Auto-photography and Collaborative Drawing: How Can Autistic Researchers Foster Inclusion Through Method Selection and Development to Investigate the Design of the Built Environment?

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Abstract

In this article, I examine how the process of method selection and development fosters the inclusion of autistic researchers, utilizing my axiological positions as autistic and researcher to critique traditional methods in qualitative research. Autism is defined as a communication disorder, but there is little discourse on the appropriateness of using traditional research methods, such as interviewing, which relies on verbal communication and the appropriate reading of body language. Therefore, there is an acknowledged gap in communication referred to as the 'double-empathy problem', where neurotypicals fail to adequately comprehend autistic communication. I pose two methods, 'Auto-Photography' and 'Collaborative Drawing', as potential methods for future research. I argue that these research methods, when employed through an autistic lens, offer the potential for meaningful co-creation of knowledge within autistic communities and in the design of the built environment. These methods complement traditional methods, supporting autistic research participants, and autistic researchers, who are verbal, minimally verbal, and non-verbal.

Keywords: *Autism, research methods, auto-photography, collaborative drawing, built environment*

Introduction

If public space is a social product (Lefebvre, 1991), then surely it is malleable to the needs of society and should reflect the natural neurodiversity that exists within humanity (Gardener, 2022). In this paper, I explore my own axiological position as an autistic researcher, investigating the design of the built environment and the impact it has on autistic population. Then, how this position will impact the selection and employment of diverse research methods for the study of locomotion within the built environment. As an autistic researcher, I

am, as Collins (1986) states, an ‘outsider within’, simultaneously autistic and a doctoral candidate. As a doctoral candidate conducting research, I am an outsider to the research participants. As autistic, I am part of the diverse community. Consequently, I am in a position of power whilst simultaneously vulnerable. This balance allows me a unique position between strengthening the research and providing insights to cultural experience. To ensure rigour, there must be reflexivity and transparency at each phase of the research.

Autism is defined as a disability that affects communication and interaction with the world (National Autistic Society, 2023). With an estimation of 25% to 30% of autistic children having verbal limitations or being nonverbal (Brignell et al., 2018), methods that do not solely rely on verbalizing are vital to inclusive research. Method selection must engage with non- or minimally verbal participants, to collect representative data from the wider autistic community. Historically, methods have not actively engaged with autistic people, rather their support networks, families, and educators. Therefore, there is a likelihood that data gathered is an allistic (non-autistic) interpretation of behaviour and not a first-person account. In this context the autistic person is not treated as an expert of their own experience (Gillespie-Lynch et al., 2017). Autistic traits are often ‘camouflaged’, avoiding detection in a neurotypical society (Cage & Troxell-Whitman, 2019), raising questions of epistemological validity within historical autism research methods, as the literature lacks debate on autistic-appropriate method selection. Neurodiversity challenges the status-quo of traditional qualitative research methods, such as interviewing and observation. Through the proposal of auto-photography (AP) and collaborative drawing (CD) as methods to complementary, the sample of autistic people contributing to research is diversified.

If autism is a dis/ability rooted in communication difference, then the epistemology, methodology, and method selection must recognize this. The methods I pose ensure rigour, as both the researcher and participant revisit the findings and co-create meaning; meaning is not solely inferred by the ‘outsider’ (Phillips & Earle, 2010) as the case is with observation and interview analysis.

Researcher positionality

Due to my axiological position as ‘autistic researcher’, I engage with the ‘double-empathy problem’, whereby neurotypicals fail to ‘correctly read’ neurodiverse body language and nonverbal cues (Zamzow, 2021). However, I utilize my status as a researcher to balance my autistic identity and use my ‘insider’ status to identify nuanced benefits regarding method selection. As an autistic researcher, both AP and CD may be beneficial in two ways. Firstly, in the application of reflexivity, through the capturing of experiences photographically and drawing with advisory teams to explore the research in an embodied manner. In this context, the research has the same benefits as the research participant. Secondly, through the

implementation of these methods. By working with methods that may closely align with the communication style of autistic research participants, richer data may be gathered. This is similar to an allistic researcher utilizing the interview. This is not to say that the autistic researcher should only use one method, rather, AP and CD may enhance the ease and richness of data. This thinking stems from the feminist critique of male dominated knowledge production, rather I critique the dominant neurotypical knowledge production. From an intersectional perspective, this could be critiqued as there is no singular autistic experience and one autistic researcher that can account for a multiplicity of experiences which intersect with race, gender, class etc. (Phillips & Earle, 2010). Here I suggest methods that account for autistic communication styles and strengths and encourage the co-creation of knowledge thus enhancing rigour through the knowledge gathering process to capture a more authentic embodied experience of autism. Thus, enhancing the experience of researcher and research participant.

This paper explores why AP and CD may be appropriate methods for researching autistic locomotion in public spaces. Further, how the reflexivity, temporality, and physicality that they offer may enhance the quality of future research as they mirror the reflexivity, temporality, and physicality of moving through the built environment. It is therefore pertinent to explore the ethical concerns that may arise whilst communicating with an autistic population. I speculate that two methods, AP and CD, may be implemented to gather ethically aligned data. Both methods are enhanced through verbal and written communications rather than being solely reliant on them. This may align them with autistic strength of 'visual thinking', a trait that is common in the autistic population (Rudy, 2021). This is not to oversimplify autistic communication and overgeneralize all autistic people as visual thinkers and visual communicators. Rather, to open a dialogue on how these methods might be implemented to engage more deeply with a variety of communication styles.

The authentic voice and method selection

A key historical issue in autism research is the disregard for the authentic autistic voice. This occurs when researchers engage with the autistic person's advocates, teachers and family as opposed to the autistic person, meaning that the vital first-person experience is lost. In these instances, researchers gather a neurotypical interpretation of the autistic experience. Traditional research methods such as interviewing exclude those who do not verbalize as a primary communication method. Furthermore, the 'ability to verbalize' and provide consent may be confused with 'mental capacity', thus excluding those who do not communicate in a neurotypical manner (AASPIRE, 2015). Excluding this group from research infantilizes, silences, and negates autonomy from the marginalized individual, re-enforcing their status as 'other' (Boys, 2018). It does not account for their complex identity and autonomous

decision to participate in research and the use of the built environment. Devising methods that empower a community to communicate and advocate, such as AP and CD, is vital. Both AP and CD are longitudinal methods, whereby the researcher and research-participant co-create knowledge. As the methods are revisited, so are conversations regarding consent and engagement. Informed consent in research should not end with the signing of a consent form but be reasserted throughout the data gathering. It is vital to carry this out with the autistic community, as there is a historical medicalized narrative, which has been used to dehumanize, objectify, and stigmatize, leading to a community distrust of research (Botha & Cage, 2022). These issues are compounded through use of applied behaviour analysis, as practice that 'teaches' autistic children compliance through coercion and manipulation (therapistndc.com, n.d). Therefore, there is a need for autism researchers to be aware of the potential vulnerability of some autistic adults to coercion. Ways of mitigating these issues include allowing research participants access to information regarding the research, time to process their decision on participation, and develop an understanding of how the research might be positioned. This also incorporates repeated consent to engage with the research. AP and CD facilitate this through the revisitation of themes and visualizations. This ethos aligns with RIBA's 'Ethics in Architecture Practice' (RIBA, 2017). Similarly, these practices align with Autistica's Researcher Toolkit that state that 'processing time', or time to think and structure, are important (Ashworth et al. n.d.).

Auto-Photography – Autonomy and Voice

Auto-photography (AP) refers to the act of a research participant photographing their own experience and sharing the photographs with a researcher. Their images may be informed by a brief but are ultimately self-directed. Heng (2020) claims that visually focused participation utilizes the camera as fulcrum to perform identity, whilst Gardner (2022) expresses that the built environment is treated as a backdrop to autonomy. The photographs taken provide valuable insight into the lived experience of the research participants. This is in opposition to a means by which autonomy is constructed. In this context, neurodiversity is an integrated part of the built environment rather than an object within it. This aligns with Boys' (2018) 'DisOrdinary Architecture' project that challenges underlying assumptions of accessibility as merely problems to solve. Rather, it is about the expertise of disabled communities being utilized to reframe architectural design and the design of the built environment. By utilizing AP, a vital archive of autistic created images could be developed to identify barriers of access, therefore integrating access into the design of the built environment.

Photographs are made rather than taken, as humans are active within the image making process (Johns, et al., 2012). Therefore, photographs are not just a visual inventory

and a substitute for memory, but due to their composition and intent, they are artifacts that evoke response. Decision making is implicit in the creation and inherent in elucidating the experience of the built environment, especially when emotional content may be 'too nuanced for language' (Horwat, 2018). Therefore, these are not just photographs of the journeys taken through space, but an archive of autistic lived experience within the designed built environment. Decisions on what to photograph are never arbitrary, they are part of the strategy inherent within AP (Mitchell, 2003). Participants are revealing their story through a visual method which emphasizes elements of their lived experience. This is especially relevant whilst exploring the impact of multiple sensory stimuli from the built environment on the individual.

An elaborate description is not needed when a photograph is present, as text, gesture, and expression can elucidate the experience. Utilizing AP in the context of photo-elicitation interviews, participants can elaborate on their experiences which relate to the images. This ensures that a bias reading of the images is not made or interpreted in a way that the research participant does not agree with, therefore ensuring that the authentic voice is fully present within the context of the findings. Heng (2016) states that images must speak to the viewer in a meaningful way, informing, surprising and signifying meaning. Using photo essays, a technique where images drive narrative as opposed to words, the narrative of placemaking can be co-curated between the researcher and research participant. Narratives of experience can be clearly depicted in this manner and whilst a textual narrative may be used to elucidate on images, the images themselves provide interplay between placemaking, action and experience; they are the data.

As AP has the potential to be conducted autonomously, this may encourage the research participant to disclose their personal experience. Therefore, it is essential to provide access to intimate and private spaces that may otherwise be inaccessible (Charmaz, 2006). This autonomy allows for the fluctuating nature of dis/ability, where the ability and energy of the individual may vary (Boys, 2018). Through this, potentially vulnerable populations may elucidate on experiences in a way that is safe and accommodating for them. It may also aid in the redressing of power between researcher and research participant by encouraging the participants to choose what is photographed, thus actively driving the visual narrative (Charmaz & Mitchell, 1996). They can invite the researcher into their space without the pressure of them being present and encroaching on them. Horwat (2018) suggests that wordless narrative research fosters 'imaginative engagement that encourages an empathetic connection'. This approach will be beneficial in developing research that is ethically aligned to the autistic community's desire for authenticity (Gowen et al., 2019) and autonomy of voice.

Leavey (2020) indicates that photographs taken by research participants can aid in the exploration of narratives and conceptualizing experiences. The inherent reflexivity invites further participatory conversation through the dissemination of findings. Images shared (with consent) may unlock dialogues with wider audiences and encourage reflect on their own experiences. These techniques emphasize the individual's agency and autonomy in the context of research and the design process of place.

Collaborative Drawing – Processing Intangible Space

Collaborative drawing (CD) is a technique used in ethnography that allows the research-participant and researcher to communicate without the limitations of solely using verbal or written language. It is a method which is often used in early years education (Knight et al., 2015). Using this technique with autistic adults is not to imply any form of infantilization, but to engage with a wider scope of creation methods used in architectural design. Visual methods, such as drawing, may enable a deeper understanding of complex knowledge that is difficult to express solely through language (Martikainen & Hakokõngäs, 2022).

The exploration of sensory environments is an intangible experience, difficult to express in words. The act of drawing allows researchers and participants to visualize theories and ideas, making complex and nuanced conversation more tangible. Pink (2015) acknowledges that we place definitions on words, and this can be difficult to do with intangible sensory experiences. This may be especially relevant to autistic people who experience alexithymia, a condition described as a 'difficulty in identifying and describing feelings' (Vaiouli & Panayiotou, 2021). As drawing is a process of creation, it is tangible, temporal, and rooted in physical experience; this allows the time to process the experience, while simultaneously making the drawing. Drawings can also be revisited, added to, and revised in order to clarify and define meaning. Verbalization is not needed to express or describe emotion. CD is a participatory practice whereby multiple people contribute to a single drawing; in this framework, the researcher and research participant would explore a single theme which had been decided in advance. For example, patterns that occur on pavement surfaces. Therefore, each mark is a decision to share, and the thinking process is held within the drawing. The act of drawing allows both participant and researcher to be present and take time and space, whilst investigating multiple ideas to develop and refine concepts (Knight & McArdle, 2015). This embodied approach challenges the traditional mode of interviewing, whereby both participants are stationery and verbal, and the research participant delivers one narrative. The embodied activity of drawing, moving, making, and remaking marks in order to explore a central theme may facilitate an authentic autistic communication style, this may be supplemented with text or spoken word depending on the researcher and research participant.

The act of drawing is a temporal exercise, and the potential drawings are, as Guysas and Keys (2009) state, 'visual constructions of data, knowledge, and residues of thinking processes'. This temporality is mirrored in the trajectories created whilst moving through space (Massey, 2005). These can be personal, for example, pedestrians passed, businesses encountered, or chairs from a cafe to be weaved through on a busy pavement. Similarly, drawing is physically active and engages with all the senses, ensuring that individuals are actively participating in the environment and present (Pink, 2015). Through drawing, these trajectories may be added to maps or elaborated on through image making processes.

Leavy (2020) states that images hold an elevated place within memory and can be recalled in a way that a verbal description of an event cannot. He argues that visual arts can 'challenge, dislodge and dismantle' stereotypes and systems. For this reason, a visual method seems a natural place to begin working with a marginalized and often stereotyped group. Drawing in this context might be used to express emotion or understand sensory perception in a deeper way. The act of drawing prompts the drawer to look closely and, over time, see the world differently.

This method may be beneficial in triangulating data within a study, as images are complimented with words, gestures, and spoken language (Kearney & Hyle, 2004). A 2009 study by Andrade showed a 29% increase in key word retrieval by research participants who were encouraged to doodle whilst listening to a 'boring' recording. This indicated that the act of drawing either improved memory retrieval or concentration in the 'doodling' group. Whilst there is no established link between improving symptoms of alexithymia, this may be a relevant area of knowledge creation. Knight (2015) notes that whilst using this technique with 'young children' they were able to open verbal and visual dialogues regarding complex issues, such as social justice and inclusion. Reciprocity is a defining autistic feature; Ommeren et al.'s (2015) study used CD as a method for an autistic child and researcher to take turns, continually adding elements to build a narrative. Results suggest that autistic children tended to be more reciprocal once in control of the drawn narrative. This approach could allow the adult research participants to focus on their vision and interpretation in the research context, with the researcher being guided by them.

Reflections

In conclusion, this paper highlights the need for the development and implementation of methods that complement autistic modes of communication. My axiological position as autistic, coupled with my position as 'outsider within', allows a unique positionality to develop and implement AP and CD in collaboration with the autistic community. Through this, there is potential to negate or redress the double-empathy problem, whereby neurotypicals

misinterpret autistic meaning (Zamzow, 2021). This facilitates autistic people in communicating their experiences in a meaningful way. Both AP and CD allow the flexibility of language to elucidate without relying on verbalization, text, or immediate processing. AP and CD may also be used as elicitation, giving research participants time to ruminate on their experience of visual conveyance and then elaborating, thus considering alexithymia. These methods provide opportunity for a rich discussion with research participants that traditional verbal interview methods do not. Whilst I am not discounting traditional methods, I offer an opportunity to elaborate on them, supplementing traditional methods through the curation and delivery of visually informed methods.

Recognizing potential deficits in traditional methods (such as interviewing) shifts the impetus from the autistic community to the research community to develop more appropriate methods. This study questions whether the methods and delivery are adequate in gathering data, as opposed to putting the burden of communication solely onto the autistic community. However, adapting methods such as interviewing, through autistic specific protocols, goes some way to mitigate miscommunication (Winn, 2015) and may be applicable to both AP and CD. These methods are a way to explore autistic communication and autistic experiences as ‘sites of ‘abundance’ as opposed to ‘sites of liability’ (Rao, 2019). To verify the use of these methods, several pilot studies will be carried out.

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