DC(S)
DESIGN CULTURE(S) | CUMULUS ROMA 2021
JUNE 08.09.10.11, SAPIENZA UNIVERSITY OF ROME

Expansive Video Capture – Up close, personal & specific tutoring "performances"

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Abstract | Moving fully or partially online during the pandemic has exposed challenges in appreciating the nuances of sociomaterial design work in the design student / tutor encounter, while also offering opportunities for introducing "new" practices to otherwise resistant students and tutors. This paper explores a simple format for and practice of video capture that encourages students to provide detailed descriptions of up-close visual material, giving tutors a comparatively expanded view of the student work and the student or student-teams relationship to their work. By framing the video capture moment as a form of performance for both the tutor(s) and the student(s) involved in the video capture, the paper argues that the video-making process is a productive practice in and of itself, and a collaborative, dialogic one in concert with the tutor as audience, as well as its use as representational practice for tutor consumption.

KEYWORDS | ASYNCHRONOUS TUTORING, VIDEO CAPTURE, CO-PERFORMANCE

1. Introduction

The ongoing pandemic in the post-COVID-19 world has disrupted the way we organize taken-for-granted uses of space, physical and digital materials, and even interactions with each other, including ways of greeting, being together, and parting. What is deemed as acceptable and unacceptable behaviour is in flux, and how we view the individual in relation to different collectives, including governmental and institutional level initiatives and directives. This has great impact not only on how we organize education, but on the world the students we are responsible for educating engage in and will contribute to. The uncertainty of short-term restriction cycles and the unpredictability of course planning has caused a high level of distress and pushed many of us into new ways of organizing education. Along with the increased stress from abruptly moving teaching online in "Emergency Remote Teaching" (Green et al. 2020), the pandemic offers an opportunity to rethink what is possible, looking at past activities and experiences in a new light, and discovering new forms of engagement while imagining what is to come. This paper zooms into the spaces of the student/teacher tutoring encounter, where students present the progress of their work, receiving constructive feedback for further developing their work and their design practice. Moving fully or partially online during the pandemic has shifted how design educators engage in the progress of student work. In many cases, the spaces used by students and tutors to share and discuss have changed dramatically, changing the tutor's ability to rely on developed rituals for understanding, assessing, and contributing to student learning, and the material, spatial and bodily characteristics within these encounters. In describing the difference between Emergency Remote Teaching (ERT) and effective online learning, Hodges et al. (2020) and Jones (2020) warn that it is not possible to merely transfer what we have done while co-located to an online format. While ERT can produce innovations, they argue, effective online learning is the result of thorough systematic, iterative instructional design. Underlying this argument lies a position that the formats we use may be deceptively similar, but fundamentally different in how they support our intentions. In line with this sentiment, it is also important to remember that students not only learn the intended content of a course, but, in a Bateson sense of Stage II and III learning, students learn how they are taught (Engeström 2001). In this sense, it may not be enough to merely get by with given tools, but to find opportunities to explore and challenge the direction the tools we use push and pull us and our students. The changes in visibility of what students may be doing and may be needing, and how they are responding to their circumstances demands reconsidering the roles we play or can play in relation to student learning. Jones (2020) stresses the importance of developing simple and effective methods for checking in on students and their work progress when creating distance design courses.

Now a year into pandemic teaching, in our industrial design-based educational environment, it appears that ERT is giving way to some forms of a new normal, and effective online learning. Zoom video encounters and the use of Miro boards or shared screen presentations have become common place. The diversity in the physical, material engagement with sharing physical spaces where students work predominately in groups and teachers often

enter their workspaces for sharing and discussion, has given way to new practices of using digital-mediated, software-mediated spaces. Increasingly, tutoring activities are mediated by the opportunities and constraints of a video platform (Zoom or Teams) with face-to-face discussion allowing for verbal descriptions and visibility through the camera, and the use of screenshare options for showing material available on the computer whether organized sequentially in a PowerPoint presentation using text, visuals and video, or other software such as Miro, and the text-based comments, questions, discussions in the video platform chat box. In contrast to these types of synchronous interactions over distance, this paper puts forward asynchronous uses of video capture to replace or augment synchronous activities. This form of video capture, I argue, is expansive in two senses: it expands the spaces and material practices that become visible in the tutoring encounter, and the video capture performance puts students in a position to rehearse and put on display how they could demarcate the territory of their project, while enacting the narrative of their project in both its detailed specifics, and the relation of those specifics to the whole. Drawing on my own teaching and both informal and formulized discussions about new practices with colleagues, and a long history of exploring collaborative design practices and the use of video capture, here I draw on the diversity of two common tutoring scenarios to introduce and discuss the use of video capture, video viewing and feedback.

2. The Tutoring Encounter

In order to look at the tutoring encounter and the spaces for dialogue between students and teachers in relation to the ongoing project work, I use the notion of world-making. In project work, students develop a physical, visual, and conceptual relational world around themselves. It is this relational world they expose to their tutors and tutors support them in shaping one way or another through dialogue. In Schön's (1992:132) terms of a reflective conversation with materials of a design situation, whether virtually or on site, "the designer constructs and reconstructs the objects and relations with which he deals, determining "what is there" for purposes of design, thereby creating a "design world" within which he functions." In linguistics, contextual anchoring of self-in-space and time at any one moment puts the speaker at the intersection of the spatial and temporal *deixis* of a language, a ground zero that allows for the use of orienting language for those sharing context (Cairns 1991). That is, within a communicative event, the speaker is located at the center and refers to you and I, mine, yours and theirs. This one rather than that one. What happened before, where we are now, and what is coming next. It is in relation to this gestural, action world of design, the practice of designing, that I refer to "pointability" within the context.

Drawing on *ethnomethodology,* Goodwin (1994) provides a concrete set of criteria by which to analyse professional practice and understand what people are trained to see and do. By looking at the ***coding schemes*** people use to make sense of the world (what sticks out for them), what they *highlight and mark-up*, and how they *create, describe and use material representations*, we can understand the relevant perspectives of that practice.

> The shaping process creates the objects of knowledge that become the insignia of a profession's craft: the theories, artifact and bodies of expertise that are its special and distinctive domain of competence. Analysis of the methods used by members of a community to build and contest the events that structure their lifeworld contributes to the development of a practice-based theory of knowledge and action. (Goodwin 1994: 606)

Verbal and visual interactions using software such as PowerPoint allow for a combination of verbal interaction with close proximity to the imagery. While design work uses a wide variety of physical and digital materials depending upon type of design and the focus of any one class, introducing work-in-progress via presentation software such as PowerPoint is common in education and in design work in industry. Wakeford brings a Science and Technology Studies perspective to argue that ethnographic research presentations using PowerPoint are "'thick' social events" where it is precisely the combination of storytelling and showing that brings its value. At the same time, she argues that this type of software and event raises conflicts in masking the analytic work involved in selecting and sequencing these visuals, deeming analysis misleadingly invisible. "Crafting" a PowerPoint presentation affords certain styles of sharing in sequence and making available the work presented.

The sequential progression is not only for moving in one direction, as it also allows for returning to specific slides during discussion, creating a shared referential, pointability. Miro boards, a type of software whiteboard, provide a virtual space that can be populated without linear ordering. Rather, the space is much more similar to navigating a physical space with material located in different places. If we consider the "pointability" of material, where the student is able to point, both physically with a finger or cursor and verbally with the words that are used, to the area of interest, while speaking about the content. When logged into a shared Miro board space, participants can click onto the icon of the presenter, and "piggyback" on their view, allowing the presenter to dictate what the viewer sees within the space. Similarly, the presenter can click a function that brings all the participants in the space to their own location. These functionalities allow different types of practices to emerge for supporting the tutoring encounter.

While the pandemic has increased familiarity with the software formats and the emergence of valuable forms synchronous engagement online, Video platforms such as Teams and Zoom and collaborative spaces such as Miro boards are generally accessed while in a sitting position, navigating with mouse on a screen. They require that all material is either generated within the digital device or transferred to the device in order to "craft" the world narrative. Over the last year, a few colleagues and I have attempted to promote new ways of exploring the physical spaces we occupy before, during and after our distributed encounters. While using multiple cameras and turning the cameras away from our faces to open up our spaces has been a rather uphill battle in relation to synchronous activities, the use of video for asynchronous interaction has become more widespread.

2.2 One-shot video capture

In this paper I focus on the introduction and practice of a specific style of video capture that I have come to call one-shot video, with emphasis upon how the video is made, where it is made physically and what it shows physically, and the temporality of the video-making process. Much like the Danish Dogma 95 movie making movement that started as a specific purposeful format with strict rules for film production arising as a reaction to the overproduced state of movie making, I have been working over the years with a set of purposeful guidelines for video capture in the service of collaborative design activities and ethnographic work. Dogma 95’s set of rules stated that all filming must be done on location, without adding extra sounds, without time jumps but in the here and now using handheld cameras without giving credit to the director (Heckman 2020). Without such rigid rules, one-shot video was meant to be an easy-to-use style of video capture that uses a handheld camera to structure a summary of ongoing work by combining overview and detailed description, while pointing to relevant material. At the same time, the one-shot video making practice arises out of a specific set of concerns and interests in the authenticity of improvisational performance and the processes of collaborative enactment (See Clark 2014 for an instructional video). In May 2020 as the pandemic took hold, I introduced one-shot video as a “recipe” on the Distance Design Education blog for tutoring students with simple set of instructions. While the steps may appear straightforward recipe, to view one-shot video as an example of “expansive video capture” requires a more elaborate argument demonstrating its link to the learning and development of professional practice, the elevation of ordinary activities to a form of performance, and an interventionist approach to video in design.

Prepare: Choose your material, identify who will speak about what, and what path the camera should take.

- Have an outline script or core message
- Have something you will film as you talk about it
- Think about where the camera will go

Film in one take while describing what you are showing:

- Overview: Outline the topic and the purpose of the video
- The details: Talk through the specifics you wish to share. Give examples! Point to the material!
- Conclude: Repeat the most important point(s) to remember. Describe what happens next?
- As you film:
    - Hold the camera horizontally for best viewing
    - Get close to the content
    - Point at what you are talking about
    - Keep it rough
    - Dare to rehearse

Upload & send: Upload to your online learning system and share the link.

Figure 1. One-shot video recipe

When looking at the use of one-shot video in relation to student tutoring, there are three main components that may be separate in asynchronous interaction or combined in synchronous activities: the video capture activity of making a video, watching of the video, and feedback response to the video.

I. Individual student task and one teacher (Asynchronous): A student either is instructed or voluntarily sends a one-shot video to the tutor for feedback on their progress. The tutor watches the video and responds via email text, via a one-shot video, and/or during a synchronous discussion. For example, during the Spring term, students at the BFA and MFA levels work on their degree projects. Samuel spontaneously sends a video to Patricia the teacher asking for input on her user study strategy. The one-shot video shows a piece of paper with the sketched-out process visual with Samuel's finger pointing to the parts he describes. "At the first two interviews where I mapped out their urban gardening rituals…I created this tool for exploring the emotional journey of when they were contributing to their urban garden." He plans to return to the same people and re-engage them with his visualization of their activities. The teacher prints out the sketch, marks on it and creates a one-shot video asking if he considered using photos or sketches in return sending it back.

II. Team task and teaching team feedback (Asynchronous + asynchronous & synchronous): A project team creates a one-shot video ahead of the upcoming tutoring session with multiple tutors or teachers involved. Some give written feedback, the others wait until the tutoring moment. For instance, during a 10-week project involving 3 main tutors (two internal

teachers and one industry-based tutor), each student team is asked to send a one-shot video of their progress the day before each tutoring. All three teachers watch the video, but only two join the tutoring over Zoom. The student team is working together in a shared space. In the video, there is one main narrator, with the three other members describing one part of the work. Sonia starts the video showing her own face, saying hello to the tutors, and giving a short overview about their status. She then walks to each person on her team prompting that person to show and tell what they are working on at present. The video moves close to Vilma's computer screen showing the details of a 3D-model as she explains. Then over to Mathias, where he describes two cardboard prototypes, then to Hamed on a table with a city map, with cardboard and paper cut-outs. After each person presents, Sonia moves close to the whiteboard where they have done a brain-dump and grouping of the potential areas of focus. After watching the video, the teacher not joining the tutoring gives written feedback via e-mail on both the content of the project, and the one-shot video making process, and sends it to the student team and tutoring team.

The concept of performance brings focus to both the past and the future in the present, and offers a strong frame for re-assessing the past in relation to the future. This can be emphasized through the perspectives of Richard Schechner and Victor Turner. Schechner (1985:36) suggests that performance is "restored behaviour or twice-behaved behaviour." People draw upon their repertoire of behaviour as they enact a new version.

> "Restored behavior offers to both individuals and groups the chance to re-become what they once were—or even, and most often, to re-become what they never were but wish to have been or wish to become. (Schechner 1985:38)

There is an almost magical quality to a live performance. Once it starts, there are generally no timeouts. It unfolds unpredictably. It is bound by the social constraint that to break the situation has social consequences. This tension, or uncertainty, of an open frame gives cause to an original quality to performance.

> "…The rules may 'frame' the performance, but the 'flow' of action and interaction within that frame may conduce to hitherto unprecedented insights and even generate new symbols and meanings, which may be incorporated into subsequent performances" (Turner 1982:79)

Turner suggests that performance concludes a process. It is a type of curating mechanism for what took place previously in the process. The interaction between the performer(s) and the audience bring previous speculations to conclusion. "*To perform is…to bring something about, to consummate something…"(*Victor Turner 1982).

The video performance can be seen as a demarcation of the current state of the design world narrative. Students are coached to give specific detailed descriptions of selected material to exemplify their statements and connect to the whole. The moment the one-shot video is completed, unless the authors wish to re-shoot, the video is ready for sharing. The opportunity for editing falls before the video filming begins, based on how the room and materials may be set-up and/or identified in preparation for a live performance.

3. Expanding world making practices

Donald Schön (1983, 1987) focused on the difficulties of preparing students for the realities of professional practice. It was his conviction that successful professionals required, and rely upon, a kind of knowing ("reflection-in-action", Schön 1983, 1987) that most Western institutional educational settings were ill-prepared to provide their students. Reflection-in-action is a kind of bricolage. It is the designer's (or other professionals') skillful conversation with the unique problematic situations that frequently arise in practice; such problems are characterized by "uncertainty, uniqueness and value conflict" (1987:6). To be equipped to act within such situations, designers require an artfulness of practice that enable them not just to solve problems, but the ability to frame messy, real world, indeterminate situations as problematic ones, to improvise, to take uncertain actions toward their resolution, and to evaluate their own progress as they proceed. Schön frames this as a dilemma for the professional schools of 'rigour or relevance': institutions may choose to hold on to a traditional, formalizable, (academically) rigorous curriculum, but must do so at the expense of cultivating the skills on which able practitioners necessarily depend (1987:312-313). These are skills that are not taught, but 'coached' out of students' own experience of engaging in murky situations *before they know how to remedy them.*

From this perspective, a goal of design education is to provide occasions for students to rely upon and develop the improvisational practices of reflection-in-action, as performances available for teacher coaching. This is complicated by the trends of digitization, the use of sequencing software such as PowerPoint as a main communicative tool, and the overall favouring of crafted output rather than improvisational material explorations. As one colleague commented after one year of pandemic education, while his students are improving their presentation skills, he sees that they are neglecting the tangible design work and rather focusing on crafting design presentations. It is here that exploring expanded forms of engagement in material spaces and explorations in the multiple uses of video can play a role.

3.2 Video in research and design

Video has long been used within research and design (Blomberg, Giacomi, Mosher, Swenton-Wall 1993, Brun-Cottan & Wall 1995, Buur & Soendergaard 2000, Suchman & Trigg 1991, Ylirisku & Buur 2007). Drawing from the tradition of conversation analysis, interaction analysis demonstrates the value of video recordings to capture "naturally occurring interaction" among people, and people with artefacts in the context of use (Suchman & Trigg 1991, Jordan & Henderson 1995). Using video has predominately been hailed for the ability to capture what takes place in the wild of everyday life for multiple viewings and analysis (Jordan & Henderson 1995). In this tradition, generating long periods of video recording provides a data set large enough to find valuable sections for detailed analysis. The majority of the analytic work takes place after the exemplary sections have been identified and a detailed transcript has been prepared.

The value of video as representation often relies upon the up-close and intimate sense of being somewhere else that can be used to provoke an audience experience. Video in the use of re-presenting users has two main consequences: it brings the user into the design process, albeit through proxy of the video medium, and it establishes authority of researcher as having captured the authentic truth of the people out there in the wild (Nafus & Anderson 2006). In this version of video capture, the researcher is often edited out of the footage for effect. In contrast, *participant intervention* refers to the active role of the researcher as a "participant in the co-construction of meaning" (Karasti 2001:81). The researcher does not necessarily suppress their presence, but rather celebrates their view as one of many within a group.

Buur and Soendergaard's (2000) video card game is an example of using video to engage participants in design activity. This was part of a movement of turning selected video output into a form of design material (Buur, Binder & Brandt 2000). Moving "beyond video as hard data" to a playful design material that could allow for access of anyone sitting around the table. What did you see? It was precisely the format of inconclusiveness of the material that Buur et al. sought to employ as a prompt for engagement.

- Video to represent the user (Brun-Cottan & Wall 1995, Suchman & Trigg 1991)
- Video fragments to engage (Buur & Soendergaard 2000)
- Video as design material (Buur, Binder & Brandt 2000)
- Video as fieldnotes (Blomberg, Giacomi, Mosher, Swenton-Wall 1993)
- Video recorded design scenarios (Halse, Brandt, Clark & Binder 2010)
- Video capture as a design tool (Ylirisku & Buur 2007)

Figure 2. Uses of video in research and design

In collaborative design and participatory design prototyping activities, Mackay and Rayard (1999) and later Ylirisku & Buur (2007) demonstrate how the act of taking video shapes the collaborative design activities. It is used purposefully and tactically as a tool within the facilitation of ongoing activities, often to capture the flow of action of design concepts. It can therefore move the design process forward and trigger reflection activities for designers to make concrete the functions and use characteristics of the design. However, there is something different between using video as a playful intervention tool in design activities, to using it as an intervention tool in ongoing activities that do not fall under the playful umbrella of collaborative design. It is this link to professional practice that nurturing a new form of video capture practice seeks to nurture.

4. Conclusions

This paper makes the case that the simple tools that we adopt and the practices we develop can constrain and expand the collaborative potential of design world making practices. Project-based design educations provide opportunities for students and tutors to explore the messiness of everyday life even through our own practices. Virtual and physical studio spaces are sites of rich sociomaterial interaction. It is increasingly important for design students to learn how to engage in the complexity of dynamic everyday life through performing in that world, tackling the messy challenges of contemporary society. The current pandemic has prompted extreme changes in how daily life is organized, bringing emphasis to the need for and opportunities to rethink and explore the nuances of sociomaterial interaction. The tutoring encounter is one example of how students and teachers can codevelop new practices.

The use of one-shot video as a tool in the tutoring encounter was shown to relocate the student presentation of their current work from the synchronous activity in the presence of one or more tutors to a two-step or three-step process of student video creation and tutor viewing and response. Rather than the students expending time and effort in carefully crafting a world narrative about their work through selecting materials and sequencing the material for synchronous engagement with tutors, a hand-held camera can be used to structure a collaborative material performance curating shared reference, through moving through different locations and temporalities in the workspace, defining through selecting, highlighting, and representing aspects of available resources. The video capture format was shown to support students grounding their world making in the zero position of reference, a practice of locating self in space and time. Introducing the constraints of an expansive video capture, video made in a single sequence rather than merging or editing, occasions an open performance frame that suppresses negotiation of what will be said, introducing pressure to fill the frame, and to keep the flow moving prompting designers to demarcate the current state of their world-in-the-making. This practice re-orients video capture and production from a time-consuming crafting practice, to an interventionist tool for provoking world making performances. This use of video is a radical departure from the more common uses of video in design, demonstrating possibility for exploration and preparedness for professional practice.

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Acknowledgements: A special thank you to all my colleagues and students for the sharing your challenges and optimism through these unique times.