An investigation into the influence of varying the witness' visual field of the artist/interviewer's space of work, when producing facial composite sketches using cognitive interviews via webcam.

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Abstract

In the context of the use of video-mediated communication (VMC) for conducting remote interviews, either with witnesses or victims of a crime, this research examine whether there is a correlation between the witness' visual field of the artist/interviewer's space of work, and the level of resemblance of the resultant composite image with respect to the target. Firstly, 24 subjects located in Santiago de Chile took part in a cognitive interview via VMC with a forensic artist located in Dundee (UK), after having seen a photograph one of the characters from a famous British TV series the previous day. Participants were randomly separated in two groups, whether far from the camera with full perception of the background and upper limb of the interviewer, or just a white wall. Secondly, two independent groups of participants rated the likeness of the composites with regard to the original photos, through a likeness and naming procedures. The data suggest that there is no direct correlation between the witness' visual field of the artist/interviewer's space of work, and the level of resemblance of the resultant composite image with respect to the target. As a consequence, the illusion of co-presence appears not to be imperative for the creation of rapport.

I. Introduction.

Absence of evidence, logistic difficulties, and a precarious coordination between judges, polices and prosecutors, are just some of many different classes of obstacles that, for decades, judicial systems across the world have had to face in order to fulfil their task. Nonetheless, current technology advances seem to be capable of solving the majority of those drawbacks, and also of contributing to increase the number of cases that in the past would be impossible to elucidate. In fact, new alternatives for applying technology in judicial cases have been proposed under the wing of forensic sciences, being one of them the use of video-mediated communication (VMC) for conducting remote interviews, either with witnesses or victims of a crime. As a result, new spaces has been opened for innovation, including the production of facial composite sketches of suspects using VMC, something that until just a few years back was not seen as a real alternative to face-to-face encounters. Accordingly, the aim of this investigation is to deepen this latter application, in terms of making the most of the quality of information available for the artists at the moment of fulfil their task, particularly starting from the construction of rapport and the basic conditions that should be guaranteed before and during conducting a remote interview. In this context, the concepts of presence and perception are extracted from the framework of contemporary studies in proxemics, in order to determine how significantly affected are the cultural rules regarding interpersonal space under this particular conditions. For that matter, this investigation seeks to determine whether there is a correlation between the visual perception that the witness has of the artist/interviewer’s development in their space of work, and the level of resemblance of the resultant composite image with respect to the target, which is generally related to the quality of the witness' testimony.
II. The composite sketch.

Defined by Karen Taylor as “a freehand drawing made up by combining various parts into a single graphic image, relying on the description of a witness or a crime victim” (Taylor, 2001: 197), composite art or composite drawing can be comprehended into a large history of imagery, directly associated with the liaison between art (or even handcraft) and justice. In fact, according to the International Association for Identification, forensic art is defined as “…any art that is of a forensic nature; that is, art used in conjunction with legal procedures” (Taylor, 2014). Under this light, composite drawing appears to be understood as some kind of “know-how”, or the ability of developing a task that typically is acquired through practice, being its principal aim the representation in two dimensions of a non-present person’s face. In fact, one of the more well known cases of the use of this type of sketches dates from the year 1881, when Scotland Yard published in The Daily Telegraph the portrait of the prime suspect in a murder inquiry, offering a reward to anyone who could provide information about his whereabouts. That sketch, considered the first composite published in the Western press, depicted the journalist Percy Lefroy Mapleton, also known as “the rail murderer”, and represents an early manifestation of the alliance between arts and justice (History by The Yard, 2014).

Few years later, what started as a non-measurable graphic method of identification, lead to the development of a more constrained method, which main objective was to guarantee the replicability of the results, through the standardization of the measuring instruments. In that context, the French police officer Alphonse Bertillon, who is considered one of the most important proponents of the investigation and systematic application of anthropometry, introduced a complex system of identification based in the individualization of people from the measurement and comparison of their different body parts, as well as the register of scars or distinctive features. With the implementation of this taxonomic system, Bertillon aspired to confront the criminals’ abilities to disguise, use false identities or plan sophisticated alibis, especially in the case of repeat offenders. For that matter, Bertillon grounded his method on the recent advances in anthropometry, photography, statistics and a sophisticated physiognomic vocabulary that, accompanied by the illustrations of Duprec, allowed him to design detailed synoptic tables intended to improve the criminal investigations. For Bertillon, the domain of the criminal body required a massive campaign of inscription, a transformation of the body’s signs into a text that could reduce a verbal description into a denotative shorthand linked to a numerical series (Sekula, 1986: 33). This language benefitted from the popular photographic format of carte-de-visite patented by André Disdéri in France in 1854, which had initiated the popularization and mass production of photography thanks to the low cost of their production. According with John Tagg, considering that in many of the implied operations it was possible to use unskilled labour, the productivity of the operator and the printer could be multiplied by eight (Tagg, 1988: 67). In that circumstances, the book published by Bertillon in 1896 and entitled ‘Bertillon system: Signeletic Instructions, including the Theory and Practice of Anthropometrical Identification’ constitute the foundations of the future composite kits, catalogues, and computer-generated recall systems (Taylor, 2001: 15). As a result, his work turned out to be fundamental in the comprehension of the human face as composed by exchangeable units, which can explain why his system was so quickly adopted by polices of all Europe and America, and became
the identification method par excellence. In fact, his system had the advantage of adapting to the precise requirements of that time, since it allowed to have immediate access to a great quantity of information from a possible re-incident, through the grouping of little cards susceptible of being stored, which summarized the anthropometrical measurements and photographic material individually taken to the culprits.

Towards the middle of the 20th century, the consolidation of the new paradigm found its final form in the introduction of the two principal hand assembly methods of building facial composites, which became serious competitors for the traditional draftsmen: the Identi-kit developed in the US, and in the Photo-fit industrialized in the UK. The first of them was basically composed of clear sheets denominated “foils”, which were printed with multiple individual facial features, and were susceptible of being overlapped one on top of the other to create a face. The initial kits had a sketch quality, because they were made from hand-drawn components, something that changed with the introduction of updated kits, manufactured from photographic component features (Taylor, 2001: 22). Conversely, the Photo-fit system consisted in numerous alternatives of five predetermined facial features arranged in a booklet. Images of forehead and hair, eyes, nose, mouth, and chin were photographic prints taken from pictures of real faces, among which witnesses had to select those closest to the face they were trying to reconstruct. Hereafter, the selected features were located together for setting a face, which could be revised by the witness. However, according to Kenneth Laugherly and Richard Fowler, this feedback was not enough for leading to a good facial representation, because its limitations did not lie in the individual, but in the design of the system itself (Laugherly and Fowler, 1980: 307). Moreover, it must be considered the fact that with this technique there are some faces more difficult to represent than others, and that there are also people with better verbal abilities, who should be able to provide better descriptions and in turn lead to better images (Laugherly and Fowler, 1980: 315).

Finally, regarding the latter insight, it is important also refer to a pair of specific variables that may influence people verbal expression during a composite interview: the physical environment (mostly the room where the meeting is conducted) and the psychological atmosphere (the level of empathy reached by the interviewer with respect to the interviewee). To that effect both conditions can be comprised as part of notion of rapport, which is usually utilized in the anthropological and ethnographic field for referring to the essential condition for any mutual understanding between the researcher and the contact person. In fact, this concept is the defined by the Oxford Dictionary as “a close and harmonious relationship in which the people or groups concerned understand each other’s feelings or ideas and communicate well” (Oxford Dictionary, 2017). This can help to explain why a composite interview based in the construction of rapport can be more successful than any other of its kind (like a standard police interview) even when using the same method or technology. In fact, according with N.A. Brace et al (2006), the quality of composites is likely to be limited by the fact that the witness has to work together with a police office to construct the composite, no matter which technique has been chosen (Brace et al, 2006: 365).
III. Standard and cognitive interview applied to the production of composites.

When speaking about the most famous method used by the police for obtaining information, the first idea that comes to mind is the traditional ‘standard police interview’, based in a straightforward question-and-answer approach, that many times has been confused with interrogation, especially when the witness is having problems to remember the facts. Actually, according to Karen Taylor, when putting the emphasis in asking the ‘who, what, when, where, why and how’, the interviewer develops a rhythm that place the interviewer in a position where their role appears to be constrained only to strictly respond to the question asked, without any margin to the natural human subjectivity or even to give some details, which eventually might be even more valuables than the general facts (Taylor, 2001:160). Naturally, using this kind of method is not the best choice to obtain in depth information regarding a crime, and much less to generate an effective composite sketch. In that sense, even though the quality of the visual memory with respect to the target face is likely to be one factor limiting the quality of the resultant composite, the process of providing a verbal description may also be a crucial factor (Brace et al, 2006: 365).

By contrast, during the 80s, the cognitive psychologists Ron Fisher and Edward Geiselman in cooperation with their colleagues in the US, developed an interviewing system based on sound psychological principles that they called ‘cognitive interview’. In accordance with Fisher et al. (2010), this model should be seen as a tool box of techniques rather than ‘a recipe with a fixed set of questions of instruction’, because many of these techniques will need to be adapted to the requirements of each specific interview. In fact, for the same authors, the ability to conduct a successful interview is precisely to know which technique should be applied given the specific conditions of the interview, and the best way to do it (Fisher et al., 2010: 61-62). Even further, according to Darling et al. (2009), given the influence of biological variables on eyewitness testimony, it is even possible that individual differences in cognitive processing might also influence identification performance (Darling et al., 2009: 369).

In that sense, drawing from the premise that all the relevant information is stored in the mind of the witness, Fisher and Geiselman consider that the witness should be encouraged to be mentally active during the interview, as opposed to being passive and waiting for the interviewer’s unidirectional questions. In that sense, by asking open-ended questions and not interrupting her answers, it would be easier to generate a good rapport, and therefore obtain detailed descriptions. Thereby, the interviewer must find a way to bring together the objectives of the investigation with the witness expectations, conveying that the best way of meeting their own respective goals is providing relevant information (Fisher and Geiselman, 1992: 31).

As a result, the cognitive interview approach is focused on how the mind works, specifically on our memory and cognition/perception, but always in connection with the social dynamics of how people communicates (Taylor, 2001:160). This is important, because according to Fisher and Geiselman, the memory code comprises not only the objective event, but also the social, psychological and environmental context in which the event took part. From this perspective, each event should be represented through different memory codes and at several different levels of exactitude, being the most detailed level usually the most valuable for the purpose of the investigation. However, that
level is also the most complex code for the interviewer to access and communicate, and therefore the core of the memory retrieval effort (Fisher and Geiselman, 1992: 98).

Regarding the composite interviews, it is important to observe the distinctive nature of the images which are sought to recall, especially in terms of the particular encoding mechanisms that operate in the mind of the observer. In the case of human faces, it is possible to recognise a common basic structure composed by a set of elements or individual features (eyes, nose, mouth, ears, etc.), whom are located in approximately the same position within the whole of the face, but introducing variance through their relative positions. In fact, this is very relevant for facial representation, because equivalence never rests on the likeness of elements just as much on the identity of responses to certain relationships, where identities do not depend on the imitation of individual features as well as on configurations. In fact, from this perspective, it is precisely why we consider that a caricature or even a sketch has a good likeness with respect to a face (Gombrich, 1977: 292). That is the case for the distinctiveness of a face, because since typical faces look more alike, they are more probable to be judged as familiar than distinctive faces. In fact, the greater success in recognizing distinctive faces is assumed as a consequence of being encoded more distinctively, and thus leading to a more strong specific memory component (Valentine and Bruce, 1986:300).

Conversely, with respect to the familiarity of the faces, Vicki Bruce affirms that it is important to distinguish the different uses made of the information derived from the face, and the different kinds of meaning that may be derived. In that sense, there are factors that could affect the promptness with which highly familiar faces could be accurately recognised, considering that our everyday task consist on recognize an identity from a face, and unfamiliar faces do not have identities (Bruce, 1990: 344). In fact, according with Young et al. (1985) many studies from the neuropsychological field, suggest that familiar and unfamiliar faces are processed by the brain in different ways, and therefore different functional components are responsible for their respective type of recognition (Young et al., 1985, 35).

As a consequence, in order to determine which method was used by the witness to remember or encode a face, it is necessary to put attention to the description of the particular properties and position of the facial features, as well as the intrinsic and environmental factors que condition the witness expression, such as psychological factors and some essential conditions that permits to access to the detailed memory of the witness, especially co-presence.

IV. Use of VMC (video-mediated communication) into composite sessions.

Even though the application of cognitive interviews to witnesses’ reality seems to have solved many of the problems about constructing rapport, there is still another obstacle to solve, which is how to overcome the physical distances between the victims and those that seek justice, mostly because of the loss of time and economic resources associated with physical displacement of the witnesses. According with Nash et al. (2014), eyewitnesse can only contribute to the exercise of justice if they remember what they witnessed, and it is crucial to ensure that they can be interviewed as soon as possible after a crime occurs. In fact, the spreading of the concept of ‘virtual justice’ has contributed to open the discussion about its utility in legal proceedings, while their promotors have emphasise
that videoconferencing allows legal processes to occur more rapidly, and not only reducing the delays, but also minimizing the costs (Nash et al., 2014: 756-758).

In the case of the interviews conducted for the construction of composites, according to Kuivaniemi-Smith et al. (2014), VMC gives the possibility to witnesses of being interviewed by a trained sketch artist when no experts are available locally, and the chances of creating effective composite sketches of suspects become smaller. Actually, the authors affirm that reducing delays before conducting interviews would certainly lead to produce better composites, without mentioning the benefits of a prompt publication of the sketch, concerning to the capture of the culprit (Kuivaniemi-Smith et al., 2014: 389-391). Fisher and Geiselman (1992) also recommend to conduct interviews as soon as possible after the event in order to minimize forgetting, but they emphasize that it is not only about a matter of time, but also about the availability of suitable personnel for interviewing. Actually, an extremely anxious witness, who is still affected by the recent events, could have problems following instructions or being incapable of doing a memory retrieval. In this case, a prompt interview could be contra-productive if it is not accompanied by the presence of an expert who would be able to take control of the situation.

By extension, it is necessary to question the relative weight of the co-presence variable in the conduction of a successful cognitive interview, and if the physical context is absolutely necessary for its performance. Nash et al. (2014) ensure that this type of co-presence may not be necessary for conducting an effective interviewing, and that contrary to their initial prediction, participants who were interviewed remotely generally reported just as much correct detail as those interviewed through a traditional face-to-face approach (Nash et al., 2014: 764). Hence, the biggest limitation for using VMC in composite interviews should be traced in the quality of the available technical equipment, just as Kuivaniemi-Smith et al. (2014) affirm in their study, when they recognise that the technical questions were more frequent in VMC than in face-to-face interviews. As a result, the experience of the authors raises that if this type of technology become massively used, it is important to keep in mind that high tech equipment is not always available.

V. Proxemics’ variables involved.

In 1966, a young North American anthropologist called Edward T. Hall, introduced the concept of proxemics, which proposes that the man’s sense of space and distance is not static, on the contrary, ‘their perception of space is dynamic because it is related to action (what can be done in a given space) rather than what is seen by passive viewing’ (Hall, 1966: 108). With this notion in mind, Hall intended to describe how men unconsciously structure the distance between them in the context of daily life, including from the organization of the domestic space, to the layout of his towns. Thereafter, subsequent works have extended the notion of proxemics to also describe the relation between people and objects, and more recently, to the field of virtual reality, specifically to the development of user interfaces (Jakobsen et al., 2013: 2386-7). In this context, proxemics is increasingly applied in human-computer interaction, as a concept for understanding and analysing the interaction among users and devices, while in the field of remote interviews, it opens new opportunities to promote the use of VMC as a valid interface.
According to Jackobsen et al. (2013) using proxemics and visualizations together may give a distinct physical sense, which may create an unexpected scenario for remote interviews. In this context, the current implementation of VMC as a communication medium between two distant realities, implies that it is possible to guarantee a similar level of rapport as if both participants were in a face-to-face conversation. Indeed, as it was presented below, the spatial variable seems not be indispensable for conducting a successful remote interview (Nash et al, 2014). However, to achieve this level of rapport it is necessary to engage the witness in conversation, and convince them of the other person existence. Following Mel Slater (2009), this is not a minor matter, because the effect of perception involves the strong believe from the witnesses that what they are seeing in the screen is really happening, and that even those events are happening ‘behind the screen’, they refer directly to them (Slater, 2009: 3553).

In addition, for Kastanis and Slater (2012) this ‘plausibility illusion’ must be necessarily accompanied by a ‘place illusion’, hence, in the case of a remote composite interview, the setting of a conversation demands that the witness is convinced that the person behind the screen is merely in a distant place, and therefore their actions are just as unpredictable and autonomous as in any face-to-face encounter. Under these particular conditions, the way in which the presence is perceived by the witness becomes the basis for the rapport construction. If following Witmer and Singer (1998), presence could be defined then as the subjective experience of being in one place or environment, even when one is physically situated in another, which, in this case, would mean shifting from the own physical environment to a shared reality (in this case, the reality of the interview). This way, the local coherent set of perceptual stimuli should be integrated to a shared and meaningful whole of stimuli environment, provided by the screen and speakers. In fact, some authors argue that both, involvement and immersion, are necessary for experiencing presence, because only full immersed observers can perceive that they are interacting directly with the other person, even if it is through an interface (Witmer and Singer, 1998: 225-227). In this context, the taxonomy developed by Stuart T. Hall (1966) regarding the relative distances that people adopt depending on the nature of their interaction (intimate, personal, social or public) is useful to characterize remote composite interviews, especially because one half of the distance remains with the witness, and the other half is perceived as in the other side of the screen, staying with the interviewer. In other words, for both participants the distance is perceived as a mixture of tangible and virtual reality, with the screen acting as the border line.

In consequence, as stated above, the aim of this investigation is to deepen the study of applying video-mediated communication (VMC) to the production of facial composite sketches, and particularly to investigate if it is imperative to create the illusion of co-presence by establishing a plausible visual perception of the interviewer’s space of work, in order to maximize the rapport and the quality of the witness’ testimony. For that matter, it is proposed to examine how the resemblance of a composite image is influenced by varying the witness’ visual field of the artist/interviewer’s space of work, when producing facial composite sketches using cognitive interviews via webcam.
VI. The study.

Background

This study rises as an opportunity to fulfill the aim of this investigation, but at the same time to explore sustainable solutions to a real problem faced by a Latin-American country. Being the longest country on earth - exceeding 4.000 km. from north to south, with almost 8.000 km. of coast - Chile is located in the south-west coast of South-America. Today, one of the most pressing problems that the Chilean Judicial System must confront, is precisely to provide solutions that would allow authorities to overcome the physical distances that usually separate them from the victims, and in that way avoid an excessive loss of time and economic resources during the process. This scenario applies, among others, to the conduction of composite interviews in situations when the victims or witnesses are in extreme zones of the country, being impossible to bring them together with the experts in the short term.

Accordingly, this investigation considers the participation of Chilean volunteers throughout the research, and the use of simple electronic devices for establishing the VMC interviews (a laptop with Wi-Fi connection in UK and a stationary PC in Chile), with the aim of replicating as much as possible a real scenario, at least in technological and conversational dynamics. With regard to the latter, it is noteworthy that the major limitation to all outcomes, is the fact that it is impossible to replicate the emotional and psychological harm experienced by the victim or witnesses of a crime, essentially because of ethical reasons. Therefore, this investigation only aspire to reach general conclusions, and by no means jeopardize the safety of the participants.

Finally, two scenarios have been selected for the conduction of interviews: the artist close to the camera just for the rapport stage and hereafter just a white wall (minimum context), or far from the camera with full perception of the background and upper limb of the interviewer during all the interview stages (full context). In both cases the participant remains in the same position. Consequently, the primary expectation of this double experience is to contrast two different feasible scenarios, where the space perception is radically opposed, with the aim of exposing the importance of space perception and social construction in keeping a conversation.

Interview stage – Composite production

A. Participants

24 Chilean volunteers without gender distinction, between the ages of 22 and 60, with a mean of 32, who declared to be unfamiliar with a particular British TV series. This group was composed of postgraduate students and academics from the Department of Legal Medicine of the Universidad de Chile.

B. Procedure and Method:

Each participant individually attended to the offices of the Department of Legal Medicine of the University of Chile, for two different meetings on consecutive days.
1\textsuperscript{st} Meeting:
Participants were shown, for about 1 minute, a photograph of a character from the previously chosen British TV series, within a pool of 24 images. In order to guarantee that for every target two composites should be constructed (one for each scenario), two photos of each character were included in the pool, and each image was assigned by a code to be revealed to the artist in the following stage, who could determine the corresponding conditions of the interview.

2\textsuperscript{nd} Meeting:
Participants were asked to sit in front of a computer screen, whereby the video-conference software was running, and requested to recall the target’s face. In accordance to the code revealed to the artist at the start of the encounter, the interview was conducted under one of the two possible scenarios (minimum context or full context).

Evaluation stage – Naming task.

A. Participants
6 volunteers from Dundee, without gender distinction, who declared to be assiduous followers of the selected British TV series. This group was composed by postgraduate students, academics and staff from the University of Dundee, between the ages of 24 and 65, with a mean of 37.

B. Procedure and Method:
Before starting the naming task, participants were shown one photo of each of the 12 selected characters, and they were asked to identify eight or more of them, in order to check the level of their knowledge about the TV series. After that, participants received 24 images of 16 x 24 cm, taken from the 24 composites made during the interviews, and were requested to name the character portrayed in each composite. It was made known to them that they could respond in their own time, and skip any sketch that they were not able to identify.

Evaluation stage – Rating task.

A. Participants
24 volunteers from Chile and 14 volunteers from Dundee, without gender distinction, who declared to be unfamiliar with the British TV series were selected for the interview stage. This group was composed by postgraduate students and academics from the Department of Legal Medicine of the Universidad de Chile, and by postgraduate students and academics from the University of Dundee, ranged between the ages of 20 and 61, with a mean of 35.

B. Procedure and Method:
Participants received 24 sheets size A4, each one with the photo of one of the 12 selected characters from the British TV series selected for the interview stage, together with its matching sketch. It was explained to them that this sketches were produced by a forensic artist, based in the oral description
from a witness, and therefore, the images do not necessarily represent a perfect match. Then, they were asked to rate the sketches on a 7-point scale, regarding the level of resemblance of the resultant composite image with respect to the target (1: not similar, 7: very similar).

Results:

A. General Results:
The results show that composites were considered to be reasonable matches to the target photos. The overall likeness was rated 4.06 out of 7 for the rating task, whilst experts got right 27.08% of the composites for the naming task.

B. Naming Task Results:
Considering the context, naming results were slightly better for full context ($M = 31.9\%$) than for minimum context ($M = 27.7\%$). The paired t test with 5 grades of freedom resulted in a $t(5) = 2.2$, $p = 0.0756$. Because $p>0.001$, it is possible to assure that there is not significant difference between the means, considering minimum or full context (Fig. 1).

C. Rating Task Results:
Within the rating task, no major differences were observed regarding the values given by the two populations independently, with a difference of just 0.83 points (Chile $M = 4.31$ out of 7, Dundee $M = 3.48$ out of 7). Minimal differences with respect to the different conditions of sketch construction were expressed within the groups. In the case of Chilean participants, sketches constructed with a minimal context conditions reached slightly better results than those constructed with a full context. On the contrary, participants who were interviewed in Dundee, gave better approbation to sketches constructed with full spatial perception (Fig. 2).
Fig. 1. Effect of environmental context on sketch production.

Fig. 2. Likeness ratings of sketches by context and sample.
Discussion.

The main concern of this research was to deepen the study of applying video-mediated communication (VMC) to the production of facial composite sketches, and particularly to explore the importance of creating the illusion of co-presence during the interview, in order to maximize the rapport. For that matter, the emphasis was placed in a plausible influence of varying the witness' visual field of the artist/interviewer's space of work, which would be measured through the resemblance of the composites with respect to the targets. In that context, two radically opposed scenarios were explored, characterised by a drastic change in the space perception of the artist's space of work after the initial rapport stage. Whilst in the “full context” scenario the participant had full perception of the background and upper limb of the artist during all the interview stages, in the “no-context” scenario the participant just perceived a white wall. In the subsequence phase, two parallel rating methods were used to assess the effectiveness of composites, taking into account if the participants were familiar or unfamiliar to the chosen TV series. Accordingly, naming task surveys were conducted to test the effectiveness of composites in the first case, while rating task surveys were conducted in the second.

In the light of the results, statistics showed that there is non-significant interaction between the two variables, which means that the environmental context should not have a significant effect on the sketch production, and also that under none of the tested conditions, the rates of produced composites might be considered as especially low. Consequently, it is important to analyse some of the possible causes behind this unexpected outcomes, and explore the different scenarios that could explain them. On one hand, according to the first outcome, it is possible that the perception of the environmental context effectively did not influenced the development of rapport, but since it was reached, it must have been constructed on the basis of a different source, which is necessary to investigate in a further investigation. On the other hand, it is also conceivable that the perception of the space effectively influenced the development of rapport, but the instrument was not sensible to those variations, which means that new instruments must be tested and applied.

From the above, it follows that the critique of the methodological instruments is a necessary exercise for expanding the scope of analysis, especially when a new study object is introduced. In this particular case, the reference to a proxemics framework through the transposition of the concept of “visual field” to the reality of an artist's “space of work” is still exploratory, and for that reason, it is impossible to be categorical about its pertinence without counting with a well-tested data collection instrument. As a matter of fact, changes in the effectiveness of the sketches and their level of resemblance with respect to the target, should also be susceptible of being perceived through the analysis of variables of different nature, which demands different data collect tools.

In sum, two alternatives for a future methodological improvement are presented: to only re-adjust the level of sensibility of the quantitative instruments, or alternatively, to re-assess the pertinence of those methodological instruments for recording deviations in the composites resemblance with regard to the targets.
VII. Conclusion.

The analysis and discussion of the obtained results suggest that there is no direct correlation between the witness’ visual field of the artist/interviewer’s space of work, and the level of resemblance of the resultant composite image with respect to the target. As a consequence, the illusion of co-presence appears not to be imperative for the creation of rapport. However, alternative data collection methods (especially in a qualitative level) may be useful for further investigation into this area, mainly for studying additional dimensions of the composite construction, which are susceptible of being affected by changes in the space perception. For instance, duration and dynamics of the interview have shown to be susceptible of being assessed through discourse analysis, and in some specific cases, from an ethno-linguistic perspective. Likewise, in order to improve the knowledge and control of the involved variables, interview conditions may be reassessed and adjusted, but always within the inherent methodological limitations associated with ethical boundaries.

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VII. Bibliography.


