

SEEDS

MEANS FOR A SUSTAINABLE ART PRACTICE

Colloquium - Faculty of Fine-Arts of the University of Lisbon, 2 > 3 september 2023

WITHIN THE (DEAF)SPACE AESTHETIC EXPERIENCE IN CAIRO: POWER TO HEAL

Filipa Machado Rodrigues

Faculty of Fine Arts, University of Lisbon, Centro de Investigação e de Estudos em Belas-Artes (CIEBA), Portugal. Universidade Católica Portuguesa, Center for Interdisciplinary Research in Health, CIIS, Portugal. Higher School of Education and Social Sciences, CI&DEI, Polytechnic Institute of Leiria, Portugal.

Abstract

Deaf individuals have a marked space awareness and an embodied understanding regarding the surrounding world. In this article we seek to understand the *Experience of Space* starting from the elements of DeafSpace but going beyond the original DeafSpace Project (DSP), the architectural and design study from the practical guide of Bauman (2005) and into the lived experience of the wider urban space. The urban space of the city of Cairo in Egypt became the context that allowed the understanding of the Deaf individual corporeal knowledge, its habits as an agent towards the way the body and mind structures the Space experience and is influenced by it. The urban space is not only the sum of its three-dimensional characteristics in the organization of structural elements but is also an opportunity for a valued *I-in-the-word* sensed aesthetically. Through the phenomenological approach, visual anthropology methodologies and visual elicitation processes (PEI), this paper offers a greater understanding of the how the *Experience of Space* can become impactful in dimensions related to the well-being and emotional self-regulation of the Deaf participants in Old Cairo surroundings.

Keywords: Aesthetic Experience; Deaf; DeafSpace; Sensory Reach; Wellbeing; Cairo

1. Introduction

This project was developed during fieldwork within the scope of a post-doctorate program named Integral Human Development within CADOS at the Universidade Católica Portuguesa. It was a Community based art research within multimodal methodological approach and its main goals were:

- To investigate possible patterns of perception and experience of Space in the Deaf participants, and to understand the impacts that the experience of Space can have on the daily lives of the participants, and in what dimensions.

Applied Visual Anthropology principles like Photovoice, Visual Elicitation methods (PEI) and Ethnographic Drawing were the conceptual framework and tools for research.

When thinking about *Space lived experience*, driven by hypothetic lines that intertwine Deaf Studies and Phenomenology of Perception, we recognize the emergent concept of body's own spatiality i.e., the ways of being, feeling, and understanding the world from a first-Deaf-person perspective. As M-Pointy states that Space is not a container, nor an intrinsic property of an object (M-Ponty cit in Duvisac, 2014,46). So, the urban space is not only the sum of its three-dimensional characteristics in the organization of structural elements, but is also the space for interaction, socialization, having as well as aesthetic parameters, which can be transformed and at the same time act as transformers of the subjects (Soto, 2012,10).

2. Sensory reach as a survival tool

Deaf individuals have a marked environmental awareness, with broad peripheral vision and greater sensitivity to movements around them. Discomfort or insecurity is felt by dorsal experience, which sensorially translates a limited or impossible reach to what is happening in near space. The street-space experience in Old Cairo can become overwhelming given the simultaneously passive and active nature of street dynamics. Sidewalks are often an extension of the commercial space of the store, cart or stand selling vegetables or street food, and

even a social space for people to socialize with benches and tables. Pedestrians often use the street as a preferential route and coexistence with traffic (cars, motorcycles, *tuc-tuc*'s) which is rather unpredictable.

For hearing individuals, the physical experience of the street-space is mostly subordinated to the sense of hearing, due to the habit of vehicle drivers who signal the march using the horn. Sensory Reach, one of the principles in DeafSpace design, is defined by the “[i]nterrelated systems of perception (i.e., hearing, seeing, smelling, feeling) that are used to understand and orient in space are collectively referred to as an individual’s Sensory Reach” (Bauman,2010,42). In addition to the possibility of an expanded visual sensory reach or a “clear line of sight” in the increase of opportunities for achievement, participation and fluid communication, it is above all in security issues among Deaf individuals that sensory reach becomes here an element of survival.

3. The Prevalence of Deafness in Egypt

Although hearing loss is preventable throughout the life course through effective public health interventions, approximately half of the causes of Deafness can be early prevented through measures such as immunization, improved maternal and neonatal care, and early medical treatment of otitis (*World report on hearing: executive summary* [WHO]), other causes belong to a different phenomenon in Cairo: the congenital Deafness by consanguineous marriage. The also called “intermarriage” occurs, in this case, within a specific social or cultural group, as required by custom or law (endogamy) or marriage between people belonging to the same small cultural group, especially if they are close blood relatives. In fact, parental consanguinity in the general population in Egypt throughout the last 40 years showed an average consanguinity rate above 30% (Temtamy & Aglan, 2012,12).

Experts say nearly five million of Egypt's one hundred million residents are Deaf, due in part to frequent intermarriage of close relatives. Egyptian Deaf population often struggles with education opportunities, health services and medical treatment and comes to Cairo from poor and rural areas. In many cases, it is a matter of insufficient investment by State in maternal and child health programs.

4. Deaf Unit School and participants

Currently the school receives Deaf children up to the age of 16, Egyptians and non-Egyptians, the age at which they take entrance exams to the governmental schools and continue their academic path. In the pre-pandemic period, the Deaf Unit received internally displaced Deaf students from rural areas of Egypt, a reality that changed with the successive lock downs and restrictions. Although in a smaller number, the Deaf Unit is currently also receiving Deaf refugees from countries in a situation of armed conflict.

The teaching modality is bilingual, the teachers communicate through Egyptian Sign Language (ESL) in the teaching of the various subjects and the students have daily ESL classes in their school hours. Deaf Unit also has speech therapists on its team of professionals. Among the educational community (teachers, students and family), eleven Deaf elements from five different households were selected: (figure1):

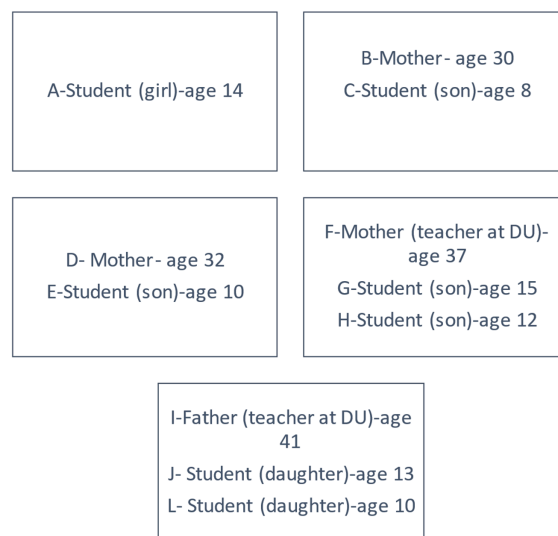


Figure 1: Family units (participants)

5. Approach and methodology

Even if not representing reality, photographic images have an association and a sense of nearness involved that the viewer gets from the experience, more

than the likeness between the caption and reality. Photographs, thus, somehow, have a unique capacity to, phenomenologically speaking, put us in the proximity *of*. The feeling of closeness to the subjects depicted is typically not present when we view a comparable painting or drawing. Thus, Photovoice appears here as the ideal methodology to learn about the participants' perspectives on the experience of the space, later complemented with data collection techniques such as photo and graphic elicitation.

5.1 Photo-elicitation interviewing process (PEI)

As informative visual material for the researcher, these images could be the beginning of a process to understand the subjective phenomenon. This step is possible through one of the main visual methods: the elicitation interviews, that is, using the photographic image as the mediator for the evocation of the lived experience. The term “elicitation” was coined by the photographer Collier (1957) in his anthropological studies in the field of mental health with the aim of expanding the potential of the interview through the use of photographs and creating links between the interviewer and the interviewee, collecting data that is less predictable than the traditional question-answer structure. Through the dialogue promoted by photo elicitation, certain valuations of experience emerge that awaken important insights in the researcher that connect empirical data and provide clues for the confirmation of theoretical assumptions.

The elicitation interviews allow for encompassing aspects of the photographed reality, evoked by the sensation itself, which is not just limited to the exact moment of the photograph. Rose (2016) points out that such interviews can prompt talking about different things, in different ways: observations, feelings, relationships, memories are discussed in ways that might be missed in talk-only interviews. By using these approaches, the image (photo or drawing) becomes a common frame of reference for both parties—researcher and participant.

5.2 PEI *plus* researchers logbook's research combination

In the initial phase of the embedded process, a statement was formulated to the participants: “-Photograph your daily life”. In the next stage, the researcher selected one of the participant’s photographs and carried out, *in situ*, the graphic representation of the photographed spaces (ethnographic drawing in a logbook). The researcher's immersive experiences were portrayed in a graphically descriptive way and, as referred by Ingold (2011), various types of cultural immersion were added during the graphic representation.

For this sensorial and graphic capture of the experience of the space, the researcher located herself in the closest possible angle of vision of the author of the photographic image and, not only depicted from the perspective of the participants, but also built a sensorial mapping of that space, through the appropriation of the diverse stimuli of the “thing in itself” and storage of the multi memory layers (auditory, olfactory, proprioceptive and tactile) collected by senses. As mentioned by M-Ponty (1994, 331) “Visual data, once become “habitual”, would create stable “associations” between the old and new directions, which would finally suppress the former in favor of the latter, preponderant because provided by vision.




At a later time, participants were asked to do elicitation recorded interviews in video format. At this point in the research, the questions were more analytical and interpretative. During the elicitation interviews, the drawings were shared and expanded the narrative with the episodes and perceptions that occurred over the time the researcher spent drawing on the street.





After this process, and according to the phenomenological approach, the reduction process was carried out based on the analysis of gestures of Egyptian Sign Language used by the participants during the interviews. The researcher looked for insights in the responses in EGL of the participants (signs, frequency, emphasis, attitude, communicative intentionality, etc.) looking for confirmation or refutation clues of the theoretical principles linked to DeafSpace, in particular in the dimension of sensory reach, security and well-being.




Through the analysis of the elicitation interviews, the association of the places in the photographs with the sensations and feelings of the participants was evident. It was also clear, as opposed to these positive aspects, the description of more negative sensations and feelings in relation to everyday life, but the places act as a positive subterfuge.




6. Data collection and analysis



Here are presented the photos and categories associated by each participant (table 2) as well as the new categories added by the combination elicitation (photo and drawing):

Photos	Spaces
	<p>Participant A (female student)</p> <ul style="list-style-type: none"> ● School entrance ● Interior garden ● School church
	<p style="text-align: center;">Categories from photo elicitation</p>
	<ul style="list-style-type: none"> -School as Safe Place (inside) -People at the streets are a threat -Sense of wellbeing (at school) -Sense of beauty (garden colors)
<p style="text-align: center;">Researcher Drawing</p>	<p style="text-align: center;">Embedded categories (drawing elicitation)</p>

	<ul style="list-style-type: none"> -Sense of insecurity in the streets -Deaf kids increased fear from strangers -Sense of over protection (parents) -Sense of beauty (iron gate and its forms)
Photos	Spaces
 	<p>Photos from B (female adult), using the Polaroid machine:</p> <ul style="list-style-type: none"> ● El Malek El-Salah bridge over the river Nile <p style="text-align: center;">Categories from photo elicitation</p> <ul style="list-style-type: none"> -Sense of calm -Sense of being at open air -Sense of wellbeing -Deep breathing -Sense of beauty (river landscape and its green gardens)
Researcher Drawing	Embedded categories (drawing elicitation)
	<ul style="list-style-type: none"> -Sense of freedom and peace -Sense of evasion from everyday worries and conflicts -Going to the place (bridge) every morning to calm down and relax -Negative emotions changes to more optimistic ones

	-Sense of vibration, same as at home when the train passes (ex. see cup of water)
Photos	Spaces
	<p>Participant C (young male student):</p> <ul style="list-style-type: none"> • Deaf Unit church (provisionally the sign language classroom). <p>He was more interested in taking pictures of his colleagues, and not from spaces.</p>
	Categories from photo elicitation
	<ul style="list-style-type: none"> -Sense of wellbeing at this room -Place to learn Sign Language -Sense of stillness
Researcher Drawing	Embedded categories (drawing elicitation)
	<ul style="list-style-type: none"> - This place is different from the other classroom (main classroom), because there are disabled boys with teachers - Can watch TV - Love to be at school
Photos	Spaces
	<p>The participant D took her photos with the cellphone on their way home to Giza:</p> <ul style="list-style-type: none"> • Cairo Mall building • Al Haram Street <p>She is the mother of a Deaf boy (E). They travel by bus.</p>

	<p style="text-align: center;">Categories from photo elicitation</p> <ul style="list-style-type: none"> -Space for leisure (see shops, see clothes, go to hairdresser) -Space to be with young suns (eat, have fun) - Sense of open space, large areas - Sense of fresh air (building terrace)
<p>Researcher Drawing</p>	<p>Embedded categories drawing elicitation)</p>
	<ul style="list-style-type: none"> -She is used to walk in the streets with 2 kids and in traffic (stop the cars) to cross -Husband was a good artist -Talked about many subjects (medical, routine, the interpreter Mina, some gestures between Portugal and Egypt, etc.) -Asked to keep the drawing for her self
<p>Photos</p>	<p>Spaces</p>
	<p>The participant E took 2 photos:</p> <ul style="list-style-type: none"> ● Deaf Unit garden ● <i>Muslim Safary</i> building at Terza Street, on his way home with family. <p style="text-align: center;">Categories from photo elicitation</p>

	<ul style="list-style-type: none"> - Likes high buildings - Also lives at the 9th floor - Feels the air flow at the window - loves to watch the stars with the telescope
<p>Researcher Drawing</p>	<p>Embedded categories (drawing elicitation)</p>
	<ul style="list-style-type: none"> - Can see the planes and knows from witch diretion they arrive in advance - Loves the calm at night - Remembers the accident that occurred here, when the old building colapsed. - Near the new building theres a lot of damage and old houses.
<p>Photos</p>	<p>Spaces</p>



The participant F (female adult) is a Deaf Unit teacher, mother of 2 Deaf Kids, and took 4 photos with her cellphone:

- School Church
- Kindergarten entrance
- Kindergarten window
- Deaf Unit Entrance

Categories from photo elicitation



- Sense of family
- Old memories (as a child)
- Vision of the choir
- Music (organ)
- Light
- Shape of the church

Researcher Drawing

Embedded categories (drawing elicitation)



- Likes the colours of the drawing
- Described internal architecture of the church
- Placement of the altar, priest /choir/organist, kids ahead and people
- Sense of beauty (yellow and white light from windows)
- Likes the interior and exterior



-the kindergarten window is interesting (shape/glass and cross)
 -Deaf Unit is like home (Deaf husband,2 Deaf sons), she is there since she was 4 years old.

Photos

Spaces







The participant G is F's Son and took 3 pictures with the polaroid machine:

- El Malek El-Salah bridge over the Nile
- Deaf Unit church



Photos



Spaces

	<p>The participant G (teenager male student) is F's Son and took 3 pictures with the polaroid machine:</p> <ul style="list-style-type: none"> ● El Malek El-Salah bridge over the Nile ● Deaf Unit School ● Street traffic
	<p>Categories from photo elicitation</p> <ul style="list-style-type: none"> -Daily routine (with family) -Sense of beauty at this place -He manages the traffic now (age 15), but before he was afraid -Father and mother are afraid for the youngest kid (people steal children at the street)
	<ul style="list-style-type: none"> -If side walks are damaged he uses either perferical vision and turns back for a clearer perception before crossing the street -The hearing kids can play outside, them no (near Giza)
<p>Researcher Drawing</p>	<p>Embedded categories drawing elicitation)</p>
	<ul style="list-style-type: none"> -Sense of smell, fresh air -Sense of relax -Sense of beauty (green, trees, boats)
<p>Photos</p>	<p>Spaces</p>



The participant I and J (Deaf teenager sisters) took photos together with the polaroid at

- Al Manial bridge over the Nile
- Traffic on their way home
- Nile gardens

Photos	Spaces
	<p>Participant L (male adult) is the father of I and J and a teacher at DU. He took the photos with his cellphone.</p> <ul style="list-style-type: none"> ● Al Manial bridge over the Nile ● Traffic on their way home ● Nile gardens
	<p style="text-align: center;">Categories from photo elicitation</p>



	<ul style="list-style-type: none"> -Sense of wide space -Sense of smell and fresh air -Sense of relaxation -Favourite place (Nile) to be with family (walks at night) -Sense of beauty in gardens and trees <p>-Some buildings are old and ugly</p>
Researcher Drawing	Embedded categories (drawing elicitation)
	<ul style="list-style-type: none"> -Sense of bridge vibration (cars, motorcycles, horse carts) -Care to be taken when crossing traffic

Table 2: participant photos, ethnographic drawings and data collected from elicitation interviews (by phenomenological reduction)

From the combined information collected in the interviews, informal conversations in the Deaf Unit and data collected in the researcher's logbook, some stress indicators were listed and the self-perceptions of the eleven participants about the presence of these indicators in their daily lives.

After these answers, another questionnaire was then designed, which sought to contain at least all the stress indicators mentioned and observed during the interviews and a new question was posed in Egyptian Sign Language “— In the favorite spaces photographed by you, are there changes in the intensity of the indicators? What changes and in which way?” (figure 3):



Figure 3: Video photo caption of the ESL questionnaire (from G. Marzouk, ESL teacher at DU)

Of the 22 stress indicators (psychological and physical) at the questionnaire, participants placed themselves in 18 of them (this selection was made by 1 to six participants in each indicator). After analysis, stress symptoms decreased by 18 indicators for 18 participants.

Final considerations

Regarding the results obtained through elicitation interviews, and its analysis by phenomenological reduction, it is possible to understand:

- a) The importance given by the participants to the experience of certain spaces;
- b) That this importance (preference) translates into a frequency and active search for these spaces, in many cases on a daily basis;
- c) in 10 of the eleven participants, preferences were for open urban spaces and transition spaces;
- c) That the way participants describe spaces includes multisensory perceptions, such as smell, sight and touch, in that order;
- d) Among these elicited sensory perceptions, the most mentioned are those linked to smell with effects on deep breathing; to the panoramic view and “clear lines of sight” with effects on feeling of openness and relaxation; and to the perception and preference for elements of nature and their colors with very frequent attribution of aesthetic value;

e) That the way in which the experiences of space are elicited relate to positive memories and that they translate into preferences that are transmitted between generations;

f) And that in the complementary process of elicitation interviews (photo plus graphic form logbook), several aspects of the experience of space became more tangible for the research, by combining two subjective space experiences, expanding awareness of perceptions due to the fact that the dialogue is mediated by a different instruments of data collection. The evocation of less positive experiences came from this phase of the process (drawing-elicitation) and with them a deep knowledge of the individual idiosyncrasies;

g) That the experiences of the space are subjective since all the participants developed this process individually, but that is a intersubjective character in this community of Deaf people that stands out, not only due to the preferences of the spaces, but mainly due to elicitation of their experiences (the gestural lexicon in the individual interviews was exactly the same in the answers given, i.e., signs used such as “smell”; “fresh air”; “calm down”, “look at the river”; “visual range”; “beautiful”; “colors”; among many others, can be found in the recordings video from multiple participants.

In conclusion, the focus of the investigation progressively turned to the existence of preferential spaces that promote feelings of well-being among the Deaf. It is clear that the perceptions of different spaces are linked to different emotions in a completely non-random way. Elements such as visual sensory reach, light and color perception and sensitivity to vibrations in buildings and bridges due to acoustic phenomena are involved in this relationship between space and individual and determine the anchorage and stability points that promote well-being and safety of Cairo Deaf individuals. This investigation wanted to show how similar principles to the architecture and design of DeafSpace are found in the urban space, expanding the potential of the space experience in the processes of emotional self-regulation and well-being.

References

- Archbishop of Canterbury.2021. “Reflections on visiting Cairo and building a more Christ-like world.” Accessed January 1, 2023. <https://medium.com/@archbishopofcanterbury/reflections-on-visiting-cairo-and-building-a-more-christ-like-world-826f7b53de39>.
- Bauman, H. 2010. “DeafSpace Design Guidelines”. Vol. 1. <https://infoguides.rit.edu/deafspace/principles>
- Casper, J. 2016. “Mothering Society to Hear the Deaf”. Accessed January 1, 2023. <https://jaysoncasper.com/tag/jesus-light-of-the-world-church/>.
- Clark, A. 2013. “Haunted by images? Ethical moments and anxieties in visual research”. *Methodological Innovations Online* 8(2) 68-81. <https://journals.sagepub.com/doi/epdf/10.4256/mio.2013.014>
- Duvisac, D. 2014. “The concept of spatiality in Heidegger, Merleau-Ponty, and Patočka”. *Senior Honors Projects, 2010 - current*. 407. James Madison University. <https://commons.lib.jmu.edu/honors201019/407>
- Eco, U. 1982. “Critique of the image”. In V. Burgin (Ed.), *Thinking photography* (pp. 32-38). London: MacMillan.
- Giddings, B., Charlton, J., and Horne, M., 2011. “Public squares in European city centres”. *Urban Design International* 16 (3), 202–212.
- Goldstein, B. 2007. “All photos lie: Images as data”, in G. Stanczak (Ed.) *Visual Research Methods: Image, Society and Representation*. Thousand Oaks, CA: Sage, 61-81.
- Ingold, T. ed. 2011. *Redrawing Anthropology: Materials, Movements, Lines*. Routledge.
- Mokhtar, M.M., and Abdel-Fattah, M.M. 2001. “Consanguinity and advanced maternal age as risk factors for reproductive losses in Alexandria, Egypt”. *European Journal of Epidemiology* 17:559–565.
- Moya, P. 2014. “Habit and embodiment in Merleau-Ponty”. *Frontiers in Human Neuroscience* 8. <https://doi.org/10.3389/fnhum.2014.00542>
- Raymond, A. 2001. “Cairo: City of History”. The American University in Cairo Press.
- Richard, M. and Lahman, K.E. 2015. “Photo-elicitation: reflexivity on method, analysis, and graphic portraits”. *International Journal of Research & Method in Education* 38:1, 3-22.

- Rose, G. 2022. *Visual Methodologies: An Introduction to Researching with Visual Materials* - London: SAGE Publications
- Saad, S. A. S. 2017. "The Spatial Identity of Historic Cairo, Part one: Typology, Geometry, and Geographic Distribution". *The Academic Research Community Publication* 1(1):7. <https://press.ierek.com/index.php/ARChive/article/view/131>
- Sage Method Space. 2021. "Using Elicitation in Multimodal Studies". <https://www.methodspace.com/blog/using-elicitation-in-multimodal-studies>.
- Smith, D.W., Smith, B., eds.1995. *The Cambridge Companion to Husserl (Cambridge Companions to Philosophy)*. Cambridge and New York: Cambridge University Press.
- Soto, M.A., 2012. "Pedestrian Areas in Los Angeles: Influence of design features and market area on pedestrian activity. A case study of three commercial strips". Master diss. University of California.
- Temtamy, S. and Aglan, M. 2012. "Consanguinity and genetic disorders in Egypt". *Middle East Journal of Medical Genetics* 1:12-1. <https://journals.lww.com/mejmedgen/layouts/15/oaks.journals/downloadpdf.aspx?an=01607934-201201000-00003>
- The Episcopal or Anglican Diocese of Egypt with North Africa and the Horn of Africa. n.d. "Deaf Unit Celebrates Christmas", accessed December 20, 2023. <https://dioceseofegypt.org/deaf-unit-celebrates-christmas/>.
- Veronica M. R. and Maria K.E. L. 2015. "Photo-elicitation: reflexivity on method, analysis, and graphic portraits". *International Journal of Research & Method in Education*, 38:1, 3-22. <https://www.tandfonline.com/doi/abs/10.1080/1743727X.2013.843073>
- Wang, C. and Burris, M. A. 1997. "Photovoice: concept, methodology, and use for participatory needs assessment." *Health education & behavior: the official publication of the Society for Public Health Education* vol. 24,3 369-87. <https://pubmed.ncbi.nlm.nih.gov/9158980/>
- World Health Organization. 2021. "World report on hearing: executive summary". Accessed February 15, 2023. <https://cdn.who.int/media/docs/default-source/documents/health-topics/deafness-and-hearing-loss/world-report-on-hearing/wrh-executive-summary.pdf>.
- Zahavi, D. *Self-Awareness and Alterity: A Phenomenological Investigation*. Northwestern University Press, 2020. <https://doi.org/10.2307/j.ctv128fnz4>.
- Collier, J. J., & Collier, M. (1986); Epstein, I., Stevens, B., McKeever, P., & Baruchel, S. (2006); Harper, D. (2002); Roland Barthes (1981); Sarah Pink

(2007); Tim Ingold (2013) ; Karina Kuschnir (2016); Andrew Causey
(2017)