011).*

I am a member of the British Computer Society (BCS), the Institution of Engineering and Technology (IET), the British Association for Human Identification (BAHID) and the Forensic Imagery Analysis Group (FIAG - *member of the working group*) and the London Institute of City and Guilds (LCGI).

I am also registered with the UK Register of Experts and X-Pro Expert Witness Register.

Introduction

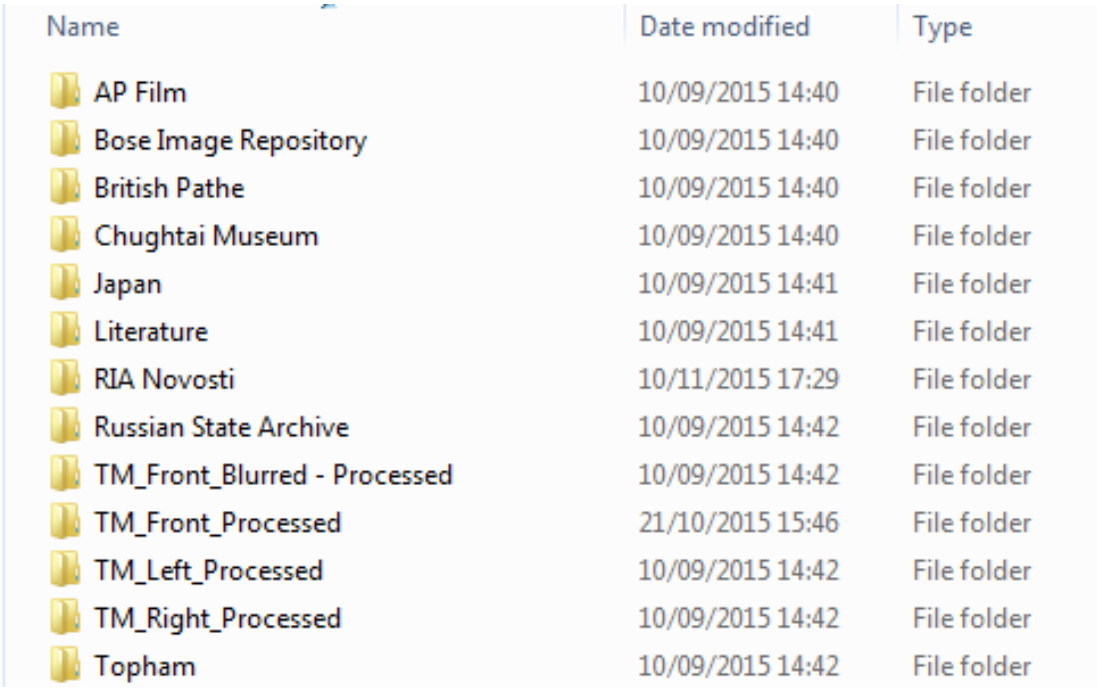
1. I have been instructed by Mr Siddhartha Satbhai, who I understand is a private researcher with an interest in *'The Bose Mystery'*.

2. My understanding is that, *Subhas Chandra Bose* is alleged to have died in a plane crash in 1945. Over many decades various imagery/footage has been found showing an individual widely thought to be *Subhas Chandra Bose* in particular footage from the 1966 peace talks held in Tashkent, Uzbekistan in the former USSR.

3. I have been asked to conduct the following:

   - Review the supplied known imagery of *Subhas Chandra Bose* known to be captured before his alleged death in 1945, with the supplied footage of the Tashkent talks, which I understand to have been made over a number of days.
   - Conduct an imagery comparison using facial comparison techniques and methodology and provide a professional opinion as to the possibility that the Tashkent Man is *Subhas Chandra Bose.*

4. I have been supplied with the following material upon which I rely by Mr Siddhartha Satbhai, each folder contains various images and video:



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AP Film	10/09/2015 14:40	File folder
Bose Image Repository	10/09/2015 14:40	File folder
British Pathe	10/09/2015 14:40	File folder
Chughtai Museum	10/09/2015 14:40	File folder
Japan	10/09/2015 14:41	File folder
Literature	10/09/2015 14:41	File folder
RIA Novosti	10/11/2015 17:29	File folder
Russian State Archive	10/09/2015 14:42	File folder
TM_Front_Blurred - Processed	10/09/2015 14:42	File folder
TM_Front_Processed	21/10/2015 15:46	File folder
TM_Left_Processed	10/09/2015 14:42	File folder
TM_Right_Processed	10/09/2015 14:42	File folder
Topham	10/09/2015 14:42	File folder

Note: Access to this information should be directed to Mr Satbhai.

5. Prior to my initial instruction/introduction *(in 2013)*, I have had no prior knowledge of *'The Bose Mystery'* and I therefore refer to the declaration at the beginning of this report.

6. Throughout my report, I have been aware of other aspects of the Bose Mystery that are currently being investigated. I have only been asked to comment on the imagery provided and where possible, I have focused on similarities, differences and any observations that I have found within this supplied material. To this end I have taken careful consideration to avoid:

    a. ***Expectation bias***, also known as experimenter's bias, is where the expectation of what you will find affects what you do actually find.

    b. ***Confirmation bias*** is closely related to expectation bias, whereby people test hypotheses by looking for confirming evidence rather than potentially conflicting evidence.

    c. ***Contextual bias*** is where someone has other information aside from that being considered which influences *(either consciously or unconsciously)* the outcome of the consideration.

7. This is my report, which includes details of my examinations and conclusion. There is an Appendix of *'Facial Landmarks'* which I shall utilise within the report for the purposes of describing features *(Appendix A)*, as well as a relevant section of *'background information on video and photographic evidence' (Appendix B)*, which includes section on the *'degree of certainty'* support scale used by the Forensic Imagery Analysis Group *(FIAG)* a subgroup of the British Association of Human Identification *(BAHID)*.

Examination of the Exhibits

The video imagery has been examined using the following equipment:

- Spectre examination workstation.
- VLC media player.
- Serif Photoplus X5
- Microsoft Office Photo Manager.
- Stereoscope
- Hand held magnifier

Examination

8. I have been supplied with a plethora of historical imagery and video of various that show what I understand to be confirmed, known images of *Subhas Chandra Bose* that are for the majority, *black and white* images that are likely to be modern copies *(Electronically scanned or other).* Generally, when conducting analysis of imagery, it is best practice to view the original media so that any distortion, debris or other viewable details can be confirmed or ruled out as false features.
9. The video footage that has been supplied is not of the original source material which I would imagine would be of a magnetic media considering the available technology at the time.
10. The various video files provided will at some point have been copied to an electronic version and therefore *might* have been reduced in quality. At the time of publishing this report, I am not aware of the historic video processes that have or have not been applied to this footage but am satisfied that they are of sufficient enough quality to conduct my analysis.
11. As well as the potential issues with the video material, is the condition of the still images of *Subhas Chandra Bose.* Some of the material appears to be *'propaganda style'* imagery or *'artistic impressions'* of the subject. For the purposes of this analysis, I shall only use a selection of the still imagery supplied, that surrenders/shows the best detail, although it should be noted that I have reviewed the majority of the imagery for any notable detail.

Method

12. For the purposes of this Analysis I shall use *morphological comparison* to compare the features of the both subjects. As no size or scale has been presented of *Subhas Chandra Bose* it is unlikely that any photogrammetric comparisons will be achievable, it is therefore likely that I will comment on a generalised shape and or size *(i.e. appears rounded as opposed to flat or large, medium or small in size).*

13. As the imagery is of a historic nature I will throughout the analysis attempt to enhance the image in question effectively changing it from the original presented to me. This is an approved technique and will in all circumstances show the original image used.

14. I have separated the report into the following tasks:
    - Task 1- Analysis of *Subhas Chandra Bose.*
    - Task 2 - Analysis of the *Tashkent Man.*
    - Task 3 - Morphological comparison of *Subhas Chandra Bose and the Tashkent Man.*

15. To avoid repetitiveness, I abbreviated the subject's names as follows and shall refer to them as such hereafter:
    - Subhas Chandra Bose - *SCB.*
    - Tashkent Man - *TM.*

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Analysis of Subhas Chandra Bose

Ref: Peter Ruhe 1935

Ref: 1937

Ref: 1941-2

Ref: CPA media

Ref: Ullstein 1943

Ref: Ullstein 1944

Figure 1 - Samples of known Imagery of SCB

16. Figure 1 shows a number of sample images of *SCB* over a period I understand to be the 1930's to mid 1940's.

17. In order to review the facial features and ears of *SCB*, I have selected those images that surrender the best quality and detail available to me. I have however, utilised all of the imagery available to me, to confirm the presence of certain features where available to rule any debris such as lens debris, which *might* provide false features/detail.

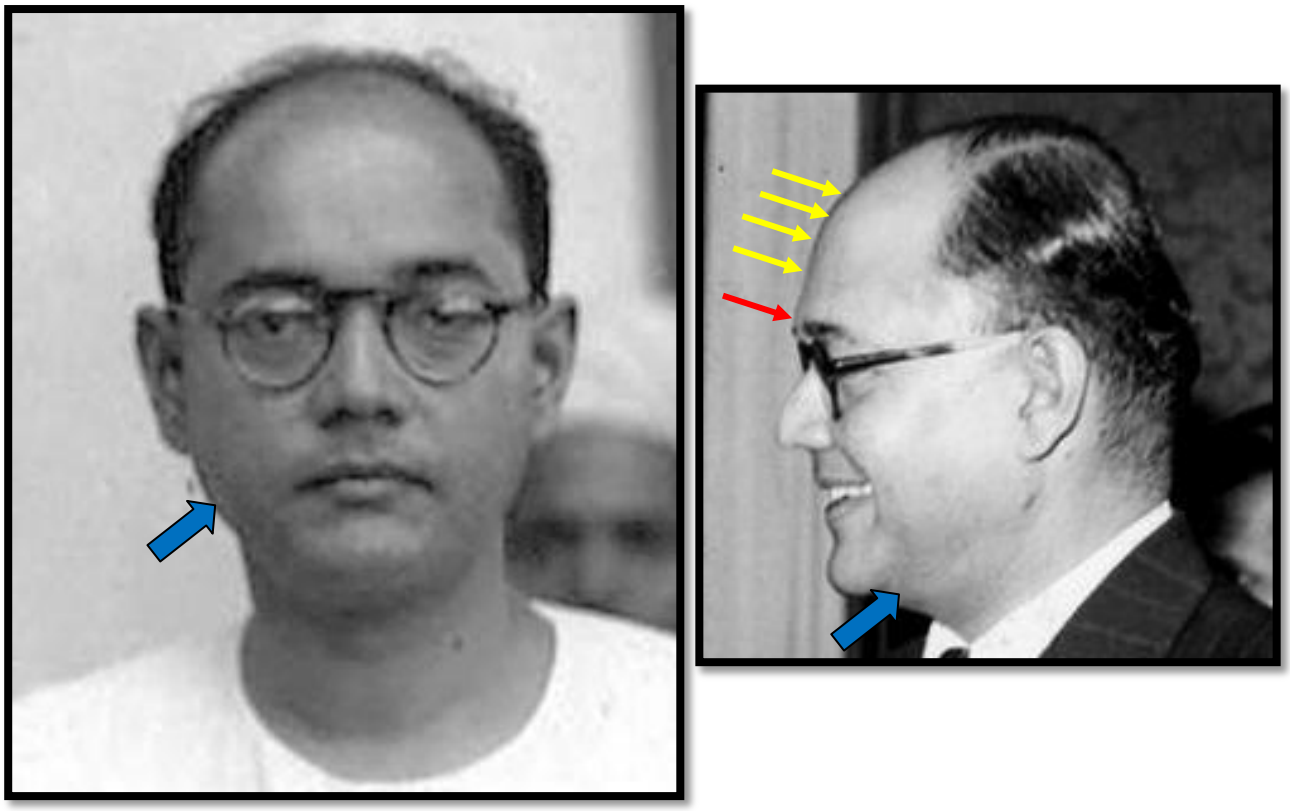

Figure 2 - SCB head shape

Head shape and key features

18. Figure 2 focuses on the shape of *SCB's* head. Taking into consideration the extense supplied imagery, I am of the opinion that I would liken *SCB* to having an oval shaped head.

19. I noted however, that *SCB*, with the exception of those images taking during a period of illness *(understood to be the mid 1920's or 1930's)*, had fleshy cheeks and the jaw line had a *jowly* appearance *(blue arrows)*.

20. Later images of *SCB* showed him to have had a *jowly* appearance in the area of the cheeks and jaw line consistently.

21. I noted that *SCB* had a sloping *'frontal bone' (area of the forehead)* that leads downwards towards the brow line, which can be seen consistently to be slightly pronounced *(yellow arrows)*. I noted no obvious presence on any *'frontal bosses'* on the frontal bone.

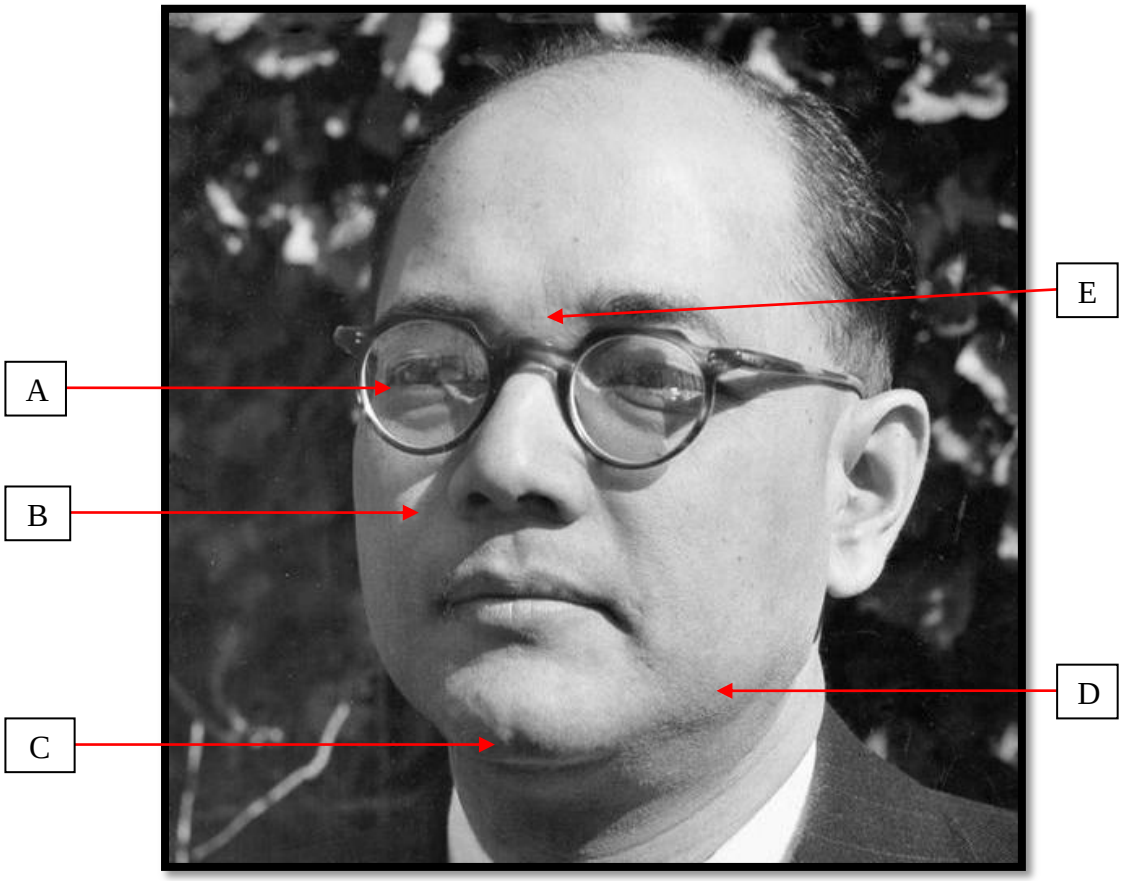

Figure 3 - SCB facial features

22. I noted the following observations in regards to the image seen in Figure 3 - lower and middle thirds of the face:

A - The eyes are of a more slender appearance as opposed to being round or wide or almond shaped. This feature would likely be subject to change depending on the position of the eyelids at the point of capture *(see also Figure 12b).*

The eyes have noticeable *'skin folds'* under the eye likely to be as a result of *'skin lag'* or more commonly referred to as *"having bags under the eyes"*.

B - The imagery shows a faint *'nose lip'* crease running down either side of the nostril housing, starting at the base of the *alar* becoming fainter towards the outer edges of the mouth *(cheilion points).*

C - The chin is round in shape and juts or protrudes; there is presence of shadow suggesting a medial delve in the structure of the lower chin area.

D - The jaw line and lower cheeks are fleshy with a jowly appearance.

E - The g*labella* is wide and slightly pronounced. It is possible to see some longitudinal orientated lines in the skin - *Glabella lines*.

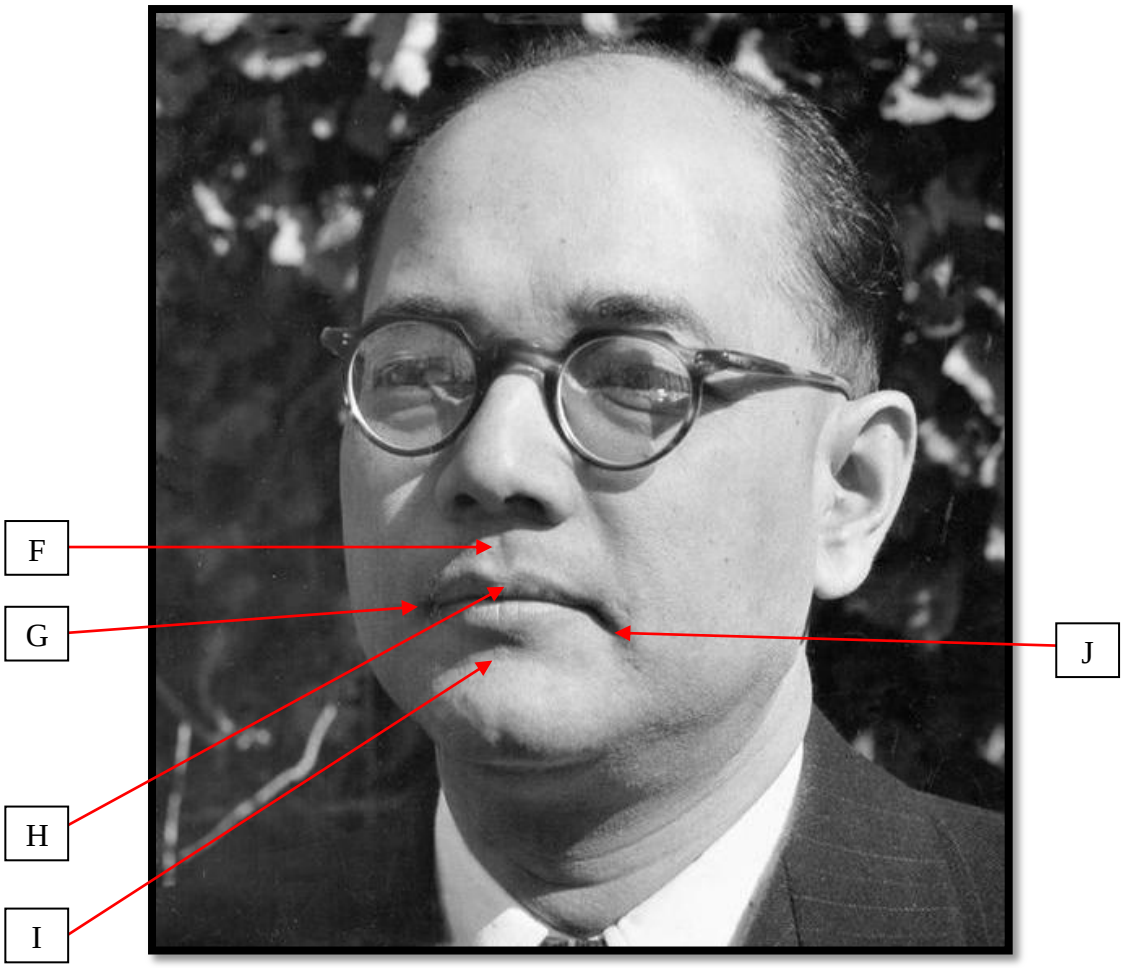

Figure 4 - SCB facial features

23. I noted the following observations in regards to the image seen in Figure 4 - *lower third of the face*:-

F - SCB has a noticeable *philtrum groove.*

G & J - The edge of the mouth *(cheilion point)* is noticeably drooped downwards.

H - SCB has a defined *'Cupid's Bow' (crista philtra)* which is identified consistently throughout the supplied imagery.

I - There is a noticeable *lip chin fold* /crease under the bottom lip which is identified consistently throughout the supplied imagery.

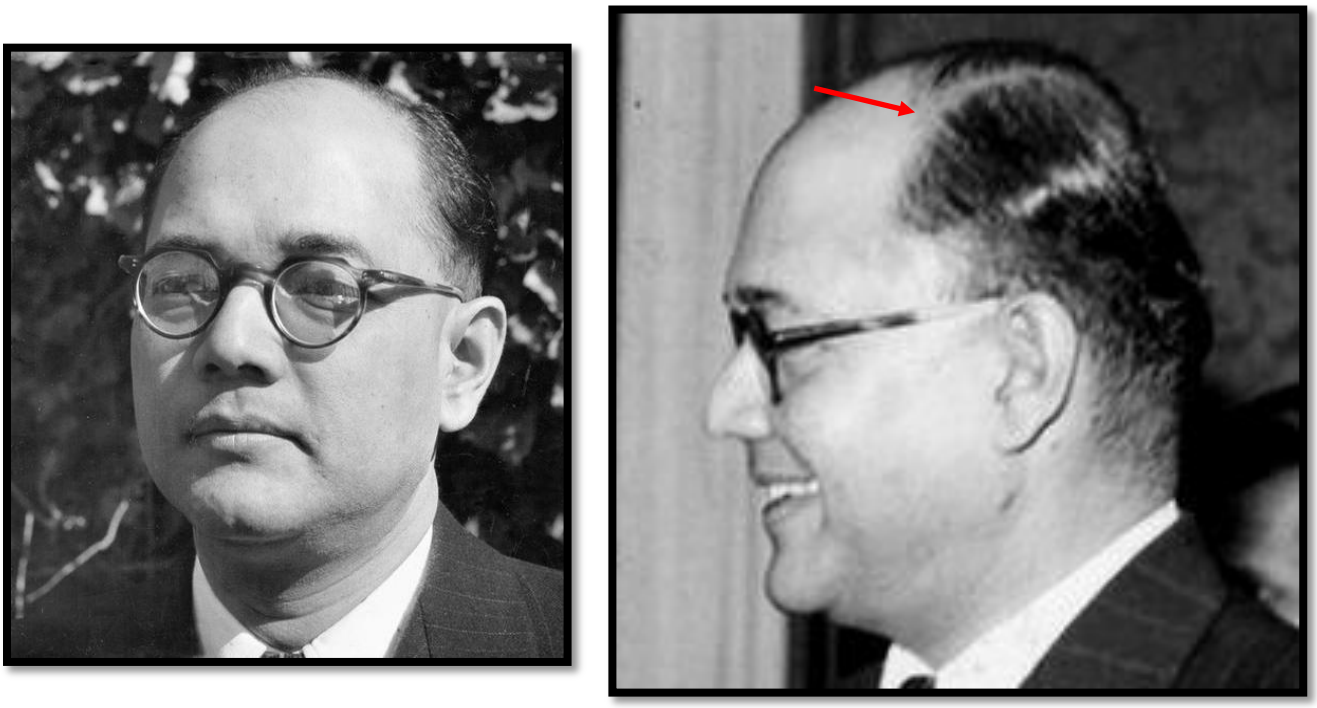

Figure 5a- *SCB* Hair & eyebrows

24. Although a transient feature, the imagery shown in Figure 5a shows the hairline to be positioned high up on the scalp. I would be of the opinion that *SCB*'s hair style has been stylistically similar over the years with a noticeable side parting appearing in a significant amount of images *(red arrow).*

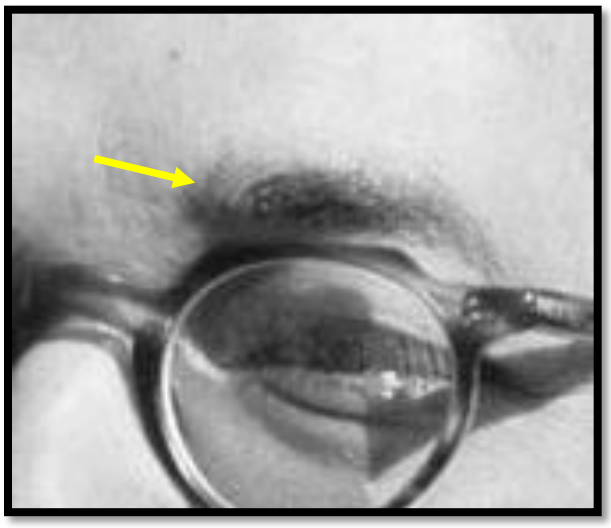

Figure 5b- SCB Hair & eyebrows

25. Being a transient feature, one would expect the style and potentially the loss of hair to have changed as *SCB* grew older. There are some earlier images which show some hair over the top of the scalp although lightly furnished.

26. I noted that *SCB's* eyebrows are curved around the top of the orbital and are of a medium thickness as opposed to being bushy or thinly furnished. I noted a small thinly furnished area on the left brow *(yellow arrow)*. This is consistent in several other images which *might* suggest a unique identifying feature; I have no evidence that would explain the cause of the feature.

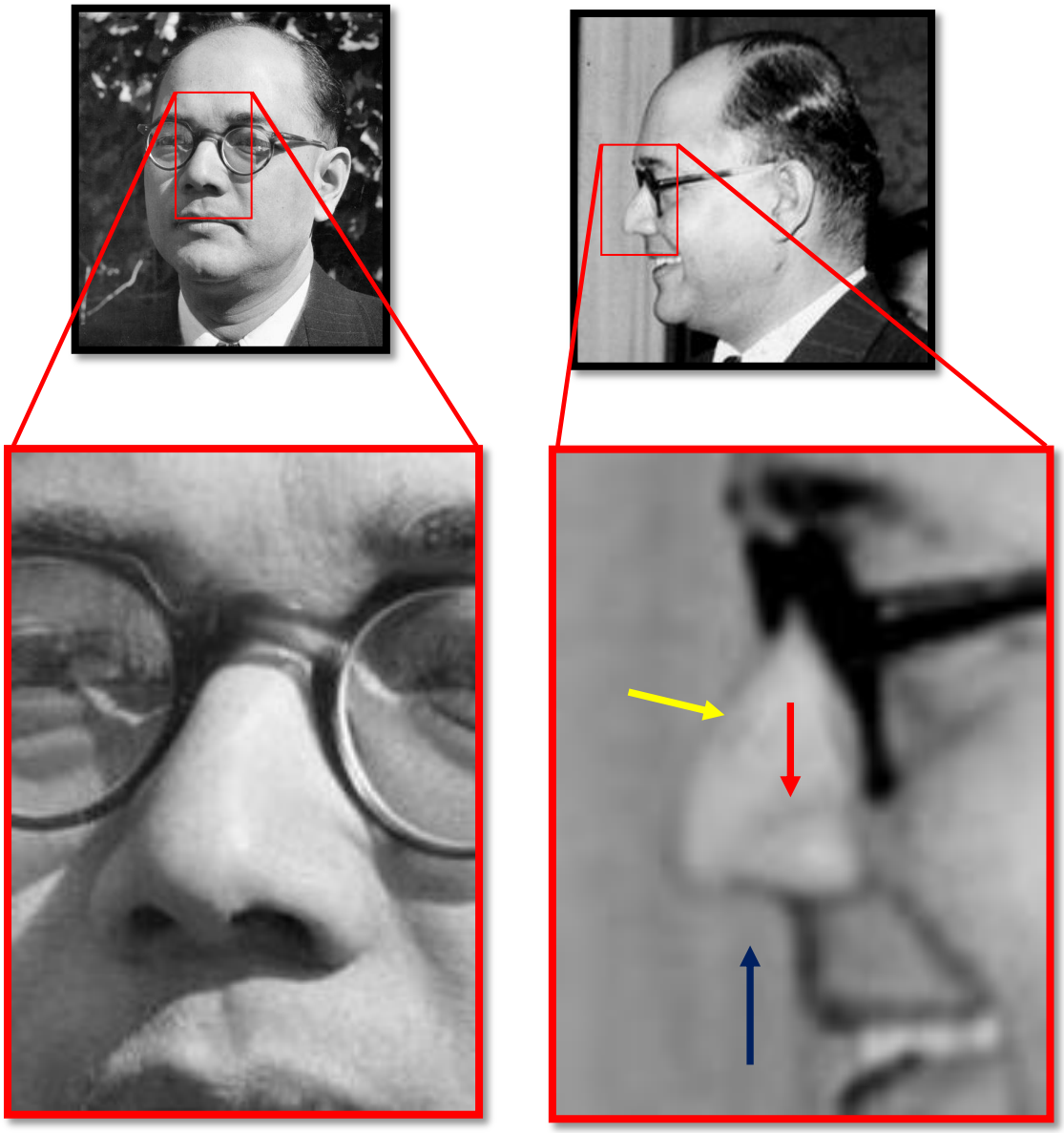

Figure 6 - SCB Nose shape

27. *SCB* has a distinctive nose shape in that the nose bridge has a convexed curve leading down to the nose *(pro-nasale point - yellow arrow).* The nose tip is rounded under the nose tip, almost resembling a lighter *'hooked'* shape/appearance *(dark blue arrow).* I would also be of the opinion that the *nasal septum* is partially exposed towards the nose tip.

28. The nose when viewed from the front profile is of a medium width (*edge of either nostril)* and has depth. The nose flanks have a noticeable surface area. The nose root is partially masked by the glasses centre piece however, I would opine that the nose root is sunken as opposed to being flat or pronounced.

29. The nostrils have structure as opposed to being flat. There is lateral crease running almost 3/4 along the side of the nostril housing *(red arrow).*

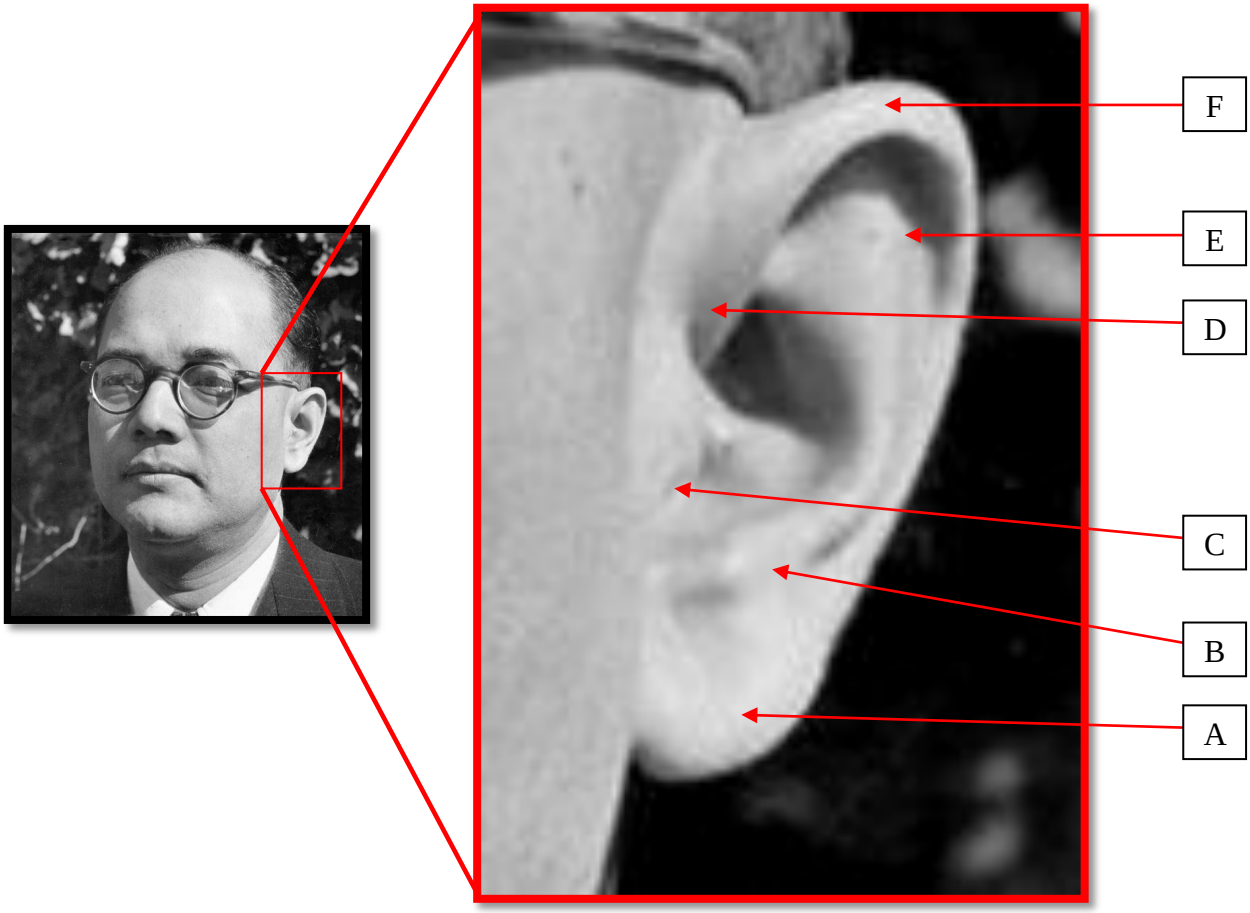

Figure 7 - SCB Left ear

30. Figure 7 shows an image of SCB's left ear, I noted the following observations:

A - The lobe is detached as opposed to being attached and is fleshy in its appearance.

B - The *anti-tragus* is identified as a structure running along the top of lobe area.

C - The *tragus* has structure as opposed to being flat and would appear to have a single peak to its construction.

D - The *crux of helix* appears as a continuous structure turning in towards the ear.

E - The *anti-helix* has structure. In some images of *SCB* the *anti-helix* is slightly pronounced from the ear itself *(when viewed in a front profile)* although the entire ear is pronounced from the side of the head as opposed to being pinched or flat against the head.

F - The *super-aurale* or *helix* edge is rounded *(tubular)* in structure as opposed to a flat structure.

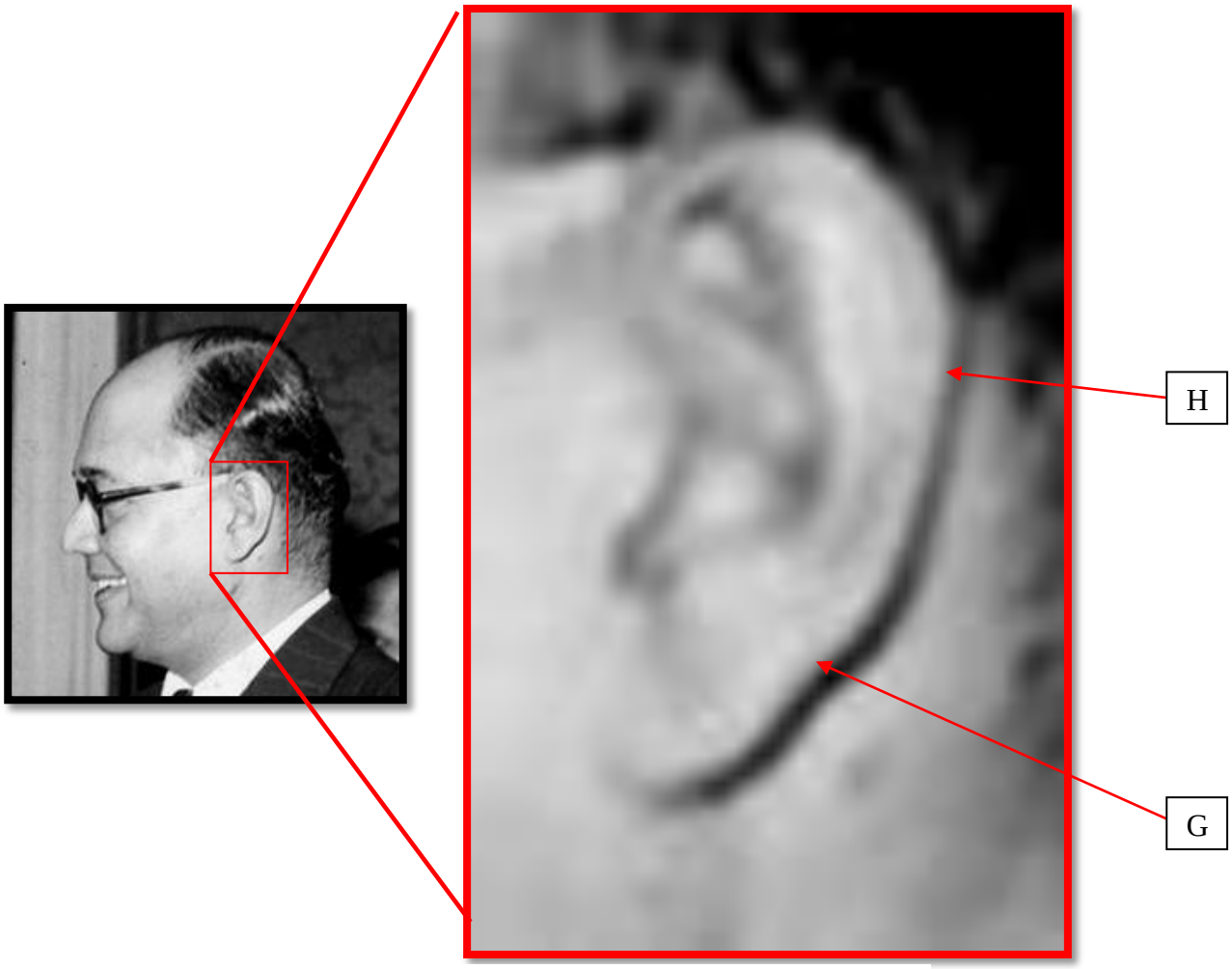

Figure 8 - SCB Left ear continued

31. Figure 8 shows an alternate image of SCB's left ear, I noted the following observations:

G - The area where the *helix* meets the top of the lobe has a noticeable *'delve'* on the or about the edge.

H - The *helix* has a continuous curvature with no noticeable breaks in the curve.

Note: Due to the image quality the enlargements have been resized and Gaussian Blur added to reduce pixelation.

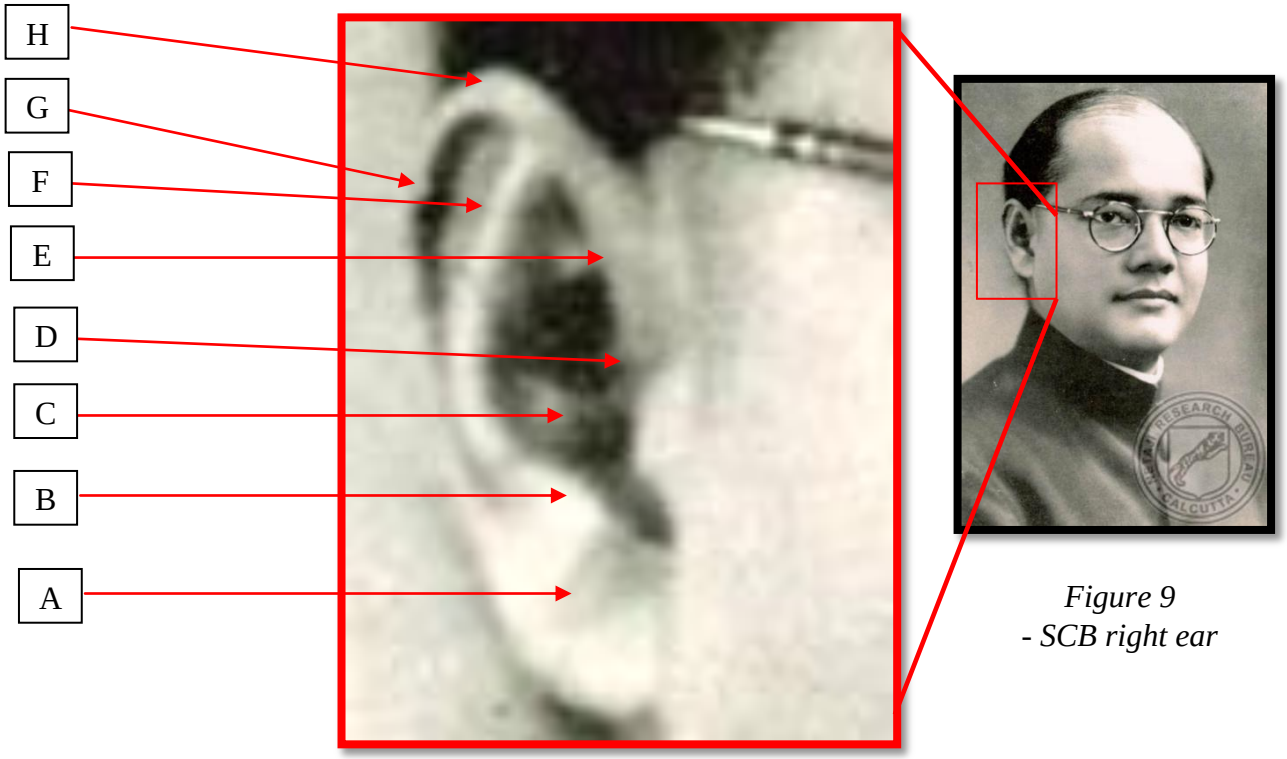

Figure 9
- SCB right ear

32. Figure 9 shows an image of *SCB*'s right ear, I noted the following observations:

A - The lobe is detached as opposed to being attached and is fleshy in its appearance.

B - There is a shadow formed on the top of the lobe which appears on a number of images of *SCB* suggesting some sort of feature in the topology of the lower ear.

C - The *anti-tragus* is identified as a structure running along the top of the lobe area however, it appears to fall slightly short, forming the structure mentioned in Point B.

D - The *tragus* has structure as opposed to being flat and would appear to have a single peak to its construction, possibly with a flat plateau appearance.

E - The *crux of helix* appears as a continuous structure turning in towards the ear.

F - The *anti-helix* has structure. In some images of *SCB* the *anti-helix* is slightly pronounced from the ear itself *(when viewed in a front profile)* although the entire ear is pronounced from the side of the head as opposed to being pinched or flat against the head.

G - Figure 9 shows a small skin knurl which appears to be on the inside edge of the *helix*. I have only identified this structure once; I therefore note it as an observation.

H - The *super-aurale* or *helix edge* is rounded *(tubular)* in structure as opposed to a flat structure.

Unique identifying features:

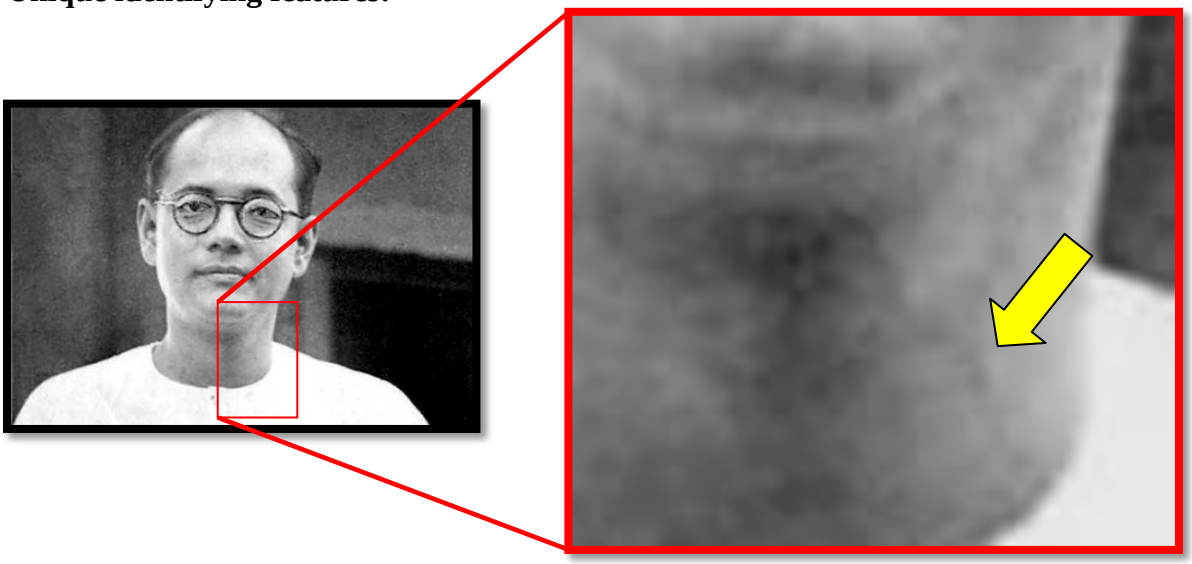

Figure 10a - SCB Unique features

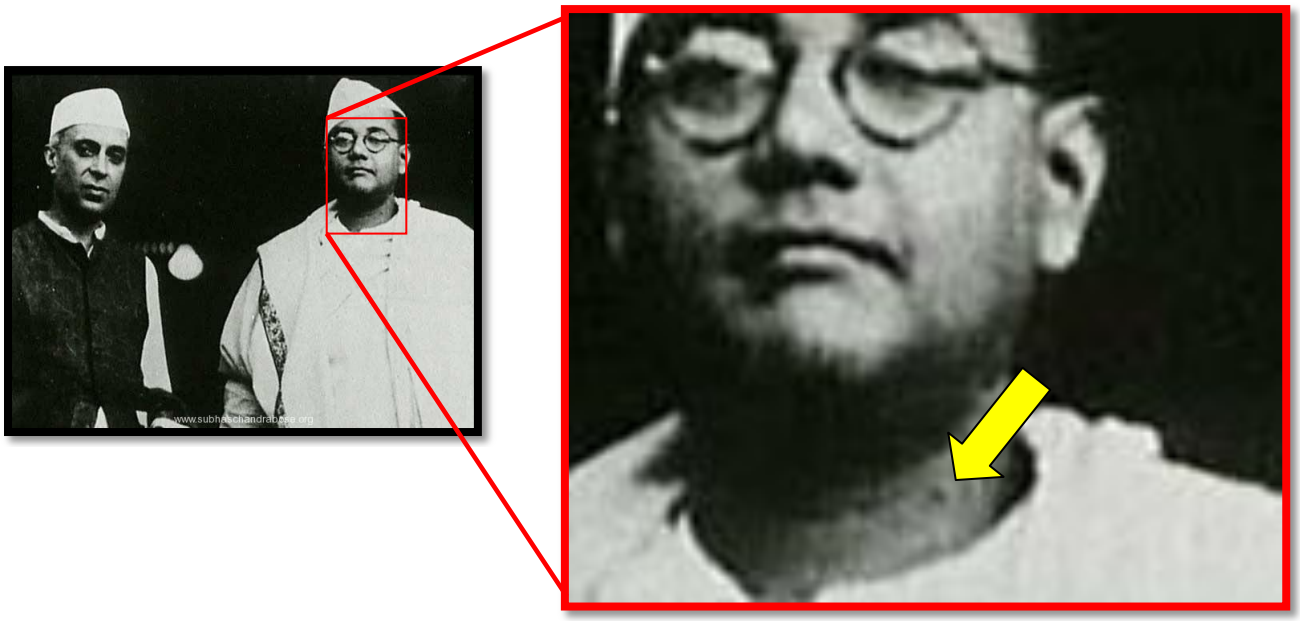

Figure 10b - SCB Unique features

33. Unique features can in most circumstance make the difference between positively identifying a person in comparison with someone with similar facial features.

34. I have identified a number of images *(see Figures 10 a-c)* that show a dark toned object /feature that is seen on various historical images of *SCB* on the left side of the neck, close to where it joins to the shoulder area *(yellow arrows).* I have ruled this out as potential lens debris as it appears on images taken from different years of *SCB*.

Unique identifying features continued:

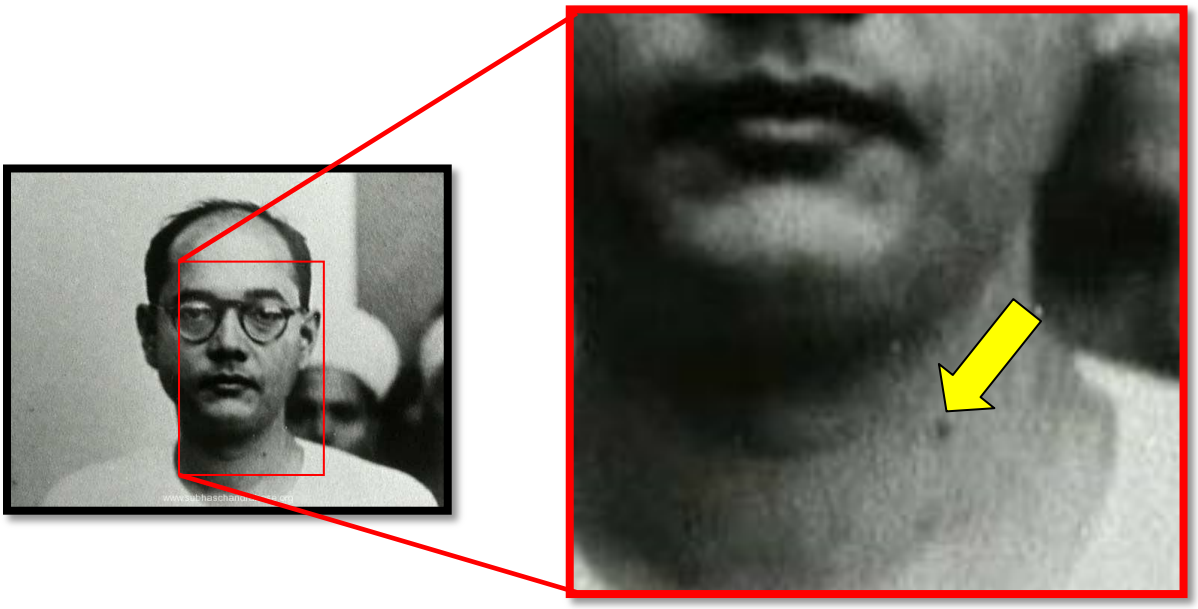

Figure 10c- SCB Unique features

35. The marking seen on the neck can be identified on a number of images of SCB, mainly images that show him dressed in traditional attire as opposed to a collar and tie. I would therefore be of the opinion that the position of the marking would be likely masked in images where *SCB* is wearing a collar and tie or military uniform with high collars.

Unique identifying features continued:

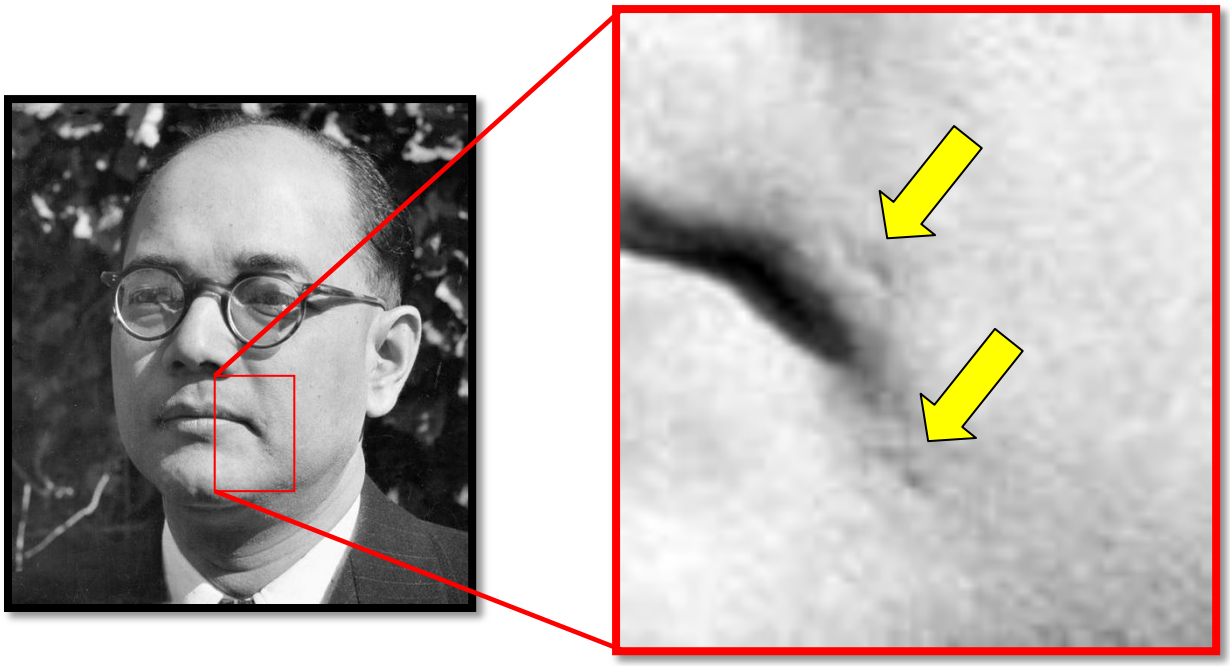

Figure 10d - SCB Unique features

36. I noted on an enlargement of the example image two small marks in the area of the left *cheilion point (yellow arrows).*

37. These marks are in my opinion *similar* to the type of scaring associated with '*Pox'* marks derived from having the chicken pox virus. I have no supporting evidence as to their origin or that they have been created as such however, I would identify these as unique features.

38. I have not identified them in any other image in such detail, likely to be primarily due to the imagery quality throughout.

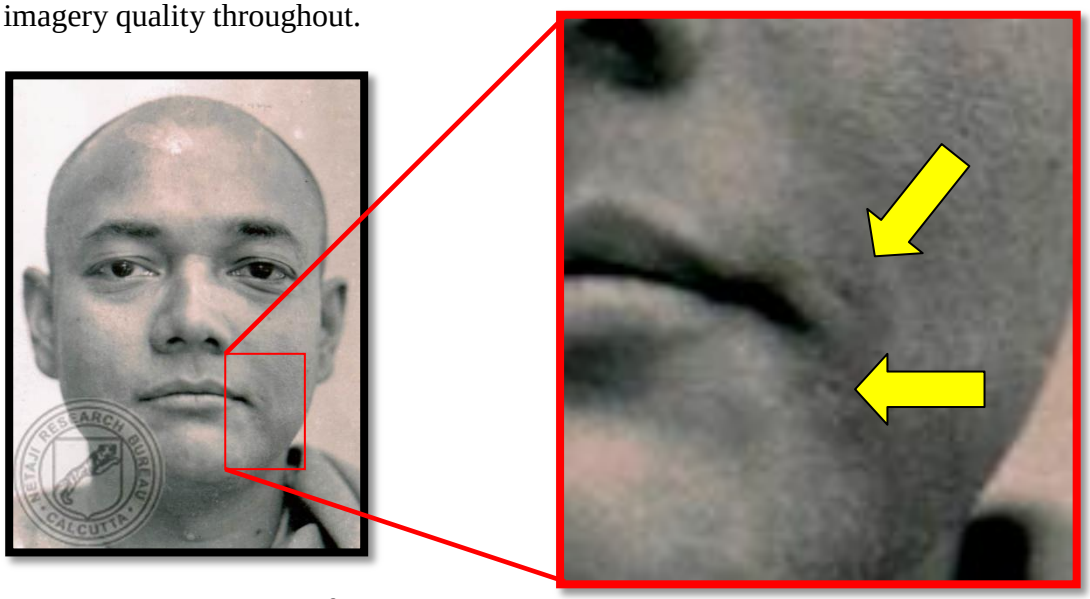

Figure 10e - SCB Unique features

Unique identifying features continued:

Figure 12a - SCB Unique features

39. Figure 12a shows a number of darkened areas *similar* in appearance to facial moles or skin blemishes *(red arrows)*. I have adjusted the contrast and brightness to extract the detail further. I would categorise this type of marking as a 'unique feature(s)', however one must use caution in assuming their origins as they *could* simply be as a result of lens debris or similar. Should further higher quality imagery be found these may or may not be present.

Unique identifying features continued:

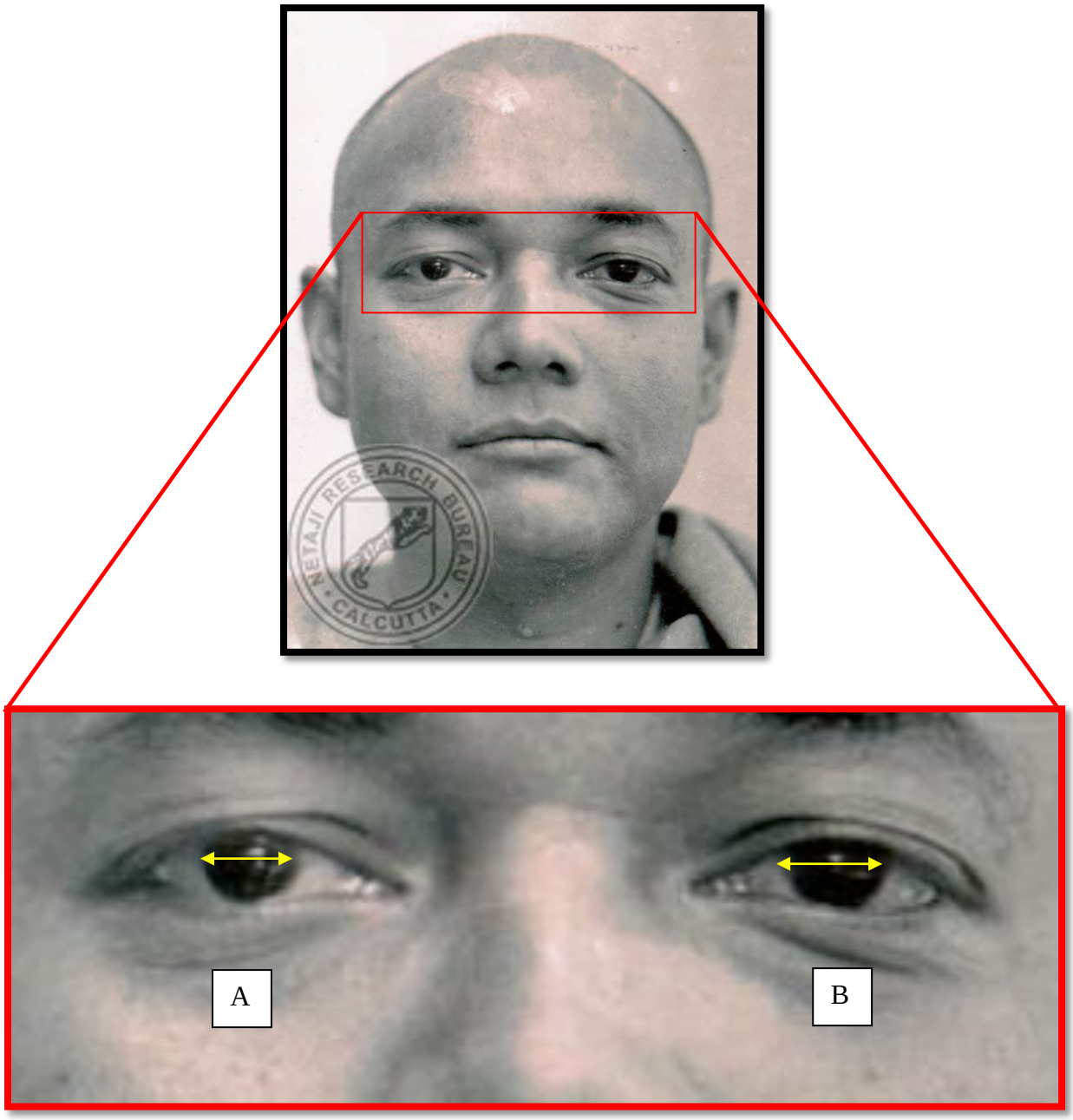

Figure 12b- SCB Unique features

40. Figure 12b shows an enlargement of the eyes of SCB. I noted that the right eye *(cornea-left as viewed)* has a visually smaller diameter than the left eye *(right as viewed).*

41. I have no scale factor that would allow me to accurately measure the diameter of the eyes however, the *image diameters (yellow arrows- A 13mm and B - 16mm approximately)* illustrates that the eye diameters are different.

General observations

42. I noted a number of observations which are as follows:

- A large majority of the imagery provided shows *SCB* to be wearing glasses. One must consider the possibility that the eyes might appear smaller or distorted due to the magnification of the lenses; therefore it might prove difficult to accurately compare the eyes *(notwithstanding the observations made in Figure 12b).*
- I am informed that SCB's height was approximately 5ft 9in - 5ft 10in.
- It would appear to me that *SCB's* build changed over the years up to the mid 1940's. I would generally comment that his build would have been, in the later imagery, to be of a medium build as opposed to being thin or noticeably heavy set.

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Task 2 - Analysis of the Tashkent Man

Figure 13 - Imagery of TM

43. I have been provided with a plethora of historical video and images from various sources of the 1966 Tashkent peace talks.

44. I have been directed to an individual *(TM)* who can be seen on a number of occasions. It would appear from the footage supplied that *TM* had been in a media role or as some form of journalist, as he is seen with a note pad on several occasions.

45. I have identified that *TM* is seen to be wearing different attire which might support a theory that he was present over a number of days. I have focused my analysis on the facial features and ears that are available within the imagery and footage supplied.

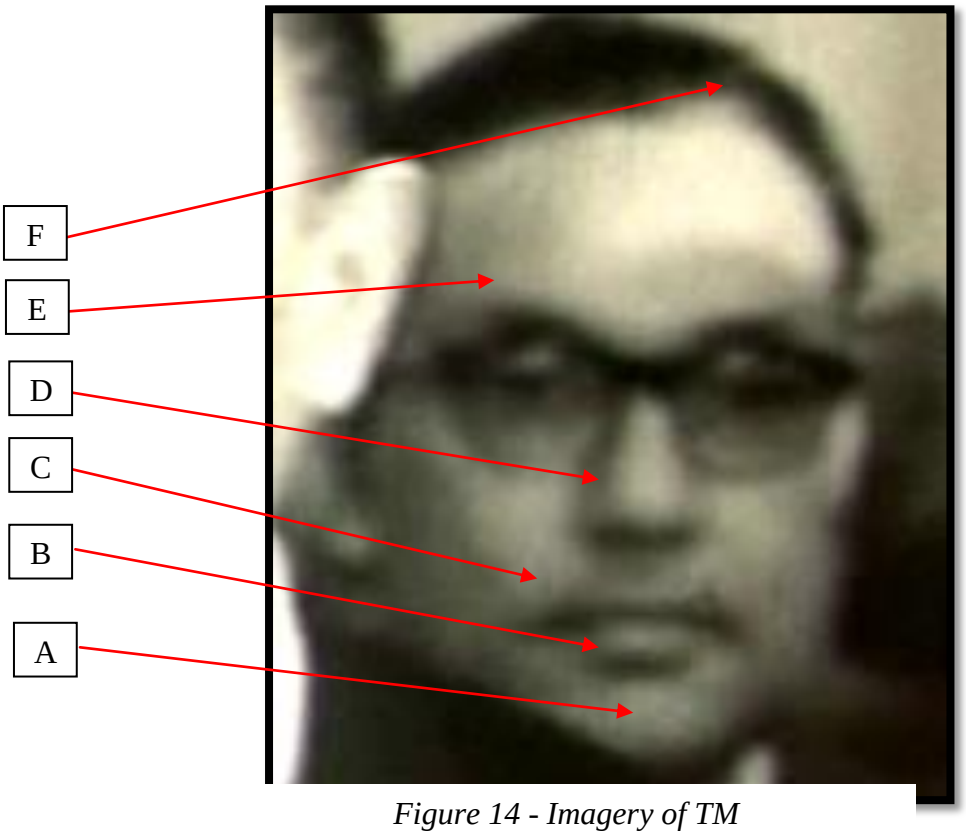

Figure 14 - Imagery of TM

46. I noted the following observations in regards to the image seen in Figure 14 - lower and middle thirds of the face:

A - Rounded chin with a mid shadow seen centrally possibly representing a dimpling or delve in the skin *(repeated through the relevant TM imagery).*

B - There is a clear presence of a lip chin crease, creating a noticeable shadow *(repeated through the TM imagery).*

C - The *cheilion points (corners of the mouth)* are drooped downwards *(repeated through the TM imagery - however, these may change with movement of the mouth).*

D - The nose has a medium width as opposed to being broad or narrow but has depth as opposed to being flat when viewed from the side *(discussed later in this report).*

E - The eyebrows are slightly arched in their appearance however, the frame of the glasses worn, masks part of the area; I therefore note this as an observation.

F - The hair *(a transient feature)* is worn high on the forehead and is heavily furnished. There is a noticeable side parting *(seen throughout the TM imagery)* which I would note as a stylistic feature on the left side of the head *(right as viewed).*

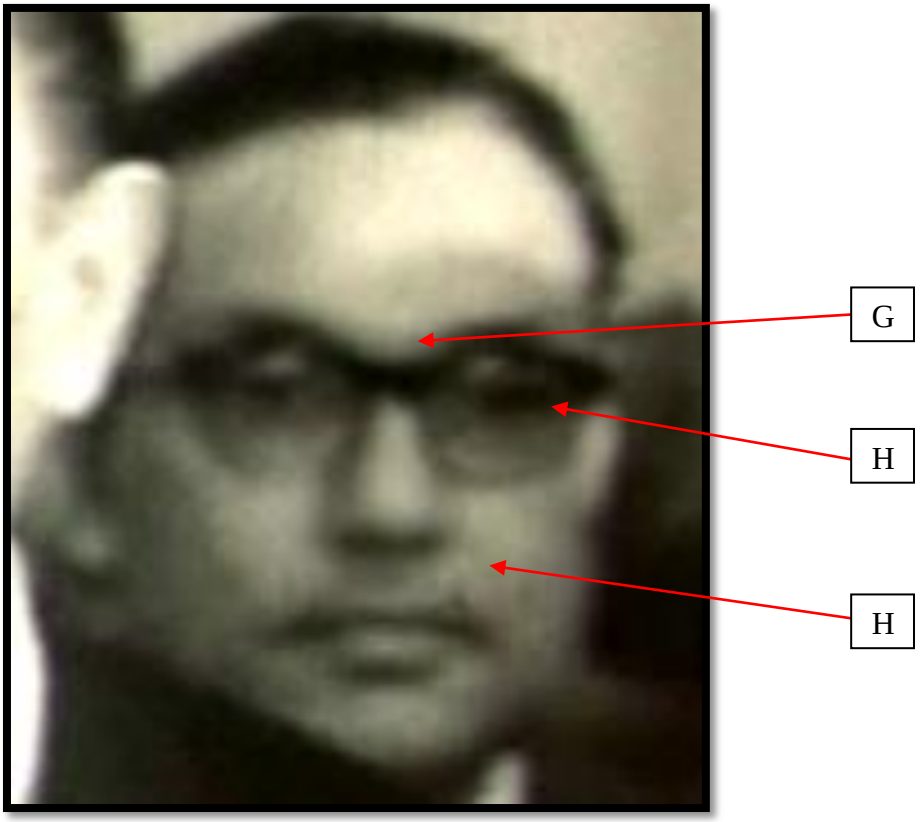

Figure 15 - Imagery of TM

47. I noted the following observations in regards to the image seen in Figure 15:

G - The *glabella* is wide as opposed to being narrow and slightly pronounced *(when viewed from the side)*. It is not possible to identify the presence of any longitudinal orientated lines in the skin - *Glabellas lines*.

H - The detail of the eyes are limited, I would comment that the magnification of the glasses, might affect how the eye appears in the imagery *(also see Figure 22).*

I - The imagery shows a faint *'nose lip'* crease running down either side of the nostril housing, starting at the base of the *alar* becoming fainter towards the outer edges of the mouth *(cheilion points).*

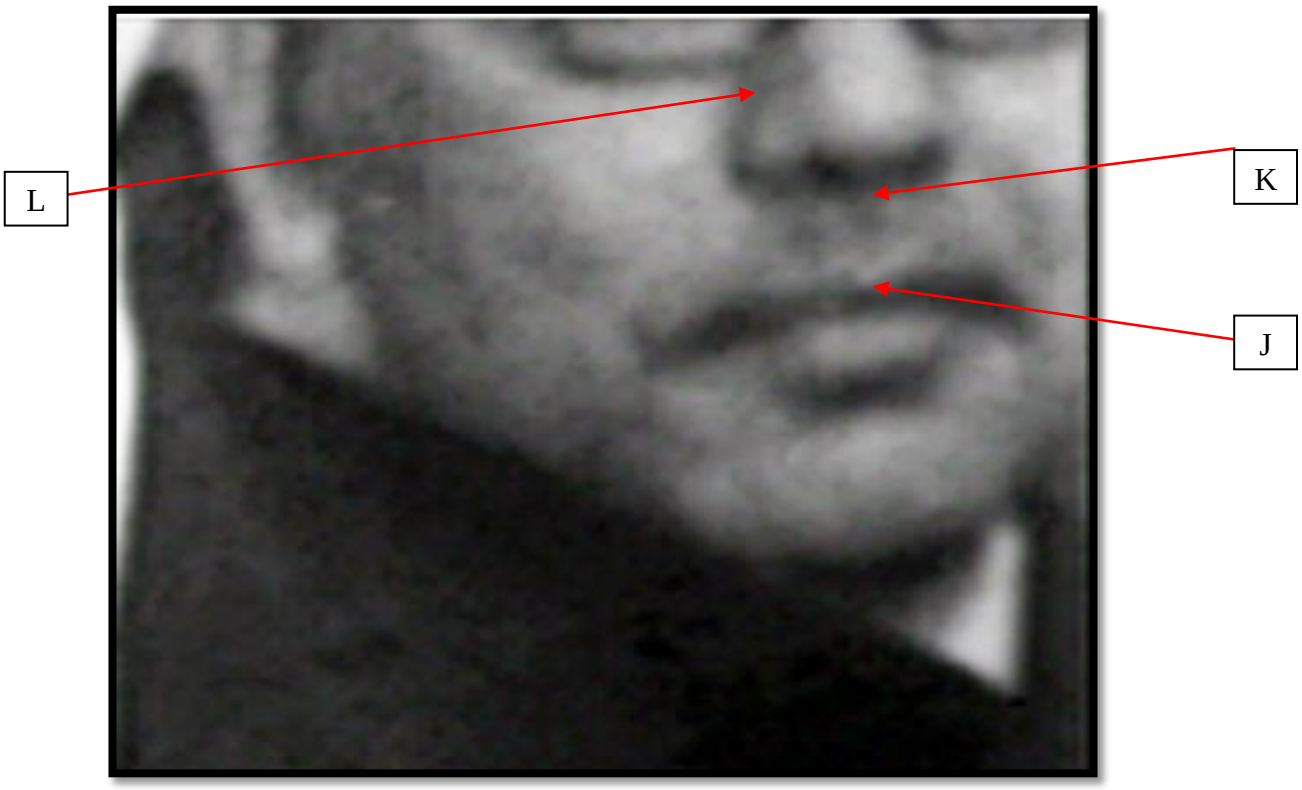

Figure 16 - Imagery of TM

48. I noted the following observations in regards to the image seen in Figure 16:

J - The top lip has a 'Cupid's Bow' *(crista plitra)* seen centrally. It may not be clear to view when printed to paper however; it is possible after some contrast and brightness adjustments to identify structure of the peaks.

K - There is shadowing under the position of the *nasal septum* and the top of the lip which I would be of the opinion is representative of a *philtrum groove*.

L - The right nostril housing *(left as viewed)* shows structure as opposed to being flat.

Figure 17 - Imagery of TM

49. Figure 17 shows a side profile view of TM taken from '*Russian State Archive*' footage supplied. There are a number of useful images that can be utilised in this sequence of footage.

50. I am of the opinion that the image shown is one of the best, *most detailed* side profile views that has been supplied to me.

Note: The image that follows has been resized and adjusted slightly with contrast and brightness adjustments.

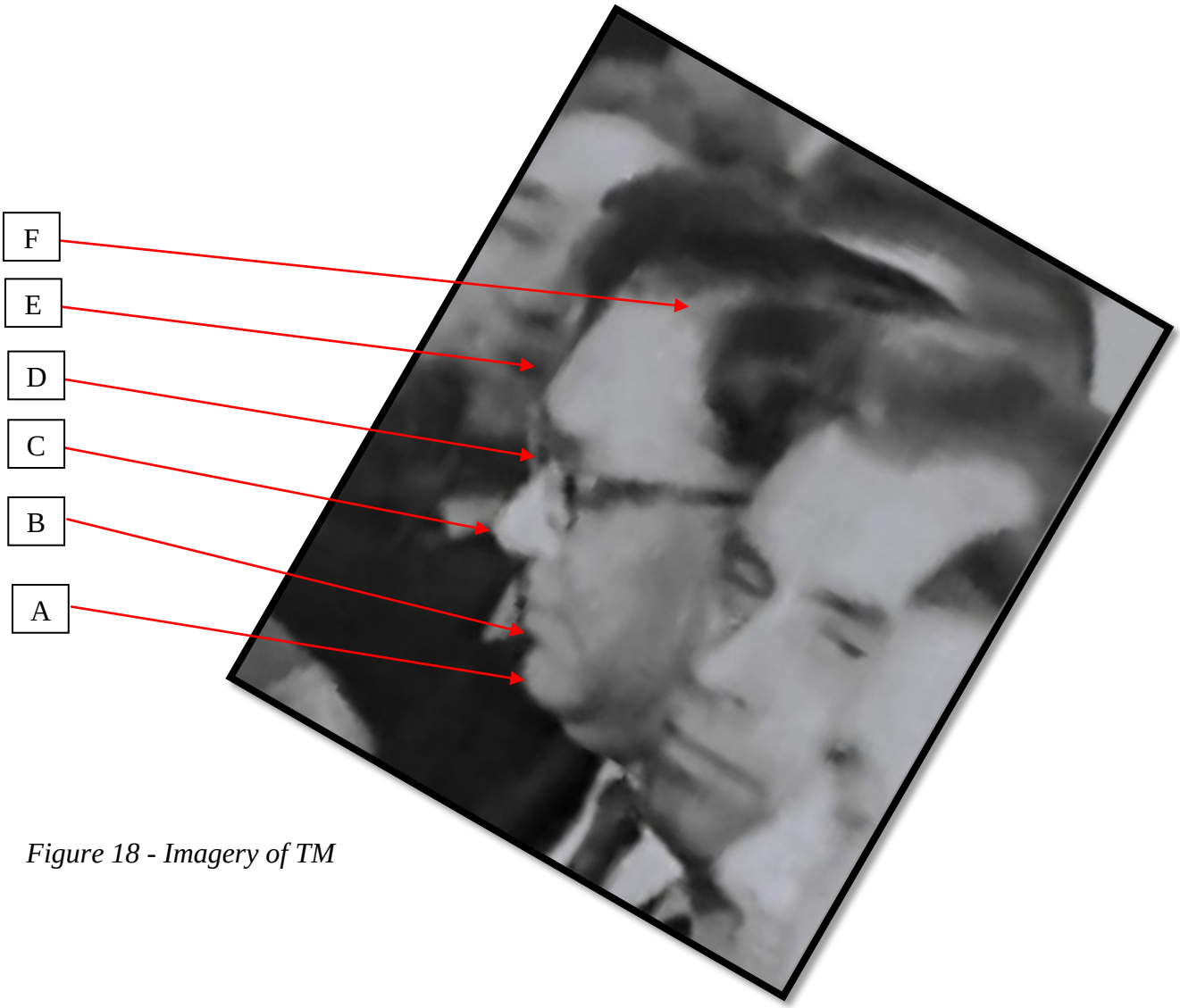

Figure 18 - Imagery of TM

51. I noted the following observations in regards to the image seen in Figure 18:

A - The chin is pronounced and rounded in shape.

B - There is a clear presence of a lip chin crease *(under the lower lip).*

C - The nose has a rounded tip with a slightly convexed shape to the nose bridge.

D - The nose root is likely to be sunken as opposed to being flat or pronounced however, the glasses worn do mask this feature somewhat.

E - The shape of the forehead *(frontal bone)* is sloped down towards the brow line as opposed to being straight or flat in its shape/construction.

F - The hair *(transient feature)* is well furnished on the top with a noticeable stylistic side parting on the left side *(right as viewed).*

Figure 19 - Imagery of TM

52. Figure 19 shows a secondary side profile image that I have reviewed specifically to identify the nose features. I am of the opinion that there is significant amount of detail considering the image quality that I have been supplied with.

Note: The image that follows has been resized and adjusted slightly with contrast and brightness adjustments.

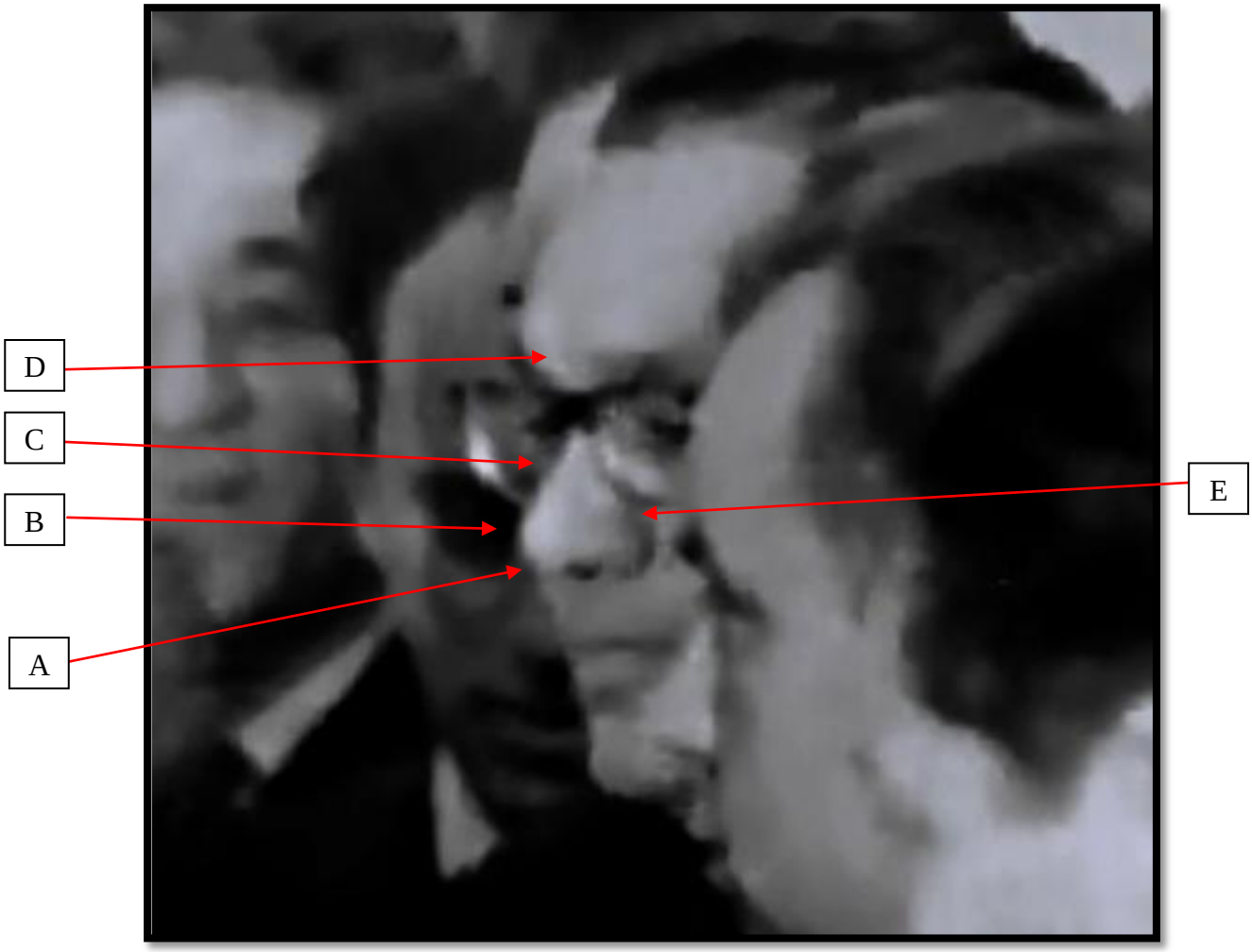

Figure 20 - Imagery of TM

53. Figure 20 shows an enlargement of the nose and nose tip *(pro-nasale point)*. I noted the following observations:

A - The *septum* is partially exposed near to the nose tip.

B - The *pro-nasale point* is rounded but has a noticeable overhang almost similar to a *'hook shape'*.

C - The nose bridge has a very slightly convexed appearance, running from just under the area of the glasses frame down to the tip. This area does *pixelate* somewhat, but I am of the opinion that the convexed area is just identifiable/visible.

D - I am of the opinion that the nose root is slightly sunken as opposed to being flat or pronounced.

E - The nostril housing has structure as opposed to being flat; it is possible in some images to identify a lateral shadow running over the top of the nostril towards the nose tip.

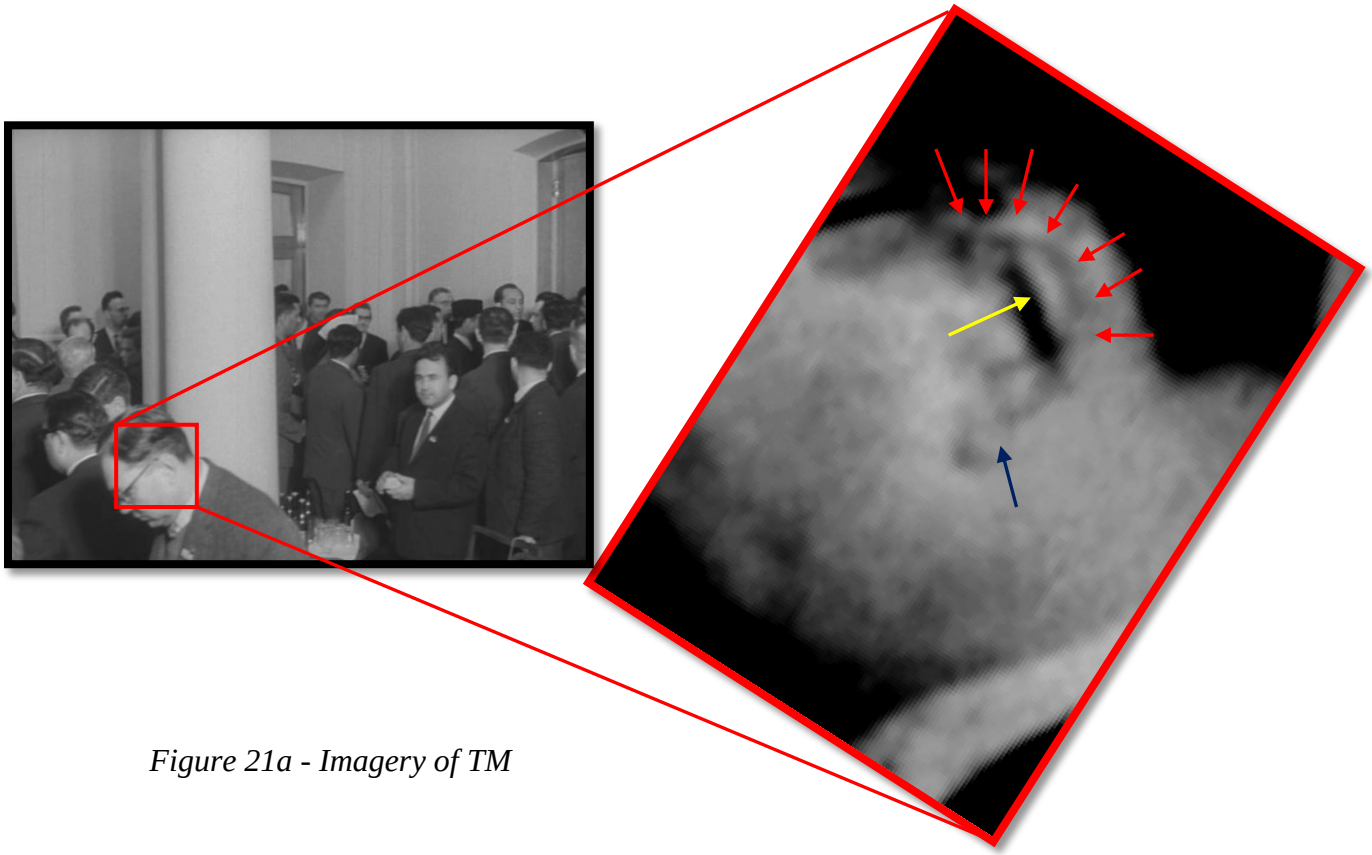

Figure 21a - Imagery of TM

54. Figure 21a shows the left ear of TM. The image shown has been adjusted somewhat in an attempt to extract the shape of the ear. The image has also been semi-rotated clockwise to view in a normal position.

- **Red arrows** - The shape of the *super-aurale* and the *helix* combined shows a curved shape, although the image is pixelated.
- **Yellow arrow** - The area of the *anti-helix* shows a longitudinal structure.
- **Blue arrow** - Shows a detached fleshy lobe *(identified in other images/frames).*

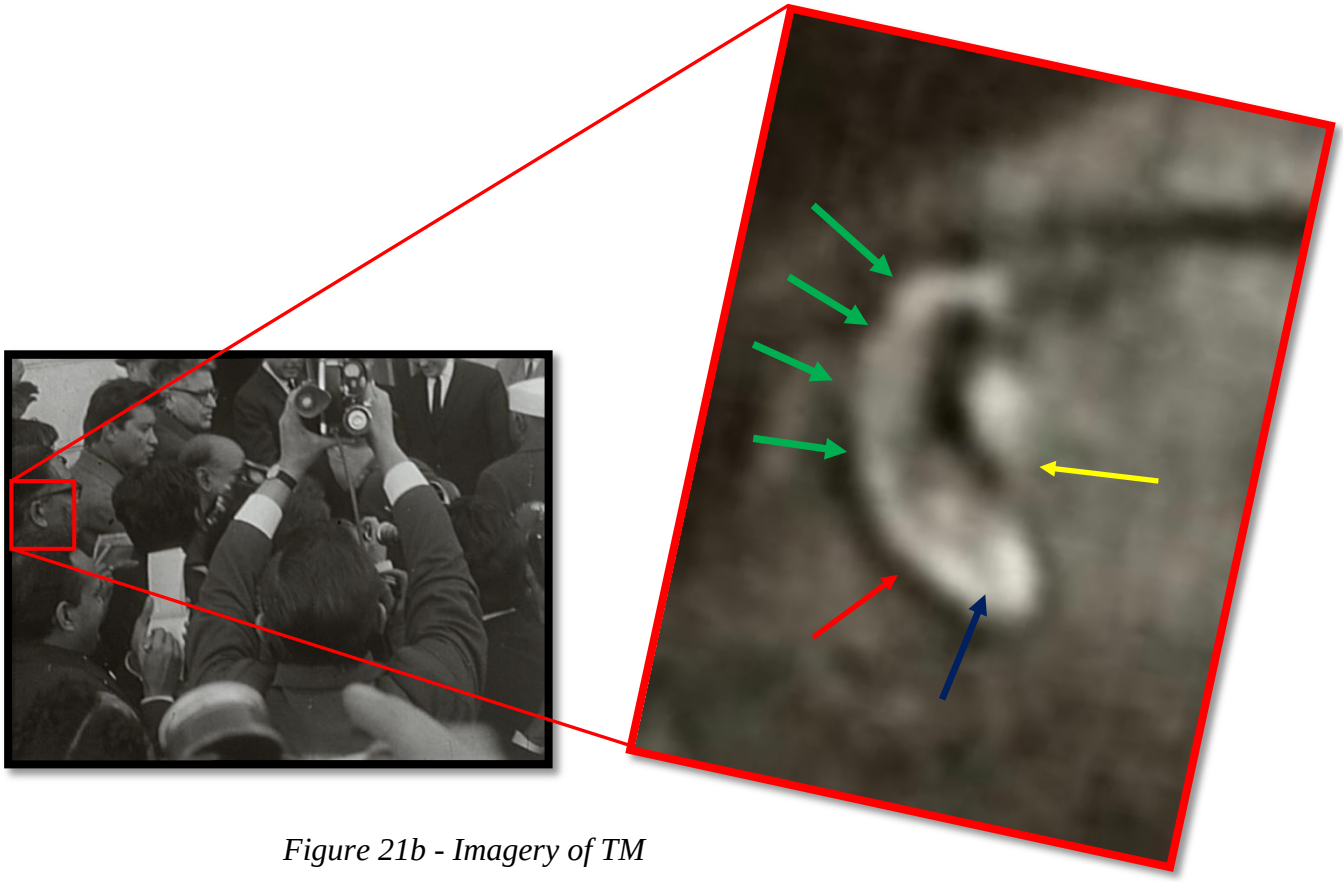

Figure 21b - Imagery of TM

55. Figure 21b shows an image of TM whilst standing outside of the location monitoring the VIP arrivals. The image shows the right ear, I noted the following observations:

- **Blue arrow** - Shows a detached fleshy lobe *(identified in other images/frames)*, there is a shadow located on the top of the lobe itself, I would opine is positioned under the *anti-tragus* structure.
- **Red arrow** - I noted on multiple images of *TM* in this location, a *'delve'* in the area where the *helix* joins the top area of the lobe.
- **Yellow arrow** - There is lightened area where I would expect the form/structure of the tragus to be positioned.
- **Green arrow** - The *super-aurale* and *helix* have a curved shape/appearance. The shape of the anti helix is not seen clearly.

Unique identifying features/observations

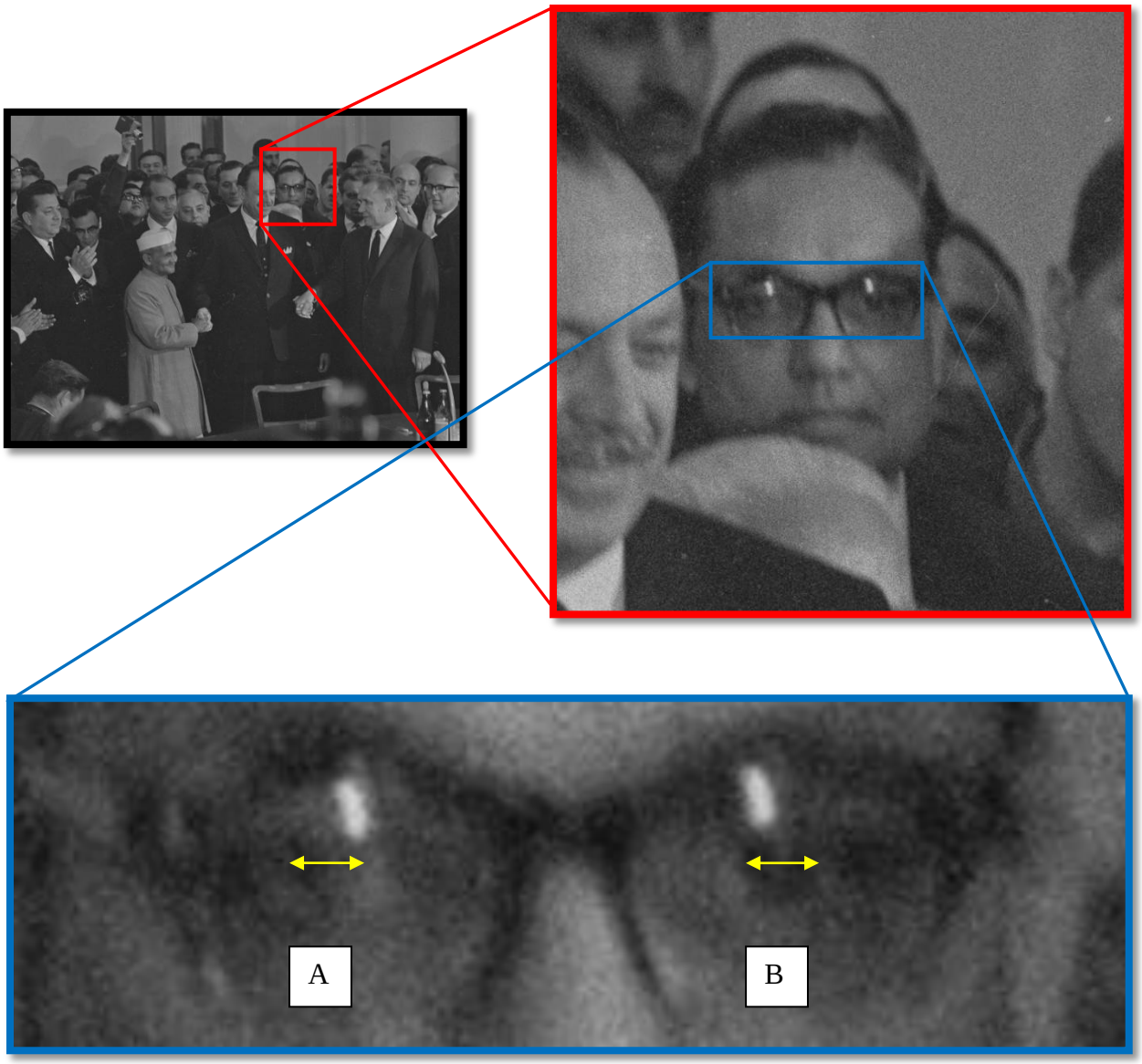

Figure 22 - Imagery of TM

56. Figure 22 shows an enlargement of the eyes of TM. Although the detail of the eyes is slightly masked by the glasses worn, I noted that the right eye *(cornea- left as viewed)* has a visually smaller diameter than the left eye *(right as viewed).*

57. I have no scale factor that would allow me to accurately measure the diameter of the eyes however, the *image diameters (yellow arrows A - 8mm and B - 11mm approximately)* illustrates that the eye diameters are different.

General observations:

58. Due to the image quality, I noted no significant facial features such as scars or skin blemishes that would allow to me to identify them as being unique.

59. As observations, I noted certain stylistic features such as the hair style and the glasses worn as these can be broadly compare to other individuals within the various footage supplied.

60. I noted that the *TM* can be seen wearing at least two separate attires throughout the footage supplied.

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Morphological comparison - *SCB & TM*

Similarities

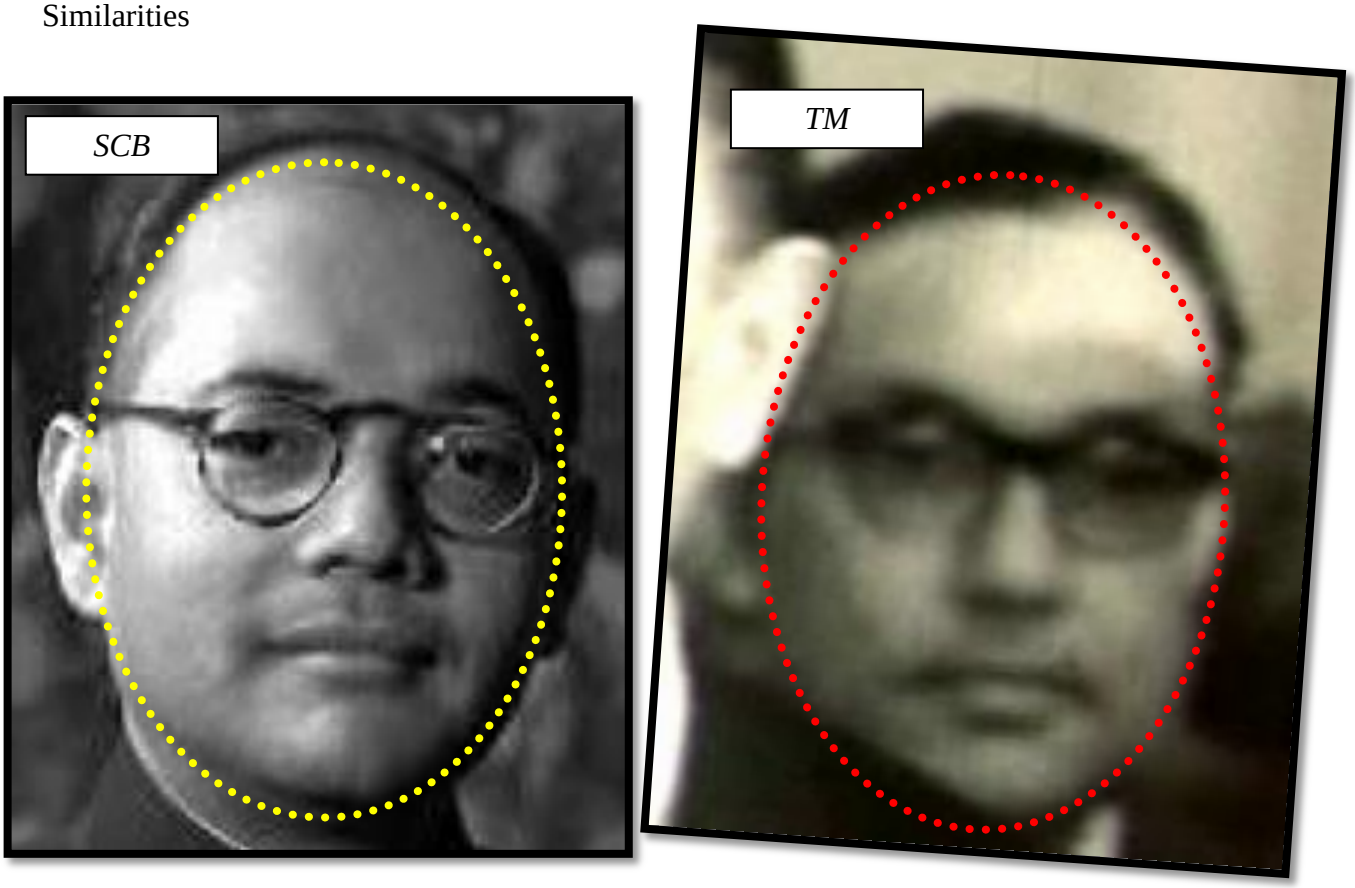

Figure 23 - Comparison of SCB and TM

61. Figure 23 focuses on the face shape of *SCB* and *TM*:

- I am of the opinion that both *SCB* and *TM* have an oval face shape however, one must consider that there many historical images of *SCB* which show the fleshiness of his cheeks and jaw line to change/alternate. I am of the opinion that the *jowly* features of both subject does alter the lower third of the face and therefore note this as an observation.
- It should also be mentioned that there would likely be over 20 years passed from the last known images of *SCB*, so one must consider potential changes in the face shape and features, such as weight gain or loss and *subcutaneous fat distribution* and effects of it on the face shape and its features.
- The images shown in Figure 23 show both individuals to have similar face shapes and have jowly cheeks however; I would suggest *TM* is slightly more fuller in the face than the image of *SCB*.

Similarities continued:

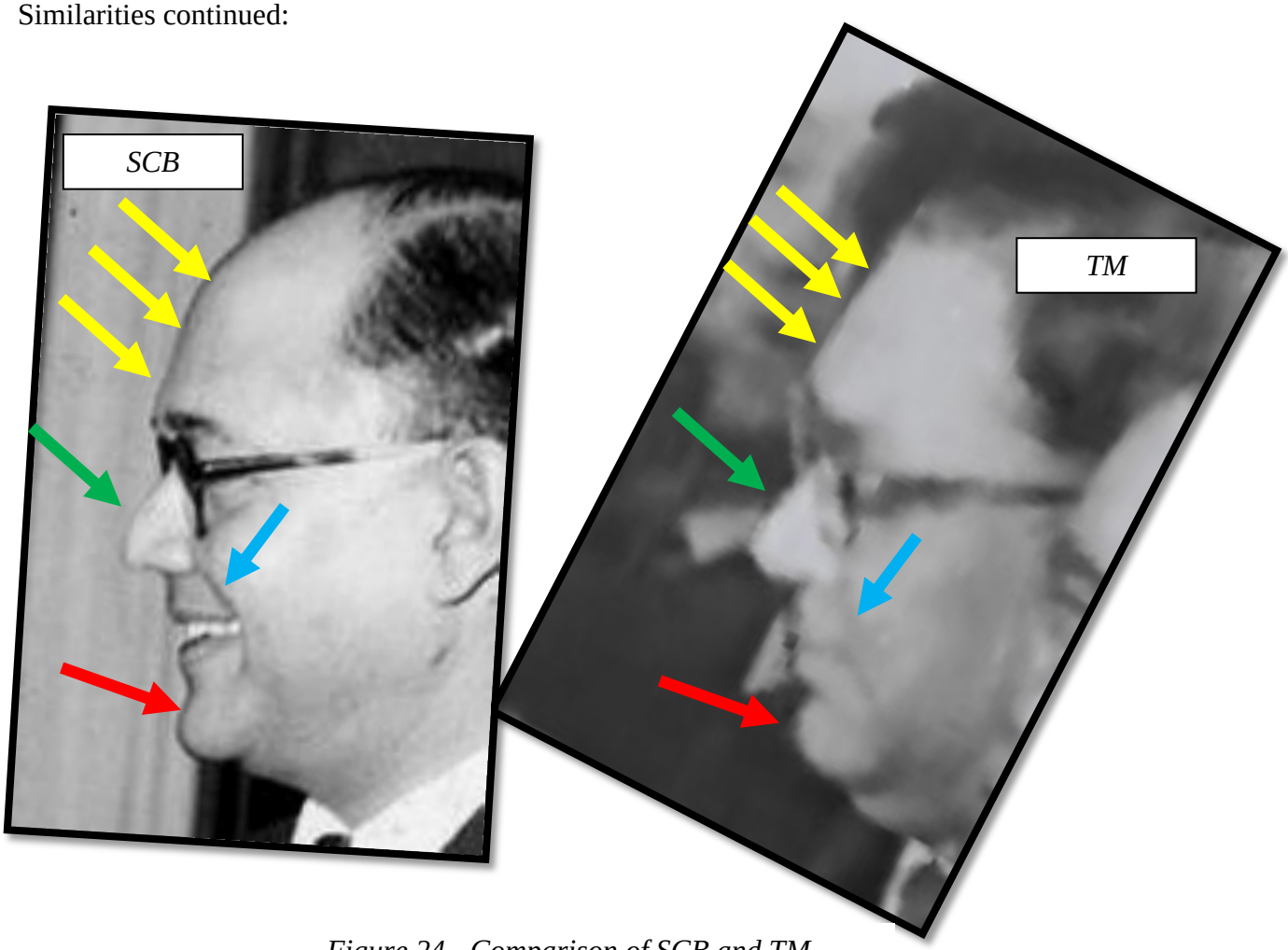

Figure 24 - Comparison of SCB and TM

62. Figure 24 shows combined similarities in the facial features/shape from a side view as follows:

- **Red arrows -** The rounded shape of the chin and its prominence. The presence of a *noticeable* lip chin crease *(under the bottom lip).*
- **Green arrows** - The shape of the nose bridge *(convexed appearance)* the shape and appearance of the *pro-nasale* point *(discussed later).*
- **Yellow arrows -** I noted that the shape of the forehead *(frontal bone*) is similar however, there appears to be a slight difference in shape towards *TM*'s hairline. I would strongly consider these potential differences to be as a result of the angle of the image/footage capture. I noted no prominence of the frontal bosses on either image.
- **Blue arrows** - I noted similarities or the presence of, nose cheek creases, although the image of *SCB* shows the area to be more exaggerated as he is laughing.

Similarities continued:

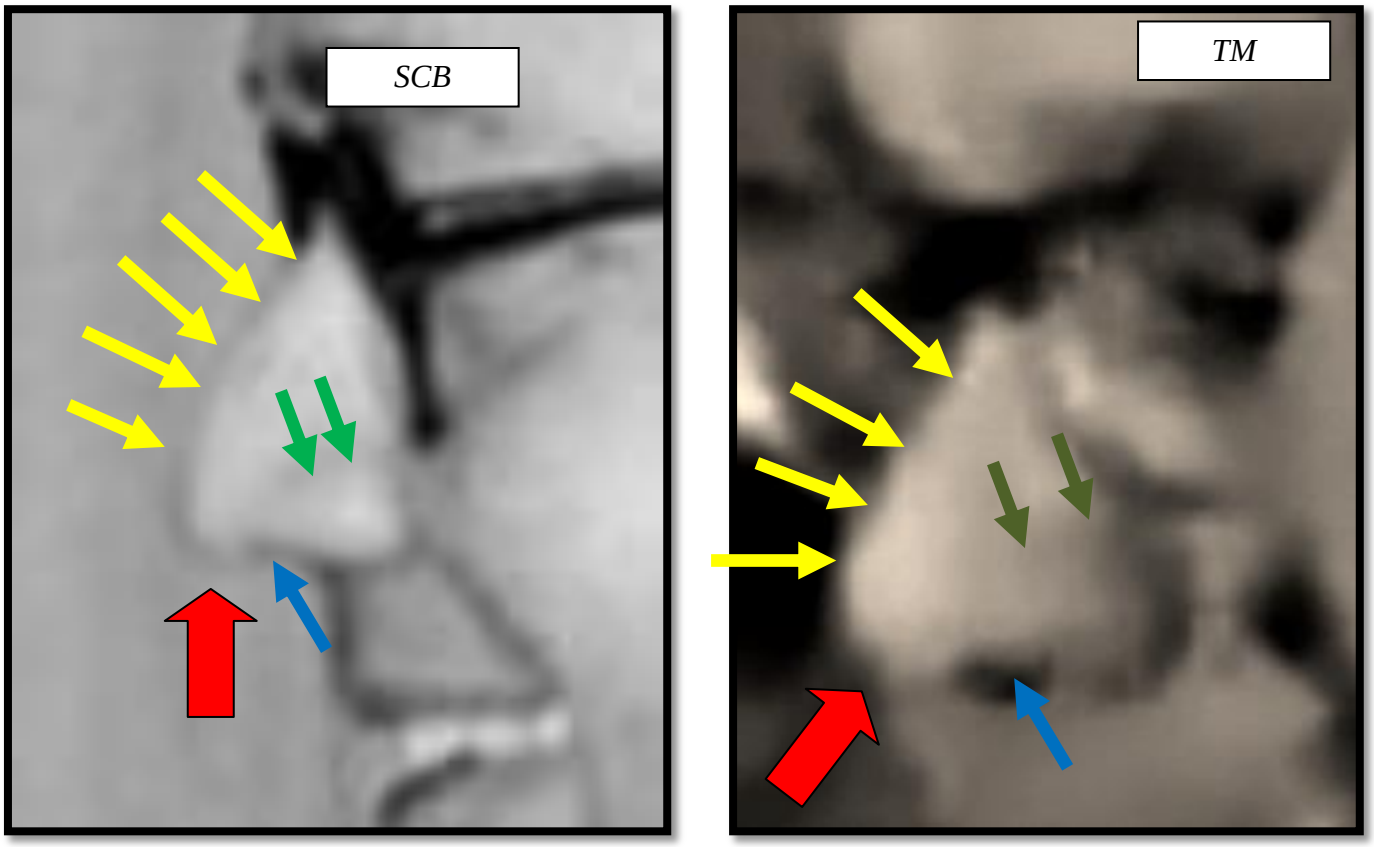

Figure 25 - Comparison of SCB and TM

63. Figure 25 shows combined similarities in the facial features/shape from a side view as follows:

- **Red Arrows** - The images show in my opinion, strong similarities in the shape and appearance of the *pro-nasale* points and the area of the exposed *septum (blue arrows).*
- **Yellow arrows** - I have noted this similarity only once during my analysis however, I am of the opinion that the convexed appearance of the nose bridge bears a strong similarity although, the capture position of *TM* image is not exactly the same as the *SCB* image.
- **Green arrows** - I have noted similar lateral shadowing over the top of the left nostril housing, although faint on the *TM* image.

Similarities continued:

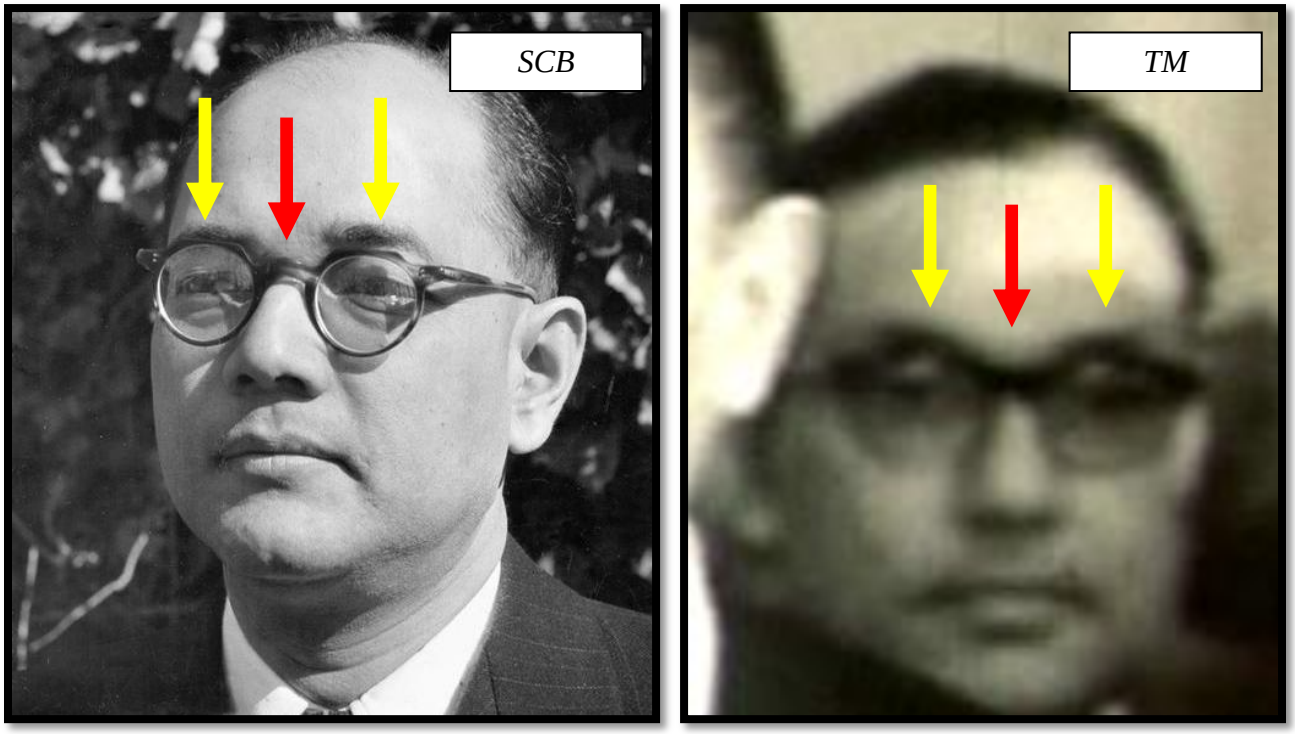

Figure 26 - Comparison of SCB and TM

64. Figure 26 focuses on the eyes and surrounding features. I noted the following similarities:

- The shape of the eyebrows *(Superciliares)* and the *glabellas (red arrows)* are *broadly* similar. The glasses worn by *TM* mask somewhat, the detail in the eyebrows and it is difficult to determine their actual positions in regards to the outer edges of the eyebrows (*frontotemporale).*
- It is just possible to see the eyes of *TM* however, I am of the opinion that the there is not sufficient enough detail to conduct a meaningful comparison. I would opine that *TM* has *potentially* lines under the eyes however; this would in my opinion be a common feature.
- I would also add that the magnification of the glasses *(not known)* and potentially any tint in the lenses would mask the area/eyes further.

Similarities continued:

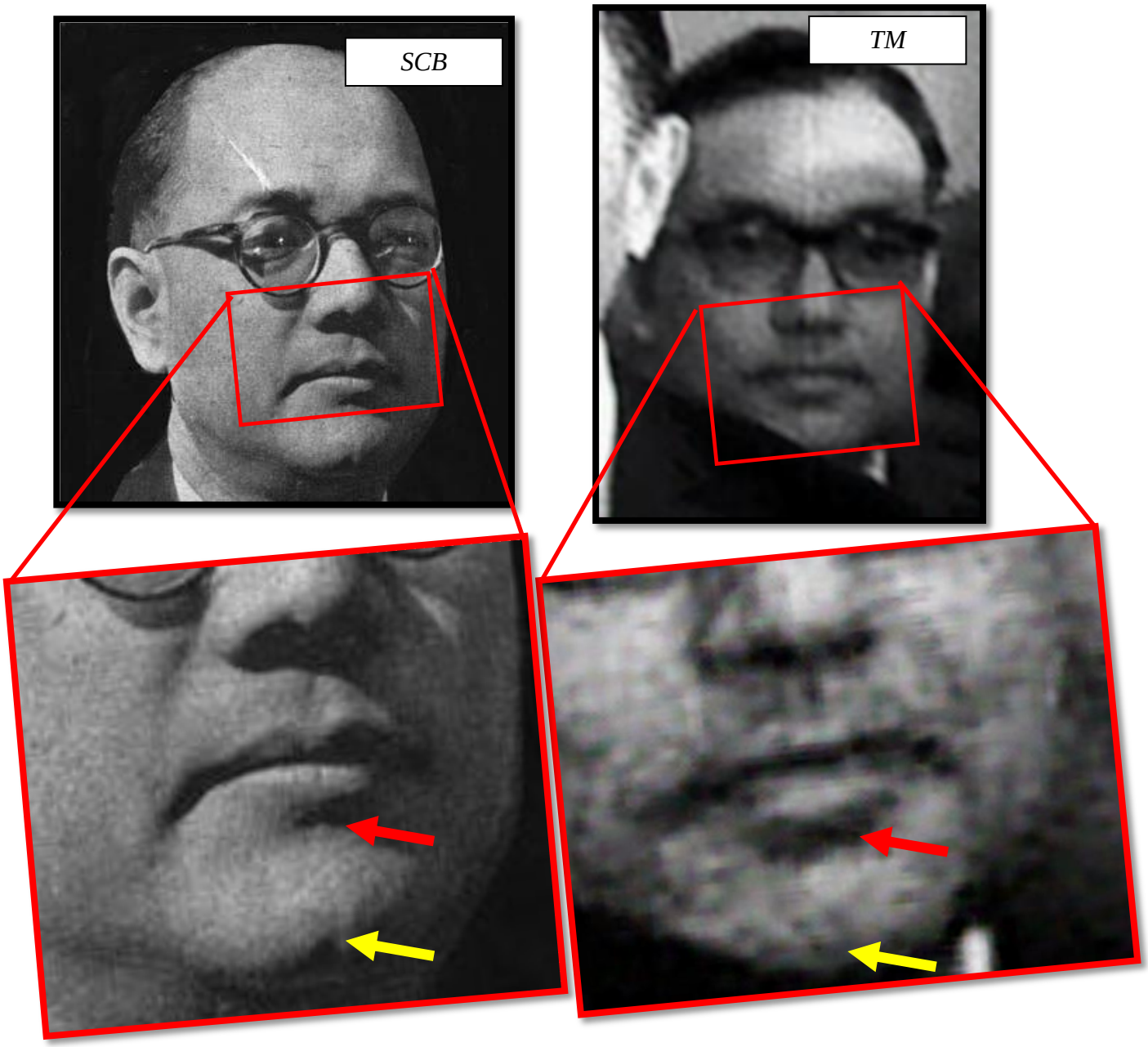

Figure 27a - Comparison of SCB and TM

65. Figure 27a focuses on the lower third of the face specifically the chin and the mouth I noted the following:

- **Yellow arrows -** A small longitudinal delve in the medial area of the chin. *TM* has a very faint shadow in this area. I would opine that this area could change over time and that any changes in the volume of the face might change or enhance its appearance.
- **Red arrows -** A noticeable lip chin crease under the lower lip possibly created as of a result of a pronounced lower lip and or chin.

Similarities continued:

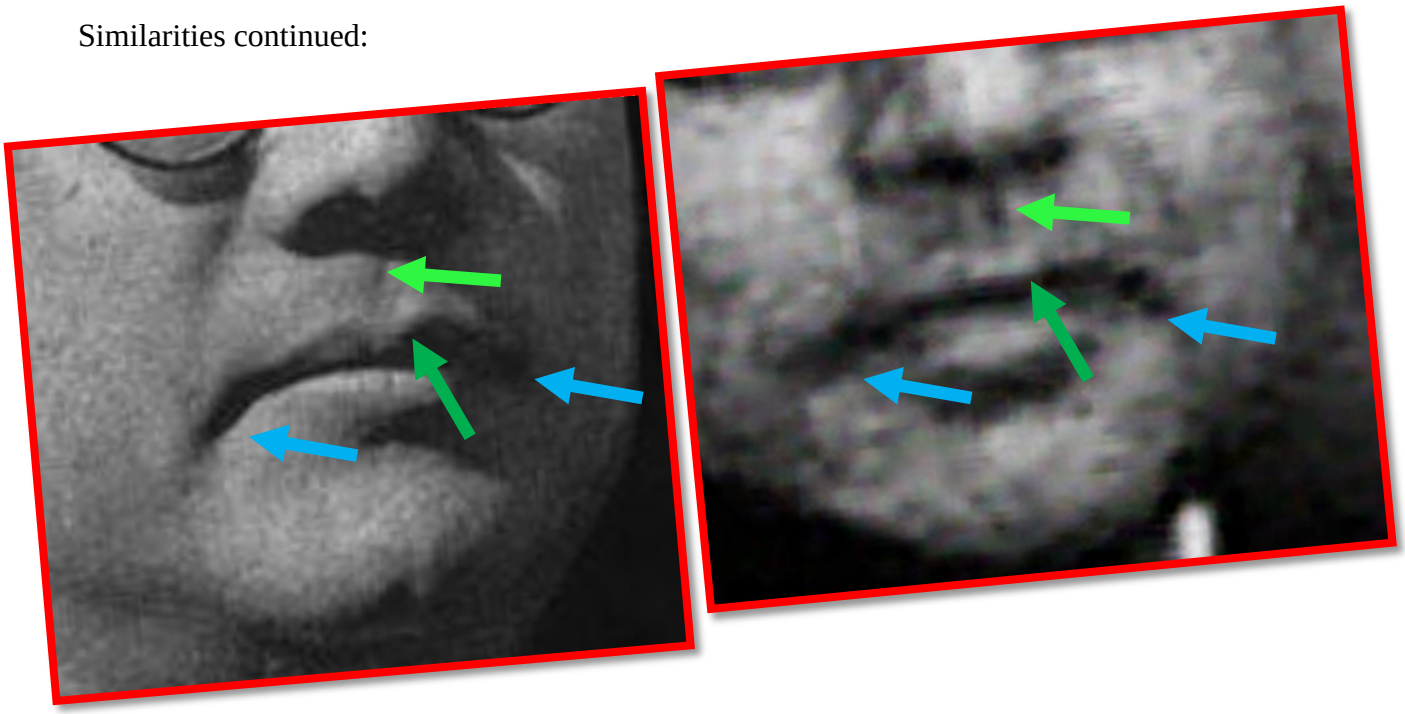

Figure 27b - Comparison of SCB and TM

- **Blue Arrows -** A noticeable droop in the *cheilion points* when the mouth is at rest. I noted in some images of *SCB* and *TM* that the shape of these areas change when they smile. I would also comment that any increase in the volume of the face might enhance the appearance of these areas.
- **Green Arrows** - Both *SCB* and *TM* have a 'C*upid's Bow' (crista philtra)* on the medial area of the top lip; whilst not unique to them I would suggest a very common feature that can change in shape depending on the position of the mouth at the point of capture (*See also Figure 27c).*
- **Light Green Arrows** - Both *SCB* and *TM* have a noticeable *philtrum groove.*

Figure 27c - Comparison of SCB and TM

Similarities continued:

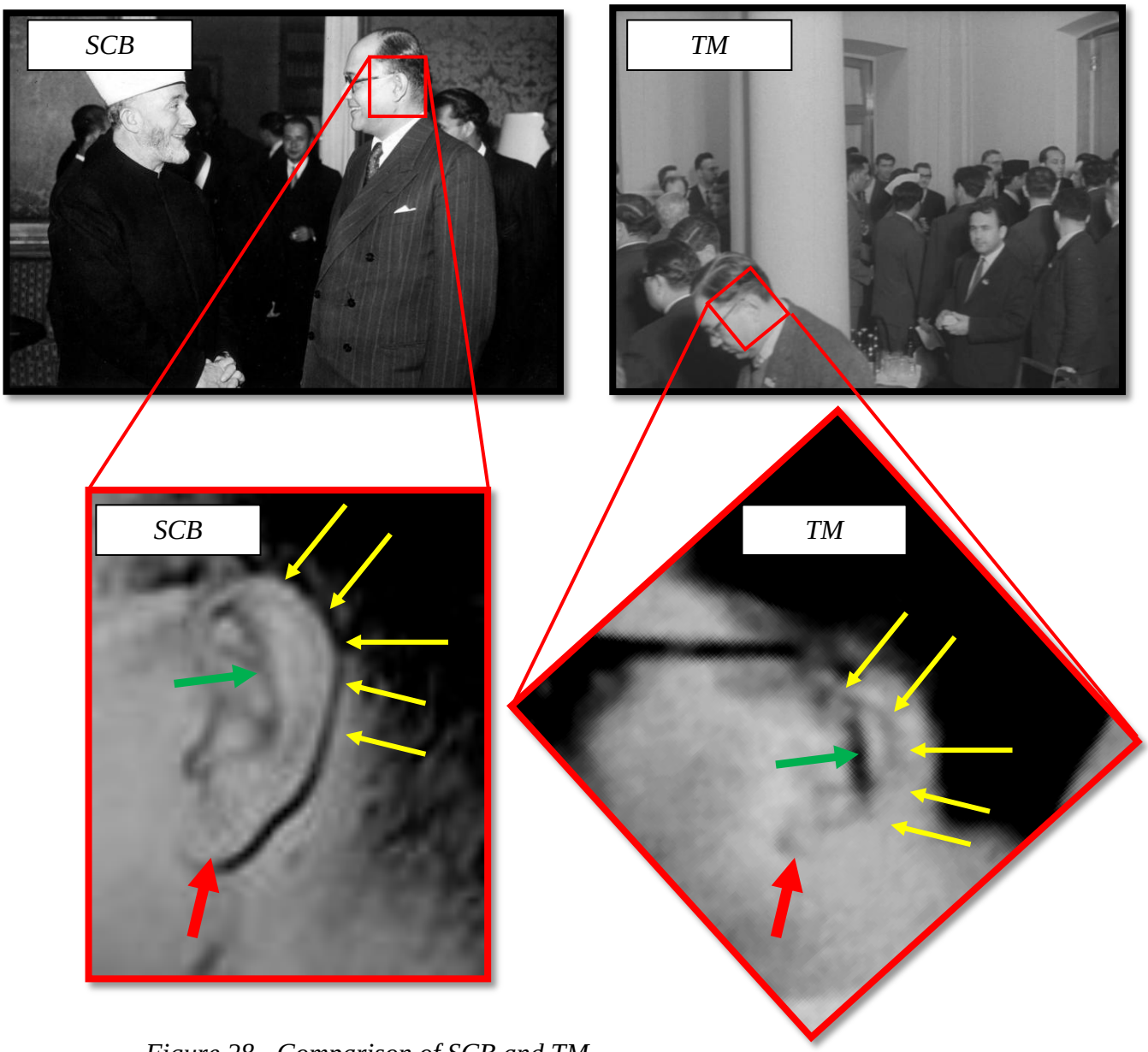

Figure 28 - Comparison of SCB and TM

66. Figure 28 shows a comparison of the **left ears**. I noted the following features:

- **Red Arrows** - A detached fleshy lobe and long shadowing under the *anti-tragus.*
- **Yellow Arrows** - Broadly similar shape *(curved)* to the *helix.*
- **Green Arrows** - Longitudinal feature/shape of the *anti-helix.*

67. The image of *TM* has been rotated anti-clockwise and enhanced with brightness and contrast adjustments in an attempt to extract more detail however, the results are limited. I would also consider the capture angle to be slightly different which might mask some of the features.

Similarities continued:

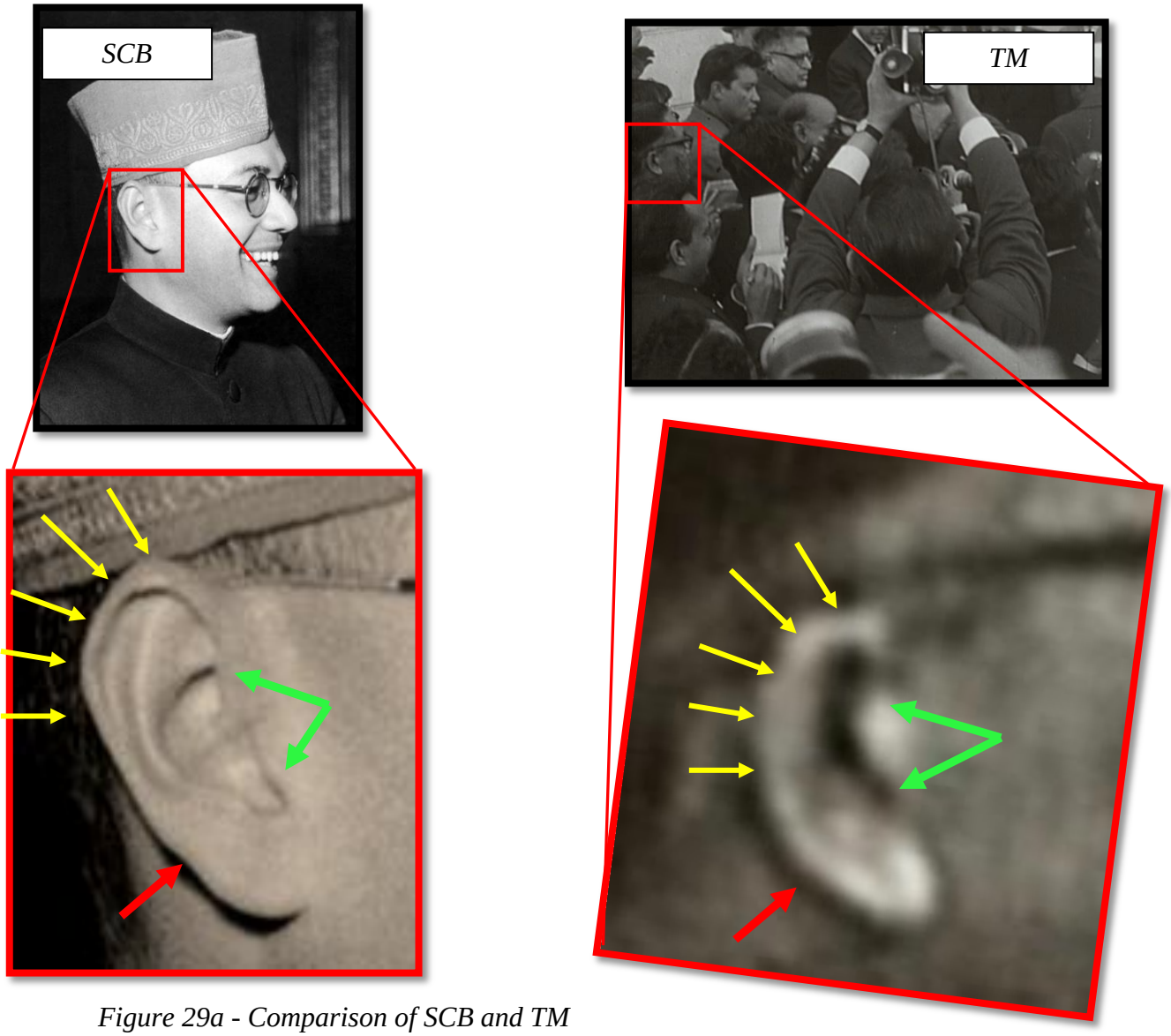

Figure 29a - Comparison of SCB and TM

68. Figure 29a shows a comparison of the **right ears**. I noted the following features:

- **Red Arrows** - I noted on *multiple images* of *TM* in this location a delve in the area where the *helix* joins the top area of the lobe.
- **Light Green Arrows** - There is an area where I would expect the form/structure of the *tragus* and or the *crus of helix* to be positioned. There is no definition of the *tragus* identified on the *TM* image.
- **Yellow Arrows** - The *super-aurale* and *helix* have a curved shape/appearance. The shape of the *anti-helix* is not seen clearly.

Note: The images have been re-coloured to Sepia in attempt to highlight the detail further.

Similarities continued:

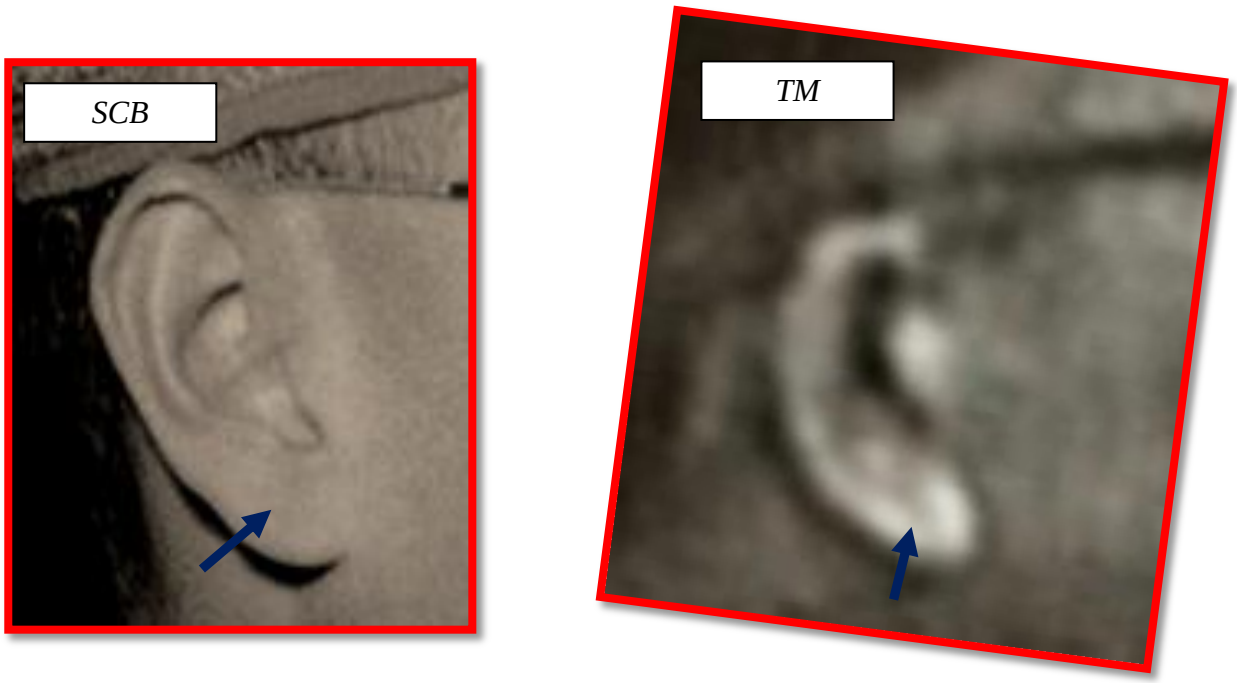

Figure 29b - Comparison of SCB and TM

- **Blue Arrows** - Shows a detached, fleshy lobe *(identified in other images/frames),* there is a shadow located on the top of the lobe itself, I would opine is positioned under the *anti-tragus* structure. I would also comment that potentially the shape of the ear might have changed.

Note: My understanding is that the ears are subject to some change over time. Features such as the nose and ears as examples are constructed of cartilage comprising of various types of fibres. Over time the connecting tissues of the skin and cartilage break up and with assistance of gravity, these suffer droop or sagging. This must be considered when conducting comparisons such as this.

Although not an area of my expertise, I understand that any of the afore mentioned changes would be as a result of the individual's 'genetics', and that the deterioration of these features may or may not occur or may occur with varying visual results.

Similarities continued:

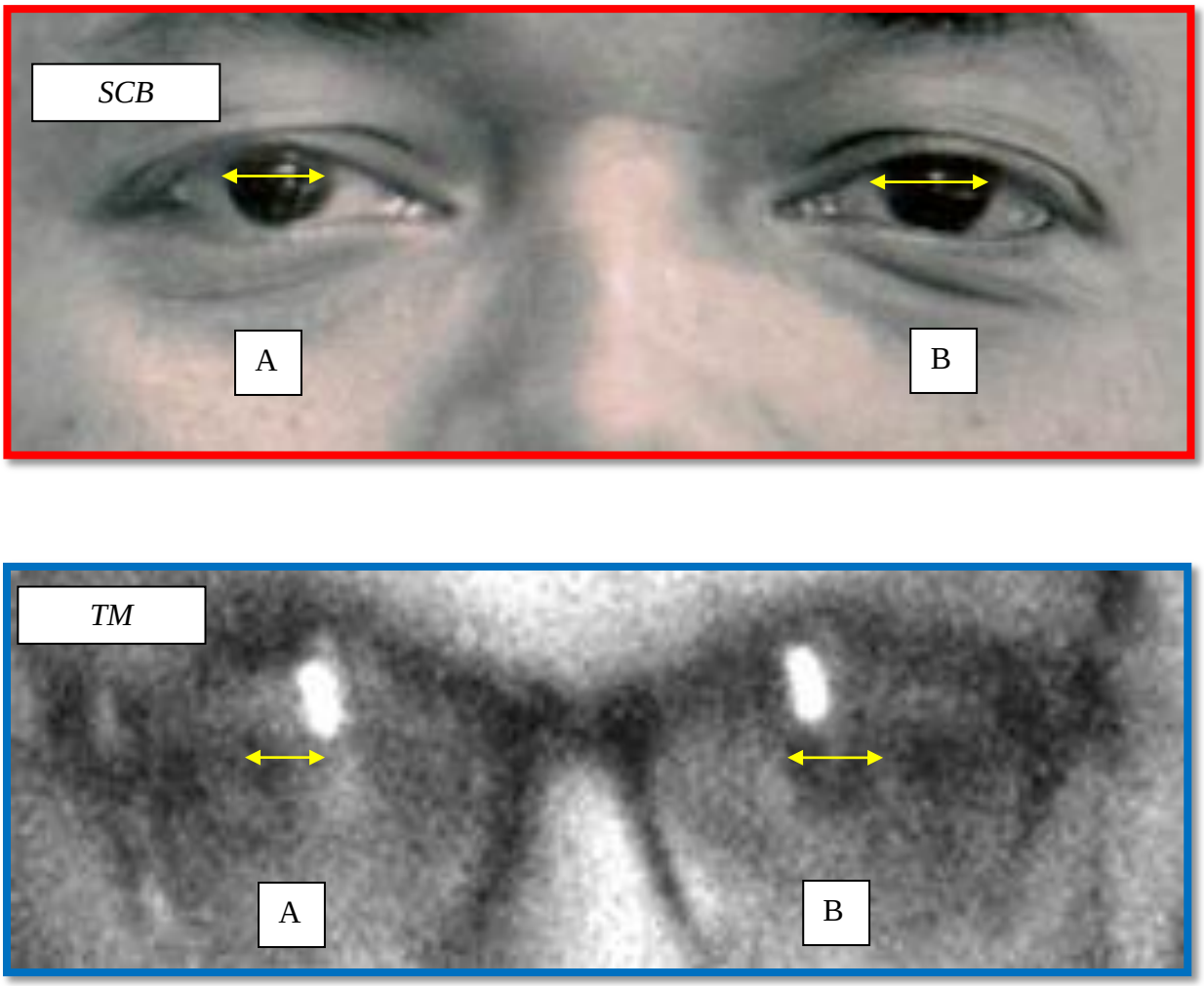

Figure 30 - Comparison of SCB and TM

69. Figure 30 shows an enlargement of both *SCB* and *TM's* eyes. Although TM is wearing glasses I am of the opinion that it is just visibly possible to determine that there is a size difference in the right and left cornea's of both SCB and TM *(yellow arrows).*

70. This is not an area of my expertise however, I have sought advice from a qualified optometrist colleague who has suggested that the imagery *might* suggest a condition *(amongst others)* known as *'Microcornea'* mentioned as being a relatively *rare condition.* Other suggestions such as *Megalocornea* and *Congential Glaucoma* have also been considered.

71. This is an area that should be investigated further by an appropriate expert. It might be advantageous to explore any medical recordings to determine whether SCB had such a condition.

General similarities

72. As with any analysis such this, the obvious features can be overlooked. I therefore note the general similarities and observations:

- Both *SCB* and *TM* are males; the origin/skin tone of *TM* is unknown.
- Both individuals are wearing glasses.
- Both males have a noticeable side parting left side of the head, in the images that show both to have hair.

73. I have no height references *TM*; I am therefore unable to comment on any similarities in the height of *SCB* and *TM* however, I would comment as an observation that they have *broadly* similar builds, focusing on the later images of *SCB* in the mid 1940's.

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Differences

74. It is clear that one must consider the fact that there is in excess of 20 years between the 1940's imagery presented of *SCB* and the *TM* images dated 1966.

75. I could find no significant differences in the appearance of *TM* when compared to *SCB* that would allow me *to completely rule out TM* as a candidate for *SCB* or Vice Versa.

76. However, there are a number of features such as the eyes, the ears, skin tone; potential skin blemishes that due to a number of factors such as, *the image quality* that cannot be compared/assessed in more detail for any potential differences.

77. *SCB* has a number of unique features *(see Figures 10 -13)* that I am of the opinion, *if* identified on the face of *TM,* would bring a positive identification of *SCB potentially* much closer.

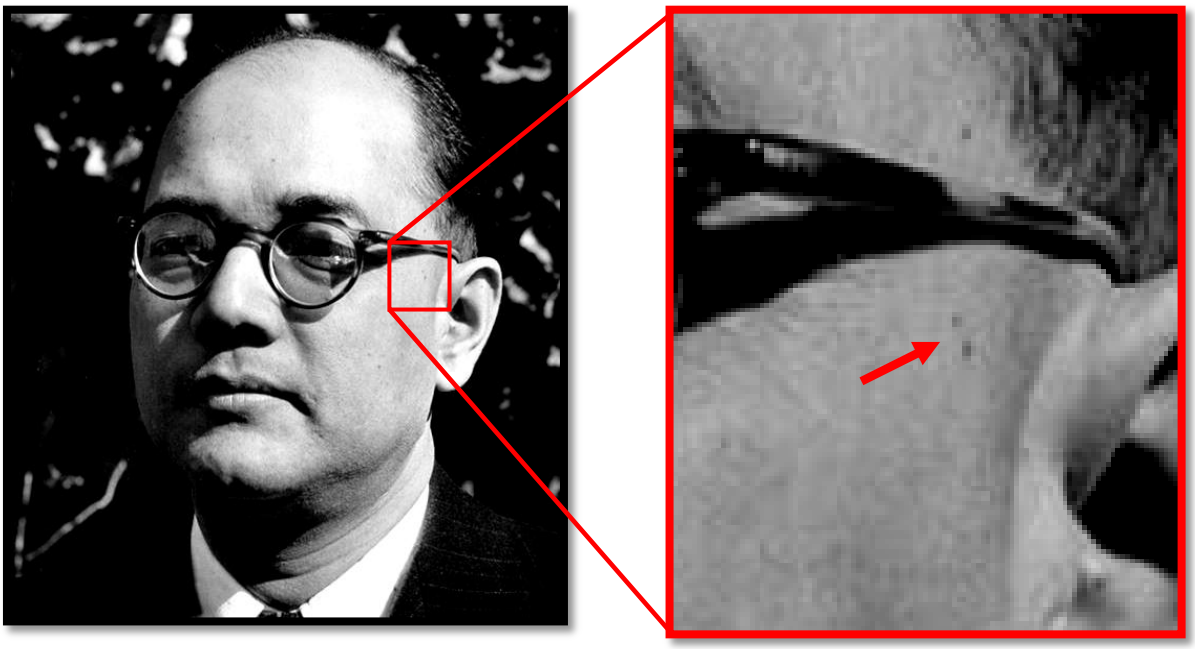

Figure 31a - Comparison of SCB and TM

78. Figure 31a shows two small dark toned markings in the skin on the left side of SCB's face, geographically positioned near to/in the area of the *temporal process/Zygomatic arch (red arrow).* I have identified these markings in other known images of SCB albeit of poorer quality.

Differences continued:

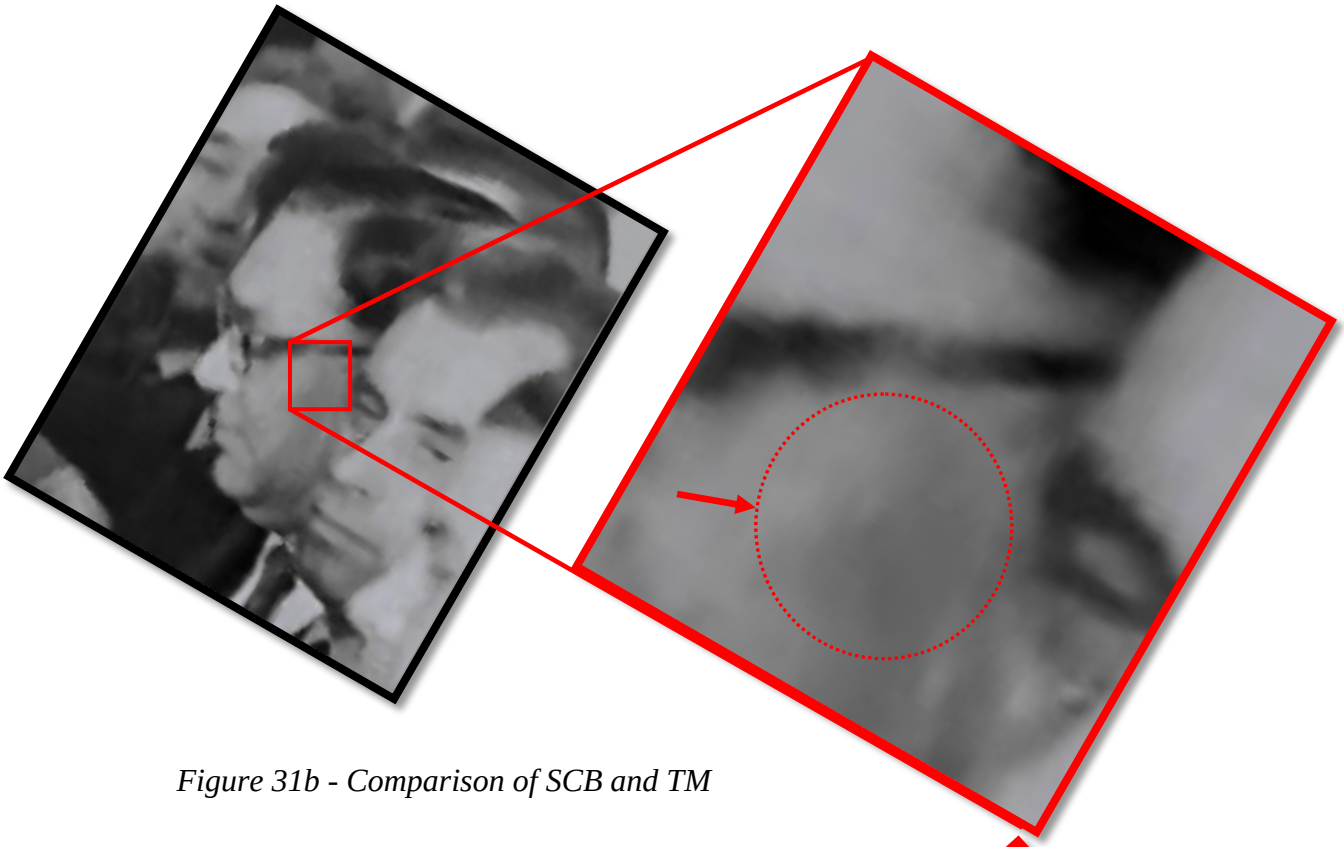

Figure 31b - Comparison of SCB and TM

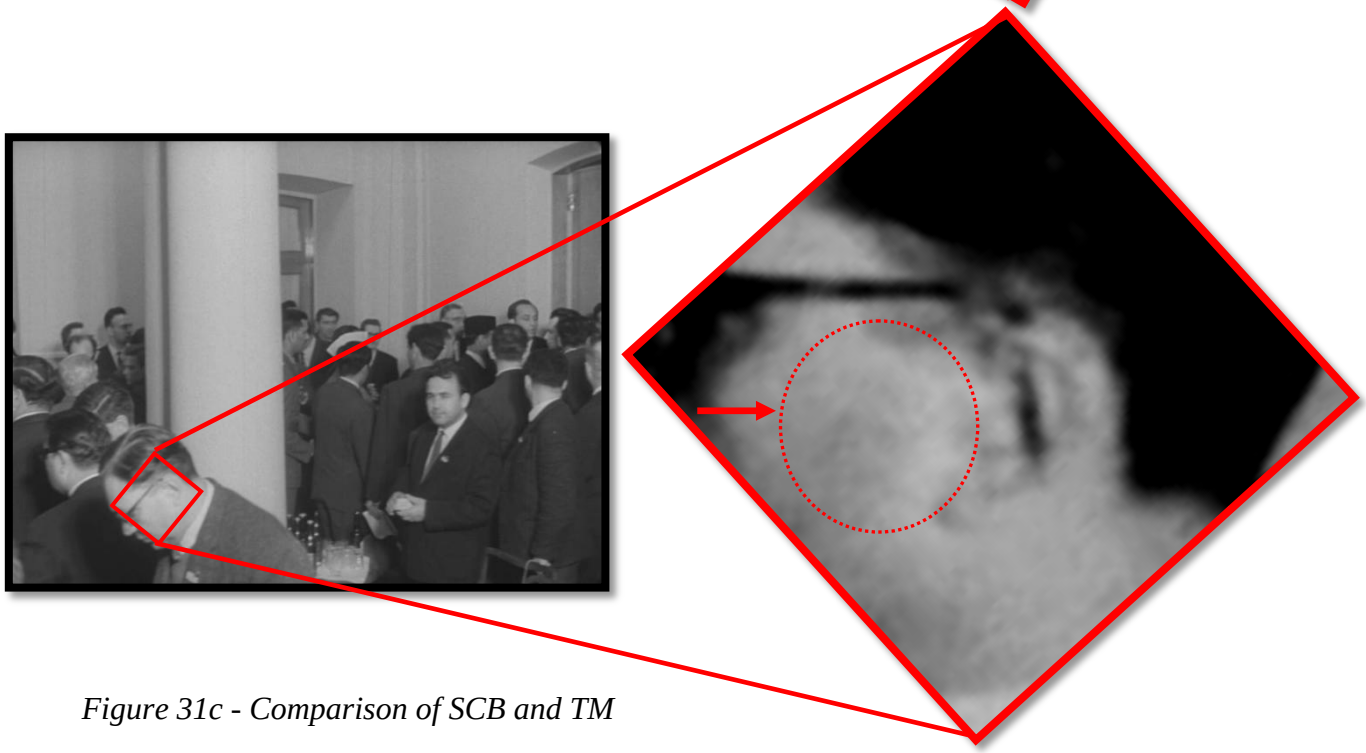

Figure 31c - Comparison of SCB and TM

79. There are few images of *TM* that are of good quality and show the same area as the *SCB* image shown in Figure 31a however, it is difficult to determine whether the markings *or lack of markings*, in regards to the *TM* imagery are as a result of compression artefacts or similar *(see Figure 31b and 31c).*

Differences continued:

80. The hair style of TM is noticeably different to *SCB* as *TM* has a full head of hair, albeit worn high across the forehead. The hair is a *transient feature* and therefore can be cut, styled and replaced or covered with a hairpiece. I noted in *Figure 24* of this report that the shape of the frontal bone is slightly *different*. One must consider whether this is a difference in the shape of the head; or that the hairline and its appearance in the imagery combined with the capture angle create a different shape.

81. One of the most obvious points is whether *TM could be* a person who shares very similar facial features to *SCB* when he was last photographed in the mid 1940's, a potential lookalike. One must also consider the ageing process and how much one might expect *SCB's* appearance to have changed potentially creating differences in his facial features, build and overall appearance. Using the material supplied to me, I have not been able to assess the skin tone of *TM*, we know that *SCB* was of an *'Asian'* descent however, the comparison of the skin tone in those coloured images is, *for me*, impossible to discern accurately at this time. I have not been provided with any coloured material in relation to *TM* at this time, that would allow me to assess his skin tone, therefore, I am unable to comment on any differences in race or origin.

82. One must also consider any circumstances in the alleged disappearance of SCB and that IF - *SCB* was still alive in 1966, what measures would he take *potentially* to change his appearance and make him different looking?

Discussion

83. I have reviewed all of the images and footage supplied to me. There are many showing consistently features that can be identified on the historical images of *SCB.* It is feasible to conclude that a person's features can change over time. I would opine that without a continuous library of historical good quality imagery, that it would be difficult to gauge potential changes in a person features over a period of time such as 20 years plus.

84. The imagery and footage that has been provided varies in quality however, all of the imagery that has been supplied to me is in digital format, therefore considering the availability of recording media in the 1960's and the early decades, all of the images have at some point been subject to digital conversion.

85. This can in some circumstances create issues with quality such as digital compression *(pixelation when enlarged as an example creating artefacts),* debris on the imagery potentially at the point of being digitally scanned, wet photography or the deterioration of wet film *(magnetic media)* and or images. I have *where possible*, tried to relieve this issue by identifying unique features on more than one image and where possible, images with significant chronological separation in dates.

Recommendations

86. As with any investigation such as this, the continued pursuit of further still imagery and video footage is paramount, as the unique detail that would/could be potentially be conclusive, *in particular*, the mark on the neck of *SCB* is not clearly visible, *if at all present*, on neck of *TM* due to the collar worn, is frustratingly not available on the Tashkent imagery.

87. I would recommend consulting with a consultant who specialises in ear and nose biometrics who might be in a position to further expand and comment in regards to the ears and nose and any potential changes in those features, as a result of a ageing over a 20 year period.

88. I am aware of various theories that the ear continues to grow however it is widely considered that the ear can also be considered in facial comparison analysis as the ear does not move significantly with facial expression. It is also widely considered that no two ears are the same, even when on the same person. I would opine that these areas should be explored further.

89. I would also recommend consulting with a consultant who specialises in both hair growth and associated patterning to expand further into the one significant transient difference found between *SCB* and *TM*.

90. Finally, the observations made in regard to the size and visual difference in the eyes of SCB and TM should be investigated further by an appropriate expert such as optometrist or similar. If this is indeed a *'rare condition'*, added to the similarities found in this analysis, I would suggest adds '*further weight*' to the contention that SCB and TM are the same person.

91. As these areas are not within my expertise or current knowledge, I would be of the opinion that pursuit of this expertise may or may not add weight to the overall area of contention.

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Conclusion

1. I have reviewed a plethora of imagery and moving video footage during my analysis of *the Bose Mystery.*
2. Taking into consideration the similarities *and differences*, the image and footage quality, the historical nature of material supplied and modern day technical quality issues, I am of the opinion that there are ***noticeable similarities*** in the facial features, to include the ears, of both Subhas Chandra Bose *(SCB)* and the individual seen at the Tashkent Peace talks in 1966 *(TM)* and differences which could be attributed to the image quality, capture angles and items such as glasses and clothing that mask certain areas.

3. I am of the opinion that serious consideration must be given to the contention that the Tashkent Man and Subhas Chandra Bose share very similar facial features and could potentially be one and the same person.

4. Within the UK Imagery analysis/ facial comparison arena, a common *Degree of Certainty* scale *(attached within Appendix B)* is utilised to assist an Expert in describing his or her findings in a manner that can be quantified, this is referred to as *'level of support'* scale. This is a guide and not a definitive scale as there are some variations dependent on the expert's use of the scale and their choice of wording.

5. If I were to utilise this scale in this particular analysis, taking into consideration my findings, I would be of the opinion that the imagery, both still and moving that has been supplied to me, in regards to the historical facial features of Subhas Chandra Bose and the individual identified as the Tashkent Man, ***lends Support*** leaning towards ***Strong Support*** to the contention that they are one and the same person.

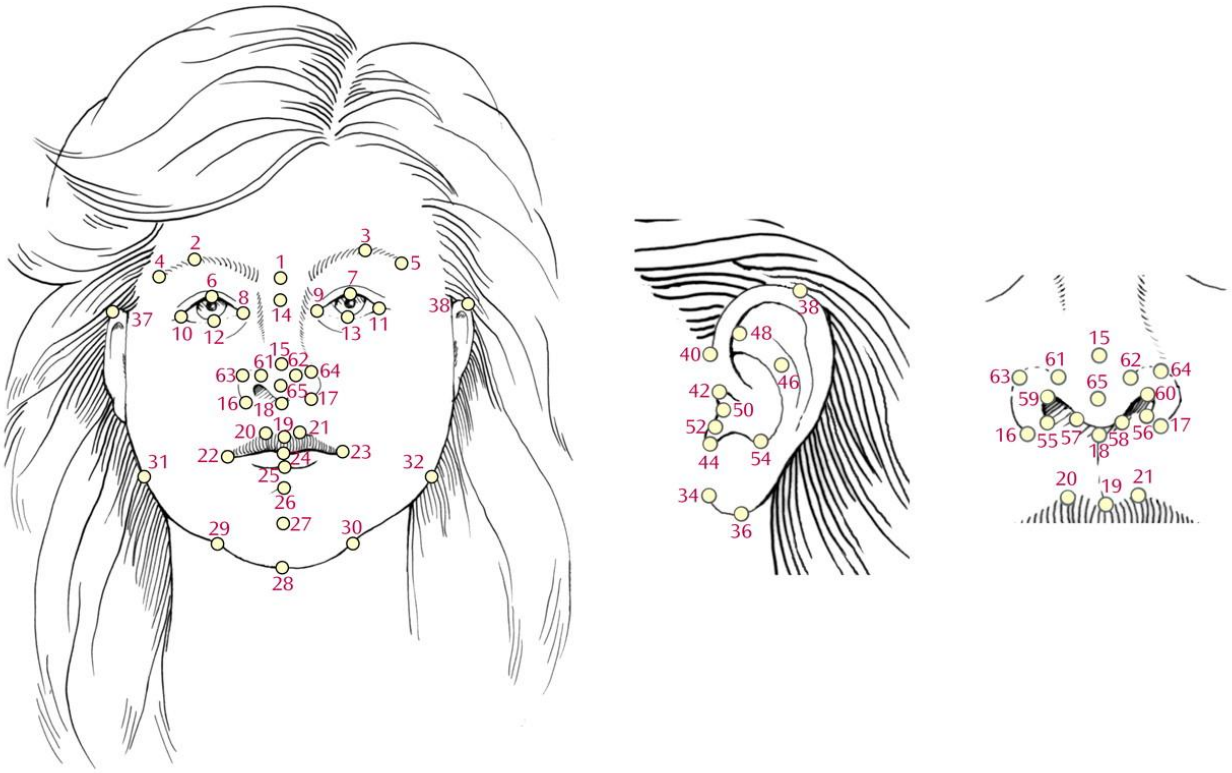
6. Should further information be determined in regards to the potential eye conditions mentioned in *Figure 30*, and further imagery of the Tashkent Man that *might* surrender more detail such as the moles and 'pox' marks seen on the face of Subhas Chandra Bose, I would be of the opinion that the Level of Support *might* increase to ***Powerful Support,*** that Subhas Chandra Bose and the individual identified as the Tashkent Man are the same person.

7. However, should additional imagery or information be supplied of the Tashkent Man or Subhas Chandra Bose be provided, the results of my analysis *might* change.

N. Millar

17th November 2015

Appendix A: Facial Landmarks



1. Glabella
2, 3. Superciliare
4, 5. Frontotemporale
6, 7. Palpebrale superious
8, 9. Endocanthion
10, 11. Exocanthion
12, 13. Palpebrale inferious
14. Sellion
15. Pronasale
16, 17. Alare
18. Subnasale
19. Labiale superious
20, 21. Labiale superious (right/left)
22, 23. Cheilion
24. Stomion
25. Labiale inferious
26. Sublabiale
27. Pogonion
28. Gnathion
29, 30. Tuberculare
31, 32. Gonion
33, 34. Otobasion inferious
35, 36. Subaurale
37, 38. Superaurale
39, 40. Otobasion superious
41, 42. Tragion
43, 44. Inferior tragion
45, 46. Superior antihelix
47, 48. Anterior-superior-medial-longitudinal axis
49, 50. Superior-lateral tragion
51, 52. Inferior lateral tragion
53, 54. Inferior antihelix
55, 56. Lateral subalare
57, 58. Medial subalare
59, 60. Supra subalare
61, 62. Lateral pronasale
63, 64. Superior alare
65. Infrapronasale

Referenced :- http://ajp.psychiatryonline.org/article.aspx?articleID=177403

Appendix B: Background Information of Video and Photographic Evidence

Identification from video or photographic evidence

Questions of identification are often raised as to the identity of a person seen on CCTV footage or other photographic medium. The police are likely to be keen to charge a felon of a crime whereas a solicitor/lawyer will want to prove that it is not their client.

In order to establish the identity of a person or object the analyst is asked to compare images, from say CCTV footage or historical footage, with known images of a suspect or known individual. This is not as straightforward as it first appears.

A distinction should be made between permanent and temporary features, and unique and non-unique features. Several individuals or objects may share non-unique features, for example, sex, height, clothing, eye or hair colour etc. Unique features include scars, moles, and tattoos, tears in clothing, paint marks etc.

An example of a temporary unique feature might be a person with a leg in plaster and on crutches amongst a crowd of able-bodied people. The feature would distinguish that person from the others around him, at that moment and in that context, but perhaps not before and not later.

If a unique feature is present on one person and is demonstrated to be absent from the other then it can be concluded that they are different people. Equally, if the unique feature is present on both subjects then it can be concluded that they could be or are the same person. The presence of non-unique features on two subjects cannot demonstrate that they are the same person although as the number of features shared increases so does support for the contention that they could be the same person.

The Police Scientific Development Branch in Hertfordshire has developed guidelines, based on practical experience, for the minimum size of image required for different uses. Their recommended minimum target sizes, in terms of percentage of screen height occupied by a standing man, are given below[1]

- Monitor: 5%

[1] *Journal of the Forensic Science Society 1994, 34(4) J Aldridge and G Knupfer*

- Detect 10%
- Recognise: 50%
- Identify: 120%

The values given take no account of resolution, however they do indicate that to correctly identify a person from video footage, a high quality close-up view is required.

The nature of video footage limits the smallest detail that can be determined. Poor imaging can also limit the opportunity to detect a significant difference, which would allow objects or people to be positively differentiated. Indeed, a single significant difference between two objects outweighs any number of similarities between them.

The question of identification in a legal environment is a matter of fact for the Court to decide. It is for the imagery analyst to examine the material and report his or observation observations. At best, an imagery analyst could report that:

- Certain differences exist in the various images which demonstrate that the parties involved are not the same, or
- Certain unique features exist which demonstrate that the parties are likely to be the same, or
- Certain non-unique corresponding physical features were observed, and no differences, which demonstrates, to varying degrees, that the parties involved could be the same, or
- The quantity and quality of information in the images is insufficient to determine anything beyond the most general and non-unique of features e.g. perhaps only sex and skin colour, which is of minimal assistance to the Court.

In many video images the suspects or target individuals head occupies a small area of the image. Often, the suspect wears a hat or hood and the video camera looks down on the suspect. The result of these factors is that the visible area of the face is often only 1-3% of the available image area. Therefore, in such cases, much of the information upon which we depend when forming identification is denied.

One needs to see the fine detailed features such as creases around the mouth or nose, the shape of the alar or nostrils to make a reliable identification and one cannot unless one can see this level of detail.

Comparison techniques

Several comparison techniques can be used to compare imagery either for the purpose of questioned identity or to determine the dimensions of a person/object.

Estimation of dimensions

An estimation of the dimensions of a subject captured on a piece of video footage can be made by taking measurements of other objects *(reference objects)* shown in the footage. The proportions between the reference objects and the subject in question can then be calculated.

Care should be taken when estimating dimensions in this manner, as perspective can make objects look as if they are side by side when they are not. Any differences in the depth of positioning of objects used in the analysis will induce errors into the calculations. Objects closer to the camera will appear proportionally larger than those further away. Furthermore, the gait or stance of an individual can affect the calculation of their height.

Photogrammetry and proportional comparison

Photogrammetry is the measurement of distances and angles between features of a person or object. In the case of facial features of an individual, the measurements that could be taken should be unchanging such as the distances between the eyes and ears, or across the nose etc. To use this technique, the images must be from comparable camera perspectives i.e. the height and distance from the subject and the view of the subject must be comparable. These measurements and the proportions between the measurements can then be compared with those from imagery of the person or object.

It should also be noted that theoretically two subjects might have the same proportions between features but be of different sizes. By resizing the images to be of the same size, the proportions would indicate the two subjects to be one and the same, even though one may be considerably larger than the other. Currently there is also no published database of natural variation between individuals in a population. Therefore the significance of certain proportions all being say within 5% is unknown. Care should therefore be taken when drawing conclusions from such comparisons.

Superimposition

Superimposition is the replacement of all or part of the face/object, as seen on video footage or other medium, with a known image of the face/object. This can be a very useful tool for the analyst as an aid in checking details, but care must be taken not to abuse the suggestive nature of the exercise if demonstrating pictorially in a report.

Morphological comparison

Morphological comparison is the examination of features of a subject with regards to their shape and form. Images of subjects from different camera angles can be used. However, care should be taken as different perspectives can visually deform features.

Stereoscopy

This technique uses similar but not identical images in order to gain a 3-D impression from 2-D images. Images that may be used are successive frames or fields, or images where an individual is viewed from a similar perspective. The two images are viewed through a set of optical lenses, which combine the images for the viewer and can bring more depth to the 2-D images. This method of comparison is more useful as an aid to the analyst rather than demonstrative in a report.

Degree of certainty

The degree of certainty to which people or objects can be identified on video footage is dependent on the quality and quantity of imagery available. Ultimately it is up to the Court to decide if a person or object is or is not the same as that seen on the video footage. However, an imagery analyst can help the Court by pointing out any similarities or differences that exist and the strength of such evidence.

Many scales have been used to attempt to convey the strength of such evidence in questioned identities, be they people or objects. One such scale, used by the Forensic Imagery Analyst Group (FIAG), a sub-group of the British Association for Human Identification (BAHID), is as follows:

Level of support

- Lends no support
- Lends limited support
- Lends moderate support
- Lends support
- Lends strong support
- Lends powerful support

Levels of support explained

No Support

There may be very general characteristics observable *(i.e. race, gender, hair colour),* but these features do not offer enough support towards specific identity, for an expert to make a more meaningful comparison than a lay-person. It would be unsafe to offer any support towards the contention that the two persons under comparison are one and the same using facial image comparison methodology.

Limited Support

There are a few general characteristics observable, these would include descriptors such as broad nose, moderately protrusive ears etc. Individually or in combination, these features only allow for a superficial comparison. The ability to discriminate between two people of similar general appearance is restricted.

Moderate Support

The image quality permits a moderate amount of facial feature detail to be discerned: i.e. visible features can be described; for example, the nose could be classified as having a narrow bridge and a straight ridge. Individually or in combination, the available imagery allows for a reasonably robust comparison. The ability to discriminate between two people of similar appearance is restricted.

Support

There are some facial features that can be compared in detail. It is likely that the facial similarities/difference will be evident on multiple images. However, they may also be observed on only one occasion depending on image quality. The similarities may or may not

be observed in combination. Individually or in combination, the available imagery allows for a robust comparison. It should be possible to make a distinction between two people of broadly similar appearance.

Strong Support

There are some facial features that can be compared in detail. It is unlikely that the facial similarities/differences will be evident on multiple images. However, they may also be observed on only one occasion depending on the image quality. The similarities may or may not be observed in combination. Individually or in combination, the available imagery allows for a robust comparison. It should be possible to make a distinction between two people of similar appearance. However, the ability to discriminate between two people bearing a very close resemblance is restricted.

Powerful Support

A significant number of facial features can be compared in detail. It is likely that these facial similarities/differences will be evident on multiple images. However, they may also be observed on only one occasion depending on the image quality. The similarities may or may not be observed in combination. Individually or in combination, the available imagery allows of a robust comparison. It should be possible to make a distinction between two people of very similar appearance. Two people would have to bear a striking resemblance in order for discrimination not to be possible.

END OF REPORT