

Article

Teaching via Zoom: Emergent Discourse Practices and Complex Footings in the Online/Offline Classroom Interface

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Abstract: The COVID-19 pandemic caused educational institutions across the world to face a new reality: when teachers and students do not share the same physical space (fractured ecologies), drastic changes in the everyday procedures and routines of teaching become an immediate necessity. In this paper, we trace some of the effects of this new situation in online classes of three experienced university teachers in the early days of the pandemic. We zoom in on dimensions of the classroom interface such as: turn-taking procedures, socialization, peer scaffolding and feedback; strategic footing changes across institutional and conversational roles; joking and humor. Not surprisingly, we found that the systematic absence of multimodal contextualization cues like gaze direction and tracing the origin of sound/speech were a trouble source in these online multiparty settings. We also saw, however, that teachers and students were successful in reinventing themselves and in devising new ways to deal with the changed circumstances. We end the paper with a number of implications for research into the classroom interface, both online and offline.

Keywords: online teaching; Zoom; classroom discourse; higher education; multimodality; discourse complexity; multiparty interaction; classroom ethnography



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Prologue

When the COVID-19 pandemic reached the Netherlands in the early spring of 2020, we were working on a paper that focused on identifying behavioral details that ‘matter’ when making sense of how classroom discourses evolve as they do and to what effect. As a point of departure and locus of our investigation, we had chosen a scene in a secondary school class that had been selected by students in our teacher education course as an instance of ‘good teaching’ and even empowerment. Central to our analysis was a moment of self-talk (Hall and Smotrova 2013) on the part of the teacher that allowed her to frame a particular student’s answer as an extremely original and ‘academic’ answer. We identified the—often half-off-record; multimodal, simultaneous—complex moves that led up to this moment of empowerment. Our motivation for this detailed investigation was the premise that a more precise understanding of how the learning of many is organized and orchestrated in classroom multiparty settings is still a key issue and an analytic challenge for practitioners and researchers alike.

But then COVID-19 swept across the world. Schools and universities were forced to close their doors, students at all educational levels suddenly had to be taught online. This situation was unprecedented. In most cases, teachers, students, and institutional organizations were completely unprepared for the new situation, which they often had to adjust to in a matter of days. Many people in educational settings reported unease and stress, and feelings of inadequateness or even failure because familiar routines were no longer feasible, adequate, or in force: they had to be adapted to the new circumstances. It then dawned on us that the disruption of educational procedures and routines as a result of COVID-19 fostered unique opportunities to approach our original research questions from a new angle. We anticipated that detailed scrutiny of the practices and experiences of

teachers and students in online teaching formats—the ‘new normal’—could yield insights in precisely the class of interactional behaviors in f2f teaching that we originally set out to investigate. This expectation was based on the idea of the ‘breaching experiment’ (Garfinkel 1967; see also Seuren et al. 2021, who had a similar idea with respect to medical counseling).

Ethnomethodologist Harold Garfinkel developed the concept of the breaching experiment in the late 1960s. His point of departure was that our everyday behaviors, developed and maintained over time at home, at school, and in the workplace, are likely to become internalized—and eventually routinized—to such an extent that their ratio or source is no longer available for conscious introspection. Garfinkel invited his students to devise experiments that topicalized or called into question everyday understandings. Friends and family members who were subjected to these experiments were likely to get either disoriented or very cross. They would be asked for instance for clarification of seen but unnoticed, taken-for-granted, background features of everyday behaviors like why they were nodding when listening to someone talk; or why they were moving away when someone was standing uncomfortably close during a friendly chat. The experiments showed that as cultural members we all—to a degree—develop a shared cultural blindness that comes with socialization in specific ecologies.

So the overall questions we address in this paper are: how does the way things are organized or happen in online classes (the ‘new’ normal) throw light on/systematically differ from routines in the ‘old’ normal-as well as being a set of practices all its own? What is missing, what is different, what is new?

Does it throw light on what we routinely did but were possibly unable to see? How do insiders cope with these new affordances and constraints?

1. Introduction

The big things reside in the small things, and the most inconspicuous and uniquely situated social action is, in that sense, “systemic” and “typical”, as well as a source for theoretical generalization. (Blommaert et al. 2018, p. 5)

In this paper, we investigate data from online classes taught at a large university in the Netherlands during the COVID-19 pandemic. We take a close look at interactional situations where hitches, disfluencies, and misunderstandings arise as a result of the discrepancies between conventional (default) expectations of what would have happened (next) in face-to-face (f2f) classroom settings and what actually happened in the ‘new’ online situation—as well as at examples of situations where teachers exploit the affordances of the online setting. We do so because exploring *systematic differences* in the way(s) routine interactional practices are implemented in online classrooms—and to what effect—may, we propose, pave the way for new analytical insights.

The interactional parameters of *ecologies of learning* and the discourse practices that mediate them may differ considerably from situation to situation. In online conditions where participants do not share a physical space, routine procedures like turn-taking and turn allocation systems, and repair, face, and feedback systems may have to be implemented in radically different ways (cf. *fractured ecologies*; Luff et al. 2003). The sudden shift to online teaching as the *only* available teaching/learning mode—rather than an extra tool in *blended learning* or *hybrid* teaching practices—will, therefore, we propose, alert us to the *significant absence* of a repertoire of nonverbal and multimodal cues that are crucial in synchronizing our behaviors in class. Of course, we knew this or we could have known: over the years a host of eminent authors have emphasized the vital role that semiotic and multimodal features of interactional behavior play in organizing and synchronizing the classroom interface (cf. e.g., Heath and Mondada 2019; Mondada 2014; Sert 2019; Skidmore and Murakami 2010). But exactly what features of online teaching cause the coordination of ‘doing speaking and listening’ to be so different—and often more problematic—than in face-to-face situations merits further in-depth systematic investigation.

We will zoom in (pun intended) on details of teacher and student behaviors and strategies in the online situation, using the f2f setting as the default situation, in order to make the impact of technological mediation on the interactional configuration of the classroom analytically transparent. Since f2f teaching-learning situations are historically prior to online teaching-learning settings—and therefore better-researched—it makes sense to take them as the prototype or point of departure of our investigations: the zero-situation as it were.

The data we draw on derive from online classes taught by experienced university lecturers in the course of 2020 at the beginning of the COVID-19 pandemic through the Zoom platform. None of the lecturers involved had any prior experience with online teaching as the *only* available interface although many had occasionally inserted online episodes in their ‘regular’ face-to-face classes.

Our data set consists of:

1. *Primary online data*: video recordings of online seminars/workgroups. Our emphasis is on *first* seminars, that is, events that involve a group of participants who are all new to each other—and to the teacher. There is no shared history. This means new routines and practices have to be bootstrapped from scratch (*first events*; Bannink and Van Dam 2013a, 2013b; Van Dam and Bannink 2017; Van Dam 2002a; Van Dam (van Isselt) 1993).
2. *Teacher and learner metadata on online teaching*: written course evaluations by students in response to closed and open questions; informal comments shared spontaneously by participants either online or in response to prompts; pre- or post-lesson spontaneous comments both by teacher and (individual) students; diary entries from one of the teachers.
3. *Anecdotal data* from journalistic sources; casual remarks by insiders.

Our focus in this paper is on detailed descriptions of what insiders actually do, cannot do, or organize differently in online classes—and to what effect—as a result of the different and novel constraints and affordances that obtain in online teaching/learning situations. In this way, we aim to make a modest contribution to the development of an ecologically validated awareness of the details of classroom multiparty practices—both in the online and the offline condition—as well as offer some tentative practical suggestions for the solution of the practical problems experienced by teachers and students in COVID-19 times.

2. Theoretical Framework, Methodology, and Data

The conceptual framework that informs our investigations is interdisciplinary and includes notions and insights from anthropology, classroom ethnography, and discourse studies. It could broadly be characterized as rooted in a tradition of ethnographically grounded studies of situated discourse practices (cf. e.g., Blommaert 2015). Within that field, our focus is on task-oriented practices in classrooms and other institutional multiparty situations.

The research questions we address in this paper are motivated by the experiences of insiders when suddenly confronted with new teaching/learning situations or ecologies of learning. An ecological approach to the study of these issues (cf. e.g., Bronfenbrenner 1979; Kramsch 2002; Leather and Van Dam 2002; Van Lier 2006) can be characterized as follows:

1. It emphasizes the importance of fine-grained pre-theoretical observation which means that no behavioral details or contextual phenomena may a priori be excluded as irrelevant (cf. *thick description*; Geertz [1973] 2008);
2. It emphasizes the extent to which real-world phenomena are complex and context-dependent: emergent in the situation—rather than static or a priori ‘given’, as a result of the dynamic interplay of multiple systems that are simultaneously in force (cf. Larsen-Freeman 2016);
3. It typically concerns questions, behaviors, beliefs, and experiences that are relevant to insiders (cf. *triangulation*; Seignyn 1978).

Such an ecological approach affects the selection of data. Since insider and practitioner relevance is an important criterion, the data we address may typically also include casual remarks, anecdotal data, and interactional events that are selected on an intuitive, pre-theoretical basis.

In order to describe the discourse complexity that, as a rule, obtains in classroom multiparty settings, we use a dynamic discourse model (Bannink and Van Dam 2006; Polanyi 1988; Polanyi and Scha 1983; Van Dam (van Isselt) 1993, pp. 33–48) that traces in systematic ways the moment-by-moment moves and context changes that occur in the discourse-in-progress and that participants demonstrably orient to in interpreting each other's interactional behaviors. The model accepts both verbal and nonverbal behaviors as input and 'calculates' for any incoming move whether it has to be interpreted in the current context or state of talk (*linear move*); or that it changes or updates the context in which it has to be interpreted (*structural move*). It aims to describe/mirror the processing strategies that allow participants to interpret each other's interactional behaviors on a move-by-move basis - and thus also to make sense of complex classroom situations.

A seminal notion in our analyses is Goffman's *footing* (1981), which addresses the different roles and ways in which 'speaking' and 'hearing' can be conducted—in classrooms and everywhere else—and the participation structures they both evoke and imply. When speaking, a speaker adopts a certain role or stance that invites and at the same time constrains the (complementary?) stances others co-present may adopt. Similarly, different hearer roles like addressed recipient, ratified (over)hearer, bystander, story listener, eavesdropper, etc. can be distinguished. Goffman's insights are especially relevant for classroom multiparty settings where teachers as hard-pressed functionaries often have to perform many tasks simultaneously: keep the lesson agenda moving; monitor and synchronize and orchestrate the interactional behaviors of many; 'read' the classroom (cf. Blum 2020). They may, for example, briefly bend down to whisper an off-record remark to a student who is at a loss (*collusion*; McDermott and Tylbor 1983) while keeping others on hold. In fact, they may occupy a host of institutional, conversational and collusive, stances and roles simultaneously ('stacking' roles/footings). We will investigate how teachers deal with the additional *system constraints* (Goffman 1981) of the online condition: whether, over time, they succeed in developing compensatory strategies to deal with them or maybe even turn them into affordances by creating novel discourse domains.

3. The Online Classroom Interface: Constraints; Insider Perspectives

Initial difficulties with the organization of teacher–student and student–student interaction in online classes have been widely reported and also shared anecdotally in observations and comments exchanged by practitioners and other insiders during the COVID-19 emergency.

In an article published in *Inside Higher Ed*, for instance, anthropologist Susan Blum starts off by giving an eloquent description of when in her view her f2f classes are successful: "When students huddling around a text point to it, their gazes converging, and create a document they are proud of. When people laugh simultaneously. When the affect and the cognition and the interaction work together." (2020, p. 2). Proximity, joint action and bodily orientation, gaze coordination, shared laughter, however, are all dimensions of interactional behaviors that are significantly missing in online classrooms. And her summary of what makes online teaching so depleting "[it] is nearly a replication of face-to-face interaction, but not quite" (2020, p. 1) clearly invites further in-depth inquiry.

Students, in their turn, have been reported to complain about not being 'seen' and 'heard' and about feelings of isolation and lack of motivation. As a representative of a Dutch student organization put it: "Some students don't see anybody all day and spend their days just looking at themselves on Teams".¹ One of our teacher colleagues articulated similar thoughts and emotions when she told us: "Last night I felt so isolated. Then I realized that I had spent at least 6 h teaching and attending meetings on Zoom—but it still felt as if I hadn't seen or spoken to anybody all day."

In the following sections we will try to unpack some of these insider observations and to unravel the subtle—and not so subtle—differences that contextualize f2f and online forms of teaching. In line with Garfinkel’s adage—trouble has to occur for us to realize what we routinely do—we first focus on infelicities that were bound to happen in online classes.

4. Online Classroom Data. Participation: Access to the Lesson Floor; Impoverished Multimodal Cues

In March 2020, in the first week of the school closures in the Netherlands, one of our student teachers told us that, in response to her worried inquiry into how she should prepare for her online classes, she was instructed by her school supervisor to simply assume that “teaching via Zoom is the same as f2f teaching—the only difference is you use the screen”. The data below show that this ‘business as usual’ approach clearly overlooks specific constraints of the online teaching setting.

4.1. Participation: Turn-Taking Procedures

Data 1 shows the first teacher–student interaction in the first class of a course taught to second and third year students at our university. A total of 25 students have registered to take part in these seminars. At the exact time, the class is scheduled to begin, the teacher admits all the students into the Zoom meeting simultaneously. Now 12 faces appear on the screen; the other half of the students cannot be seen: four have not joined with video (and will not change this throughout the session), the others have not signed in (yet). Nevertheless, the teacher starts the class.

After a brief formulaic greeting (“*Ladies and gentlemen - . . . - welcome*”) Teacher 1 announces the main activities on the lesson agenda. He will first introduce three key concepts relating to the central topic of the course and then set the students a reading task. After that, they will be asked some questions about what they have just read.

The teacher rounds off his introduction 19 min into the class and invites the students to individually read two texts he has selected and to scrutinize them for linguistic evidence of reader manipulation. Two and a half minutes later he asks them to join him again to discuss their findings.

Data 1^{2,3}

T	[gaze to camera] alright – welcome back - let’s continue – so – in looking at these two texts – uh who – who’d like to identify ways in which these two texts are in fact about directing the behavior of the audience – you can shout it out [brief smile] –
SSS	[silence; blank faces; no visible smiles]
T	- just unmute yourself - or you can type it in the chat window [broad smile]
SSS	[silence; blank faces; no visible smiles]
T	[5 sec pause] – or if you really want to - you can screenshare your text analysis with the rest of the class [smile] – so what do the two writers do to direct the behavior of their audiences – [6 sec. pause] – I – I can’t see all the hands but I can see - [different tone] N. – you’ve raised a hand – so you’re welcome to speak –
SN	[3 sec pause] Mmm- yes – uhm - HI – uhm – in the first – uhm text – uh – there is a lot of use of must and should

What we see in this data is an example of the first moves in the conventional IRF (Initiation-Response-Follow-up) sequence that is ubiquitous in classrooms of all types and at all levels (cf. e.g., Cazden 2001; Nassaji and Wells 2000; Sinclair and Coulthard 1975). The teacher invites a volunteer student to answer a question about the texts they have just read. He adds to his words an encouraging, hyperbolic, “you can shout it out”, a clear invitation to the students to self-select and spontaneously take a turn at talk, but none of the students do so - nor do they visibly respond to his smiles. Not being physically co-present in the same space apparently diminishes the need for participants to mirror each other’s nonverbal behaviors. The teacher then suggests an alternative way to respond (“you can type it in the chat window”) and when after a 5 s silence no student comes forward, even offers a third option (“you can screenshare your text analysis with the rest of the group”), followed by a rephrasing of his original question. Again none of the students seems willing

or able to comply: there is another lengthy pause (6 s). Then the teacher reports he has noticed that the students have introduced their own, alternative, way for responding to a teacher question: by bidding for the floor by a show of hands, a strategy that is clearly inherited from the f2f setting.

The teacher now calls on SN to provide an answer to his question. There is a three-second gap (cf. [McHoul 1978](#)) between the turn allocation and the addressed student's turn—which SN has probably used to unmute herself. When she starts speaking there is a cluster of hesitation markers (“*Mmm–yes–uhm*”): being the first to speak up in a gathering of unknown peers is always a scary business. Then, before actually producing her answer, the student inserts an informal greeting: “*HI*”. That greeting (*bracketing device*; [Goffman 1981](#)) is unexpected in that it occurs when the class has already been underway for over 20 min.

There has been no informal exchange of greetings at the very beginning of the lesson; just a formal, formulaic greeting by the teacher addressed to all. Possibly more importantly, teacher and students have even been unable to *physically* register each other's presence by exchanging looks at the very beginning of the lesson when entering the online classroom—as is the case in face-to-face situations when students trickle in. Now the essence of a ritual move like a ‘greeting’ is that it is reciprocal: it has to be returned in order to be valid. To that end pending discourse obligations—in this case, finishing the student-answer-turn-already-in-progress—have to be temporarily suspended. A marked change in intonation contours (*contextualization cue*; [Erickson and Shultz 1981](#); [Gumperz 1982](#)) signals that now, briefly, some ‘other business’ has the floor. Only when that has been dealt with can business at the level of the lesson as a *task event* be resumed.

Such nonlinear or *structural* moves ([Bannink and Van Dam 2006](#); [Polanyi and Scha 1983](#); [Van Dam \(van Isselt\) \(1993\)](#)) that temporarily freeze the state of talk in order to take care of ‘other business’ are inevitable in classroom *multiparty* settings where so much is happening simultaneously. The only way to deal with this without continually creating interruptions, confusions, and disfluencies is to shift to a different behavioral dimension or discourse domain—as Bateson already told us in 1972. In that sense, teachers are like Goffman's proverbial *auctioneer* ([Goffman 1981](#)) or Erickson's *bricoleur* ([Erickson 2004](#)): all multi-taskers. But since the available repertoire to perform simultaneous acts is considerably reduced in online conditions—a fact we will probably have to live with unless there are revolutionary developments in the technical domain—other solutions have to be found.

4.2. Participation: The Role of Multimodal Cues

The events in data 2 below critically hinge on the fact that in online classes participants are situated in random configurations across a computer screen. It is often difficult to figure out in what direction a co-participant is looking and this constraint of the online classroom interface, we will show, is consequential for participation rights and access to the lesson floor.

Data 2 highlights details of data 1 and shows the listening behaviors of one of the students in the class (SK) during the teacher-student IRF exchange. This student repeatedly bids for the floor—without any success. Only by zooming in on the timing of his moves can we gauge the reasons for his lack of success, which in the end causes him to (at least temporarily) lose interest in the class altogether. We present the data schematically (Table 1) and visually (Figures 1–6).

From the moment the teacher (top left in Figures 1–6) has reconvened the students, SK (far right, third from above in Figures 1–6) has been leaning forward, continuously looking at the screen without averting his eyes even once, signaling active listening. His posture remains like this during the first student turn which the teacher has allocated to SN (data 1; Figure 1). When the teacher continues with a second question, SK raises his hand in a bid for the floor (Figure 2). After a short silence, the teacher, however, indicates that SN is still the current speaker by saying her name with an upward intonation. As SN begins to speak, SK drops his hand. He raises it again as soon as she stops talking (Figure 3), but by

that time the teacher has turned his face away from the screen, so he does not notice SK's second bid for the floor.

Data 2

Table 1. Schematic representation of participant moves.

T	Initiation/Question	
T	Turn allocation SN	
SN	Response	
T	Follow-up	
T	Initiation/Question	SK raises hand (Figure 2)
T	Turn allocation SN	SK drops hand
SN	Response	T gaze away from camera to second screen; SK raises hand (Figure 3)
T	Follow-up	T gaze still away from camera; SK hand down; SK rubs eyes (Figure 4); T gaze back to camera; SJ raises hand (Figure 4);
T	Turn allocation to SJ	
SJ	Response	
T	Follow-up	
T	Initiation/Question	SK raises hand (Figure 5)
SX	Spontaneous turn	
T	Follow-up	SK eyes down, leans back, turns head away from camera, eyes roaming the room (Figure 6)

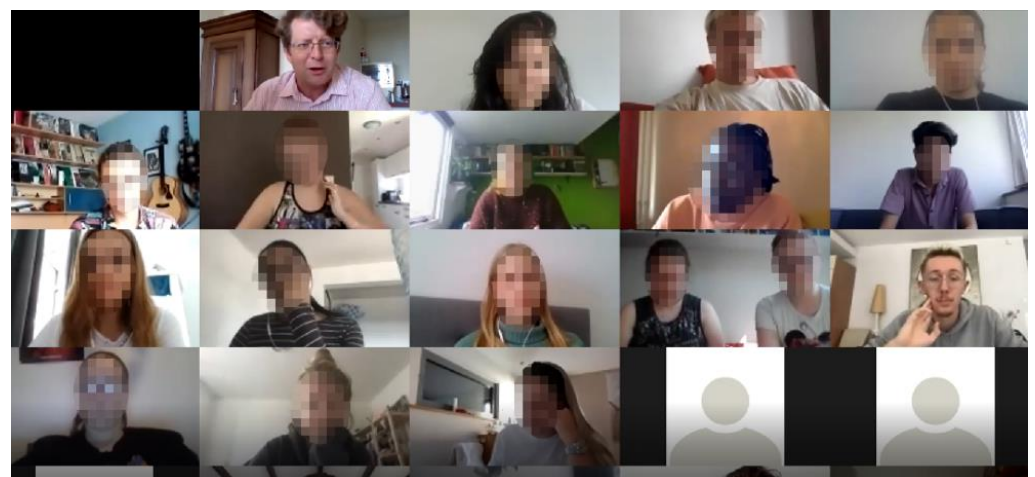


Figure 1. Visual representation of participant behaviors 1.

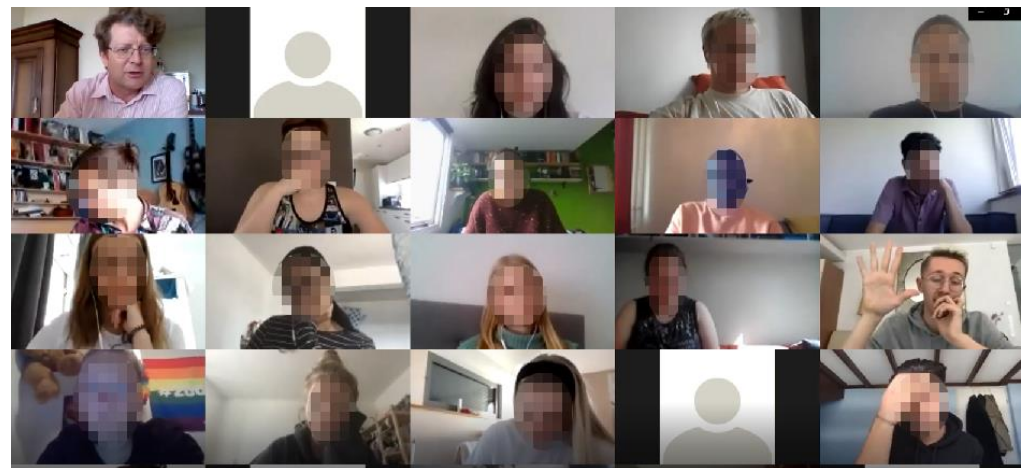


Figure 2. Visual representation of participant behaviors 2.

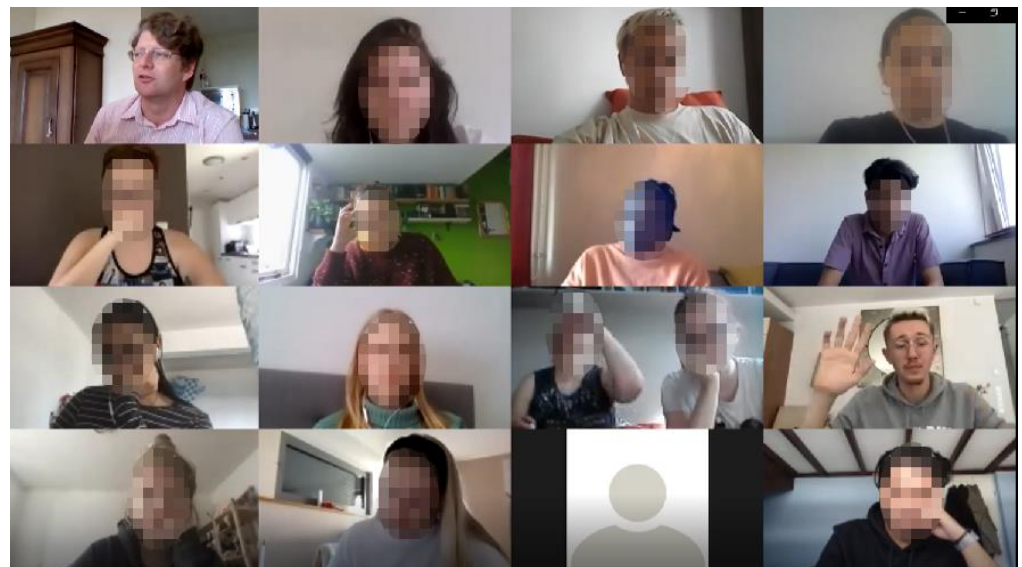


Figure 3. Visual representation of participant behaviors 3.

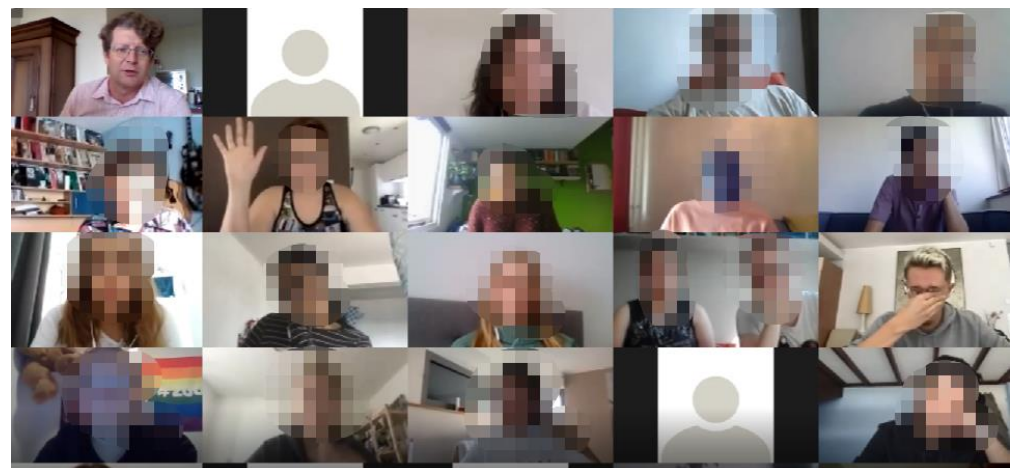


Figure 4. Visual representation of participant behaviors 4.



Figure 5. Visual representation of participant behaviors 5.



Figure 6. Visual representation of participant behaviors 6.

When the teacher embarks on a lengthy follow-up to SN's response move, SK drops his hand again and starts rubbing his eyes. While he is doing so another student (SJ) raises her hand (second from top, second from left in Figure 4). The teacher, who has now redirected his gaze to the camera, acknowledges her bid for the floor and allocates the next turn to her. When, subsequently, yet another question has the floor, SK raises his hand for a third time (Figure 5) but after a two-second pause, and before the teacher has had a chance to nominate the next speaker, another student (SX) self-selects and takes a spontaneous turn. Clearly, SX here orients to the informal/conversational procedures for the coordination of utterances and interactional events that the teacher proposed at the very beginning of the IRF rather than the formal/institutional one the students introduced and that the teacher has just sanctioned ("you've raised a hand so you're welcome to speak"). At any rate, he is allowed to continue.

At that moment SK's nonverbal behavior changes dramatically: he leans back in his chair, folds his arms behind the back of his chair. Looking around the room he is sitting in (Figure 6), he turns away from the screen, his body language displaying disengagement; hands and arms not in readiness anymore to follow up any call for a contribution (e.g., raise his hand, press the 'unmute' button) to the lesson-in-progress⁴.

In this data, we see how in the online setting confusion or misunderstanding may arise about who is to speak next in class (and who is not), which demonstrably leads to loss

of involvement on the part of one of the learners. Having tried a number of times to gain access to the lesson floor, the fact that a fellow classmate is allowed to take a spontaneous turn, while he himself has been repeatedly ignored (or so it seems—at least he is not *seen*) even though he sticks to the rule that has been established a few turns ago (i.e., raise hand) apparently causes him to give up altogether. Having started out as an enthusiastic volunteer, he now drops out, disengaging himself—all in the course of one lesson episode at the very beginning of the first class. Again a procedure that is common practice in offline classrooms clearly does not work in the ‘same’ way in online environments: it is easy to miss a hand when scanning 24 images on the screen. Mixing formal and informal turn-taking routines has different parameters in online settings: here peer support, for instance, is significantly absent (see also data 6 and Epilogue; cf. Van Dam (van Isselt) 2009).

We will now briefly return to the beginning of data 2 (Figure 2) and focus on SK’s first bid to the floor. What happens there clearly shows the crucial role *eye contact* plays as a contextualization cue (Erickson and Shultz 1981; Goodwin 2018) in organizing multiparty classroom interactions. The flattening of the three-dimensional f2f classroom to a two-dimensional computer screen makes it impossible to track the *gaze direction* of participants and so this cue has become unavailable as a visual resource (cf. Hjulstad 2016). Participants may of course focus on a particular image on the screen, but the ‘gaze’ (and others co-present in the online situation) will not be aware of this. This makes the orchestration of multiparty interactions even more complex—and possibly problematic. As Blum says: “...all the communicative signs that embodied humans rely on are thinned, flattened, made more effortful or entirely impossible” (2020, p. 3).

There is also a structural ambiguity that in f2f settings is usually resolved because a repertoire of nonverbal and multimodal cues is available as a backup system. Technically speaking, the teacher’s question is indeed ambiguous with respect to whether it initiates a *new* question in a *new* (IRF) unit with a new addressee or whether it is in fact a follow-up move that creates a subunit *within* the current IRF-in-progress. We know, in hindsight, that it was indeed meant as a follow-up question because, when no spontaneous answer is forthcoming, the teacher explicitly calls on the previous speaker again by saying her name. This should presumably be taken as an invitation to her to self-correct her non-response (cf. *other-initiation to self-correct*; Schegloff et al. 1977). The mentioning of the student’s name should, therefore, be interpreted as a correction of shared expectations about the current state of talk: it reminds SN that she continues to be the current addressee and nominated next speaker and that her answering move is now overdue.

Data 3 below, from another teacher and another class in our corpus, corroborates our observation that teachers at first sometimes were not aware of (c.q. temporarily forgot?) the fact that eye contact is not available as a visual cue in the online classroom. Here the structural confusion caused by a mismatch of expectations is made explicit in what must be considered an overt (but undue) other correction (we cannot even be certain to whom it is addressed):

Data 3

T [teacher question is on the floor; inviting look]
 SSS [looking towards the screen] - - [silence]
 T [looking towards the screen][reproachful tone] ik kijk naar JOU hoor
 ((I’m looking at YOU [Dutch singular] - you know))
 SSS [looking towards screen] - - [silence]

In the online condition, this teacher move is clearly incoherent (as well as rather funny): on the flat, two-dimensional screen we cannot possibly see who is looking at whom or in what direction. A virtual gaze does not identify the indexical ‘you’ mentioned in this data; in fact, it might have any of the students in the online classroom as its referent.

Data 2 and 3 show a mismatch of expectations owing to ill-understood parameters of ‘the’ online situation. In both cases, the teacher assumes that an addressed student is aware that he is looking at her but she is not—and *cannot* be: in online discourse eye contact is

not an available cue to nominate or identify a next speaker (or anyone else for that matter): eye contact is impossible.

Nor, for that matter, is ‘sound direction’, that is, all sounds are perceived as originating from the same source, the speaker system of the technology that relays them, as can be seen in Data 4 below. Here the teacher invites the students to share their experiences with Zoom.

Data 4

T [leaning forward; eyes scanning the screen] uhm – before we start the quiz – can you give me an idea of [breaks off] – is this the first time you are - for you - uh - to be taught on Zoom ↑

SE I mean – I’ve just finished high school and we had a thing called Teams – so yeah

T OK - yeah – so Elias has got some experience – any other ↑ [eyes scanning the screen]

SA just yesterday we had uh
[

SX xx

T [eyes scanning the screen] sorry – yeah – who was that ↑

SA I don’t know – I said something – I don’t know

T yeah – Annemarie – go on

SA yeah – yesterday we had a lecture in Zoom
[

T [nodding]

Latching on to the teacher’s question SE takes a spontaneous turn and shares his experience with another online platform, Microsoft Teams. When the teacher invites the other students to follow suit, there are two overlapping student turns that both stop mid-sentence. Although her eyes have been actively scanning the screen, as if she is trying to make eye contact with the members of the class individually, the teacher cannot identify who is/are speaking and is forced to initiate a *verbal* repair sequence. When SA follows up the teacher’s query by identifying herself as one of the speakers, she is allocated the turn.

In the above data, it becomes evident that the *significant absence* of multimodal cues, along the dimensions of ‘sight’, ‘sound’, ‘positioning’ or ‘bodily orientation’, is likely to be a trouble source in online multiparty interactions. Thus eye contact is no longer available as a nonverbal cue to nominate (or support the continued status of) the next speaker (data 2 and 3); nor can we infer the *spatial* parameters of utterances hearable in the online situation for which we do not know the source: position relative to the hearer; near/far (data 4). Also, in the prosodic domain, the systematic unavailability of a collusive whisper voice for participants in the student role is worth mentioning.

As a result, structural ambiguities in the discourse situation that, in f2f settings, might have been resolved without much ado owing to the redundancy of verbal, nonverbal, and multimodal contextualization cues, may in the online condition lead to confusion and misunderstanding. There is even the suggestion that student SN in data 2 is herself *at fault* for not being aware that she is being addressed, which clearly is not the case⁵.

In conclusion Garfinkel’s ‘breaching experiments’ were based on the assumption that routine (verbal and nonverbal) behaviors only become available for conscious inspection when things ‘go wrong’. That is precisely the reason why we zoom(ed) in—in such detail—on just one episode in one specific first online lecture in which one student did not gain access to the lesson floor. This episode illustrates the general point that routine classroom procedures may become problematic when new circumstances obtain. In the following sections we will focus on data that show how teachers and students over time adapted to the new circumstances—and often invented new routines/procedures.

5. Online Classroom Data. Discourse Complexity: Embedding Mixed Formal/Informal Domains

In the first dataset we analyzed in this paper (data 1) we saw how one of the students, before answering the teacher’s first class question, creates a brief time-out to greet him (and her classmates?) informally. In a different tone of voice she inserts a colloquial ‘hi’

before continuing her answer to his question—in spite of the fact that we are already over 20 min into the lesson. That may seem odd but makes sense.

Besides an institutional ‘task’ event, a class is also a social gathering of fellow human beings who, in the circumstances described here, have not even had a chance to *see* each other come in or briefly acknowledge each other’s presence by a glance, a nod or a smile. By inserting a brief “HI” the student emphasizes that the virtual classroom is also a shared *social* domain. Participants enter this first interaction on a double *footing*: both in their formal-institutional roles as ‘teacher’ or ‘student’ and as—‘just people’, ‘individuals’. The embedding social discursive world of more informal social roles and everyday businesses can always briefly be shifted back to, when the situation so demands (cf. Van Dam (van Isselt) 2009).

In the following sections, we will trace how two other teachers in our corpus, Teacher 2 and Teacher 3, negotiate the new circumstances—and to what effect. It is clear they both feel some drastic changes are in order. We will describe how they create a variety of lesson *meta-domains* that can be shifted to in order to solve problems in the task domain; but also how they try and compensate for the lack of personal contact and socialization between themselves and their students—and the students mutually—that is almost inevitable, given the constraints imposed by the COVID-19 measures. None of the students and teachers have ever been co-present in an actual physical classroom space nor have they been able to meet on the institutional premises.

5.1. Pre-Course Mixed Formal/Informal Domains

In the week before the start of the semester, Teacher 2 sends out email messages to all her (first-year) students to invite them to participate in informal 15-min online sessions with her in groups of three. She explains that it might be a good idea for them to get to know at least one or two peers before the start of the semester; and for herself to have at least an impression of who her students are, given the extraordinary circumstances caused by the COVID-19 pandemic. Participation in these brief pre-course introductory conversations is emphatically on a voluntary basis but all students decide to take part. So when the first class starts it is not the first time this teacher meets her students: she has seen all of them online once before and already recognizes most of their faces and voices. Also each of her students is already on speaking terms with two other students in the group (in fact some of them have contacted each other in the meantime). The teacher has also decided to split up the group, which originally consisted of 24 students, into two subgroups of 12 students because she feels she needs to literally *see* them (or at least their faces) in order to be able to teach them properly⁶.

5.2. Informal Lesson Subdomains: Zoom Etiquette and Teacher-Free Zone

About 10 min before the first class of the course is scheduled to begin, Teacher 3 starts admitting students who have signed in early into the lesson proper domain, the Zoom meeting, and immediately topicalizes the unusual situation (“*this is so weird, I wish we could all meet on campus*”). Animated chitchat follows, as the teacher’s eyes constantly scan the screen as if she is making eye contact with all students individually. When 22 students (out of the 24 that are registered) have joined the session and their faces have appeared on screen she addresses them as a group (“*good morning, everyone*”). She then welcomes two latecomers and immediately asks them to turn on their cameras and microphones (“*A. and S., could you please turn on your cameras -AH -THERE here you are-so lovely to SEE you-can you please SAY something?*”) and announces that she will be taking attendance (“*because I want to make sure you are all here*”). Immediately after that, she introduces the first lesson activity: they will start the class by doing a little quiz (“*just to get to know you - to get an idea of who you all are-what kind of students I’ve got in my group*”). First, she asks them whether they have any prior experience with Zoom (“*before we start the quiz-can you give me an idea of-is this the first time you are taught on Zoom?*”).

So before the official beginning of the first class, Teacher 3 has implicitly topicalized a number of behavioral rules: she has made it clear she expects her students to turn on their cameras and microphones, and to be present throughout the Zoom session. She has also conveyed the message that she wants to get to know her students and is interested in their prior experiences with online classes.

Note how she leaves no time when A. and S. appear not to have turned on their cameras. The timing of her intervention, immediately contingent on admitting them to the classroom, renders her question ambiguous as to whether it is a simple request to the students to check if the technology is working as it should—or a correction of their behavior.

Teacher 3 also came up with a strategy to compensate for the lack of opportunity for informal peer interaction at class boundaries in online conditions (*no dawn and dusk phase*; cf. Mlynář et al. 2018). ‘Fuzzy edges’, the more informal episodes that routinely bracket the lesson proper, naturally arise in the f2f setting where students are physically present in the classroom before and after class. They are then in a position to initiate conversations with one or more of their peers. Technically speaking, these ambiguous interactional spaces must be considered part of ‘the lesson’: as complex interactional lesson subdomains that allow the embedding of informal egalitarian roles, businesses, and participation formats, as in peer interaction outside school. Since they are not available in the online setting, Teacher 3 introduced, what she named, the ‘*Teacher-free zone*’: at the end of each class she would make one of the students in the group host of the Zoom meeting in her place; she herself would then sign off, leaving the students to have an informal chat and decide for themselves when to call it a day.

This Teacher-free zone indeed served its purpose as can be seen in this email message the student/host sent to the teacher at the end of the course in response to her request for feedback on the course as a whole:

“More than I expected, bringing the class together digitally [in the teacher-free zone] was extremely helpful. We used zoom mostly in the beginning—by now everyone is mostly too busy with their own studies to hang around long. But through zoom we created a Whatsapp group that is extremely helpful. Students are sharing questions, concerns and relieving each others’ anxiety, and even sharing the workload, like sharing article summaries through joint documents and helping each other out when we get stuck or don’t fully understand something. So it’s probably worth recommending this to other groups you’re teaching online as well!”

5.3. Self-Talk; Complex Footings and Reversal of Institutional Roles

One of the recurring problems of online teaching is hiccups or bugs that are caused either by technological problems or the limited know-how of the participants involved (cf. e.g., Blum 2020; Hagler 2019). These can lead to long pauses where ‘nothing’ seems to happen, which may seriously hinder the smooth progress of the class. As Blum (2020) puts it: “*The dead time is, well, deadly to the rhythms [of the interaction]*”. Below we present data where the teacher’s knowledge of Zoom falls short: she attempts to combine two functionalities of the platform, but finds she does not know how to do this.

The data are derived from the first class taught by Teacher 2. She kicks off the class with a ‘warming up’ exercise to probe her students’ prior knowledge about core syntactic notions that will be used in the course. In order to determine their academic level and create common ground among the members of the group, she has devised a simple true/false exercise. She had planned to use the *chat box*—which would allow everyone to see all of the individual student answers to her questions simultaneously but unfortunately she is confronted with a technical hitch:

where it was temporarily abandoned—or frozen as it were (cf. [Bannink and Van Dam 2006](#); [Van Dam \(van Isselt\) 1993](#)). Whereas nonverbal behavioral cues to signal *context changes or nonlinear transitions* may not be effective in online conditions, prosodic cues are still available to do the job.

Two students spontaneously come up with solutions to the problem. They are clearly more competent than the teacher in the world of interconnected computer functions and systems. In doing so, they become collaborators: have made themselves co-responsible for smooth and effective procedures in the ‘lesson interface’. These data then show how self-talk may create an embedded (complex) discourse domain where asymmetrical institutional roles are temporarily overruled. In this way, it may empower students and at the same time, foster the creation of a social bond between teacher and students.

It is striking that in the official written student evaluations at the end of the course one of the students makes a spontaneous comment about precisely this incident—and even mentions the teacher’s use of self-talk. It confirms our interpretation of the event. The student writes:

“The teacher was 10/10, she knew what she was doing 99% of the time and was very open about her problems with handling zoom so we knew what was happening if she suddenly got kicked out of her own zoom, for instance.”

Students, as digital natives, may feel frustrated with teachers who lack their own savviness in dealing with technological problems but here the teacher’s (incidental) lack of expertise in the technical domain has been transformed into an opportunity to import more egalitarian roles in the ‘task’ domain. Of course, an essential ingredient of the students’ appreciation and esteem is the fact that they have experienced her as an excellent teacher who works hard and on the whole is well-organized.

6. An Emerging Learning Community: Robust Feedback Systems; Laughter and Play

The final two datasets we will discuss derive from two other classes taught by Teacher 2 near the end of the six-week course. They clearly suggest that the teacher’s efforts to invest in a robust, solidary, effective, and supportive learning community have paid off.

6.1. Feedback Systems: Peer-Scaffolding

At the beginning of data 6, Teacher 2 is involved in dyadic interaction with SJ about the workload of the course. Apparently, she is so wrapped up in this conversation that she does not once look up to scan the screen—as she is in the habit of doing. Consequently, she is unaware that another student also seeks her attention.

Data 6

SP		<i>[raises hand]</i>
T		<i>[in dyadic interaction with SJ] ... I would be really challenged - if I had to do this - but anyway - RIGHT - see how we can make the best of it =</i>
SX	→	<i>= P. wants to say something</i>
T	→	<i>[smiles; bends face towards screen; eyes scanning the screen; marked change in tone] OH - [inviting tone] yes?</i>
SP		<i>[asks question]</i>
T		<i>[answers question]</i>

In this data, we see that one of the students in class has noticed that a peer’s request for attention from the teacher has remained without an uptake. She decides to intervene and spontaneously breaks in on the teacher’s dyadic conversation-still-in-progress to alert the teacher. The teacher’s “OH” is a contextualization cue ([Erickson and Shultz 1981](#); [Gumperz 1982](#)) but also, more precisely, an *update marker* ([Heritage 1998](#)). It signals a renewed awareness on the part of the teacher of her institutional duty to attend to the needs of *all* the students. In technical terms, that means that her current dyadic interaction with *one* student is embedded in an institutional ‘task’ event in which all ratified participants

(Goffman 1981) in principle have an equal right to her attention (cf. Bannink and Van Dam 2006; Polanyi and Scha 1983).

It looks like the teacher's interaction with SJ was in the closing phase anyway. The discourse marker "RIGHT" seems to signal pre-closure and "see how we make the best of it" qualifies as actually performing the closure. It is worth noting, in this respect, that SX's excellently timed intervention move is ambiguous between an interruption and the strategic use of a pre-existing *conversational TTR* (*turn-transition-relevance place*; Sacks et al. 1978). At any rate, the student intervention results in instant repair. The teacher immediately withdraws from her current involvement with SJ and gives her full attention to student SP whose hand was not noticed. He is invited to voice his problem—which is solved on the spot.

Basically, the situation described in this data is very similar to that which arose in data 2. In both cases, a student solicits the attention of the teacher by raising his hand—which, initially, is not noticed by the teacher but here the student's participation problem is remedied—thanks to the alert eyes and spontaneous intervention of an attentive peer. Thus any problem of understanding or confusion about the nature of assignments that pre-existed can be addressed—and hopefully solved. Affordances for immediate feedback are created through peer-mediation and *peer scaffolding* (Vygotsky 1986), even across institutional roles.

6.2. Laughter and Play

In many everyday interactions including task-oriented ones, there is a felt need to mix business and play (cf. e.g., Bakhtin 1981; Bateson 1972; Goffman 1974). Schools and classrooms are no exception to that general rule. Various forms of by-play and side-play (Goffman 1981), sometimes in the margins of institutional practices, have been noticed and described (e.g., Bell 2017; Mehan 1980; Van Dam 2002a; Van Dam and Bannink 2017). Humor and jokes, however, are overwhelmingly situated phenomena. They are often dependent on the shared here-and-now and might therefore be less likely to occur in digital environments. Blum (2020) mentions as one of the essential qualities she misses in online teaching that there is no (less?) shared laughter.

Let us inspect Blum's statement with respect to the lesson episode transcribed below. It also occurred near the end of the course. The students are presented with (mock) exam questions that they can work on together in break-out rooms. Having started to announce the procedure she was going to follow in organizing their distribution across break-out rooms, Teacher 2 corrects herself and instead negotiates the final format with the students: they agree they are going to work in pairs.

Data 7

T		<i>Okay - alright - I'm gonna put you in - [break-off; change of tone] shall I put you in pairs↑ - so that you can work with ONE person↑ - yeah↑ =</i>
SSS		<i>= (overlapping) yeah okay sure</i>
T		<i>= okay - good - SO I want 14 participants to 7 rooms - [softer, self-talk] my arithmetic is really pathetic - [normal voice] but there you go - shall I do it automatically↑ =</i>
SSS		<i>= yeah alright okay</i>
T		<i>don't forget to join and I'll see you very shortly - okay↑</i>
SX		<i>wonderful =</i>
T	→	<i>= and whatever you do - don't PANIC - just follow the lead and you will get there =</i>
Sy	→	<i>= I'm panicking already (laughter T + SSS; see Figure 7 below</i>
Sx	→	<i>= I was born panicked (laughter T + SSS)</i>



Figure 7. Data 7: Laughter and play.

Language play and play on words are in evidence in nearly all cultural settings and communities (cf. Bell 2017) and in a linguistics course, a play on words might well be particularly appropriate. One of the ingredients of humor and play frames is making things bigger or making them smaller. Here two spontaneous student jokes are a play on the teacher’s advice (“*don’t panic—just follow the instructions and you will get there*”). One student immediately claims the hypothetical feelings of anxiety that the teacher has referred to: they are already ‘current’, *owned by him* in the here-and-now. Another adds that for him these feelings are *omni-present* and always have been since his birth. His formulation frames them as on a par with other qualities a human being might possess by birth like brown eyes or lots of hair. The student’s exaggeration draws laughter all around: we can see on the screen (Figure 7) that almost all students are joining in. It is perhaps not accidental that the trigger here is a particular word the teacher used to indicate strong feelings of anxiety: the word ‘panic’. With the final exam imminent, concern among the students about how they are going to do might well be high.

At the same time, the brief joking interlude may well take the sting out of local feelings of uncertainty that individual students could possibly entertain right at this moment. If so, they now know they are not alone in this. By mutual scaffolding—also in the emotional sphere—they stand strong and a brief interlude of joint laughter provides some necessary relief as well as confirming that bond.

7. Conclusions

The data discussed in this paper were recorded in the course of 2020 when—due to the COVID-19 pandemic—online teaching had all of a sudden become the ‘new norm’ in educational practices in our part of the world. That was a drastic change and it is no wonder we see that initially both teachers and students are inclined to act online as if they still share the same reality (cf. Seuren et al. 2021). We find evidence, for instance, that they have not quite internalized the fact that some of the routine (nonverbal; multimodal) practices they used to orient to in the ‘old’ f2f settings—like addressing someone by looking at them or making a gesture in their direction—have become ineffective, if not incoherent, in the new online situation (Sections 4.1 and 4.2). Garfinkel was right: sometimes things have to go wrong in order for us to even notice them—let alone evaluate and, if necessary, re-think them.

The data and analyses in this paper also illustrate how in a relatively short period of time teachers and students succeed in inventing themselves anew—and show great creativity in devising new ways and procedures to deal with the new circumstances. They adapt their lesson routines. Some teachers radically change their teaching schedules to find extra time to meet the students personally (Section 5.1). Others use the affordances of the technology to create mixed social/institutional domains where students can socialize

before and after class, as well as scaffold each other in the task domain (Section 5.2). These initiatives were demonstrably appreciated by the students (data email; Section 5.2).

In one case, the teacher and her students literally bootstrapped a new learning community in the sense that they even laid down a set of conventions and behavioral rules for online behavior in class in a protocol, what could be seen as a ‘Zoom etiquette’ (Section 5.2). It contains basic rules everyone is supposed to orient to (within the limits of their personal circumstances) like: ‘cameras on’ and ‘microphones on’ throughout class time; ‘be ready’ at the beginning of class; ‘attendance throughout’; etcetera. And to compensate for the lack of opportunities for informal peer interactions in the *dusk and dawn phases* of f2f classes, the teacher introduces a ‘Teacher-free zone’ that turns out not only to strengthen the social bond of the students but also helps to achieve task-related goals.

One teacher frequently used self-talk as a means of (meta)-communicating with her students about what was currently happening in class (Section 5.3). Such *complex footings* (Goffman 1981) overrule asymmetrical institutional (speaker/hearer) roles by constructing the students not as addressees in the institutional ‘lesson’ domain but as overhearers of a flurry of private talk—that they may choose to respond to—or ignore. This discourse strategy may have contributed to fostering a sense of informality (or even intimacy?), as well equality and ‘community’ that is in evidence throughout her classes. There is spontaneous peer and teacher scaffolding (Section 6.1) and spontaneous peer play (Section 6.2), as well as evidence of a lot of hard work on the part of all in the context of serious class business.

The picture that arises from these various datasets is one of a *web of interconnected institutional and informal/conversational discourse domains and subdomains* that both preexisted the lesson proper event or were specially created on the spot and fed into them. The data and analyses in Sections 5 and 6 illustrate how in a relatively short period of time even drastic changes in the contextual circumstances of teaching may be accommodated: in the hands of experienced teachers, robust and solidary learning communities may emerge.

To round off: At the time we are completing this paper (August 2021) schools and universities in the Netherlands and in many other places in the world are opening up again. The pandemic, however, is not over yet and not all students will be able to actually attend all classes on campus. Therefore, administrators of educational institutions advocate (and in some cases even require) *hybrid* teaching, which means that teachers will need to attend to both the students who are physically present in the classroom and to those sitting at home in front of a computer screen. This is a daunting task, since it combines the (ill-understood) constraints and discourse complexities of both online and f2f settings—it certainly provides us with a topic for further research...

Epilogue

So let us return to the question we raised in the Prologue. Does the detailed scrutiny of the practices and experiences of teachers and students in online teaching formats also yield insights into crucial aspects of the organization and orchestration of participants’ interactional behaviors in offline classroom multiparty settings?

We would like to argue that the answer to this question is ‘yes’—and will illustrate our position with an example from our study. The events described in data 2, where one of the students (SK) withdraws from the learning situation because his bids for the floor are not noticed by the teacher, might of course also have occurred in a f2f classroom. Teachers do not see/hear everything. But in that situation, a wink, conspiratorial smile, or whispered comment from a fellow classmate might have remedied the situation. It would have signaled to SK that at least he has been seen: that his plight has been noticed and recognized by his peers. Such a brief off-record interlude might well have mitigated his frustration and prevented him from tuning out altogether.

What happens in informal or collusive peer lesson subdomains—in ‘the cracks and seams’ of the lesson proper (cf. ‘byplay’; Goffman 1981; McDermott and Tylbor 1983; Van Dam 2002a, 2002b)—is important: it feeds into the discourse and affects what is taught and what is learned. It is striking that both Teacher 2 and Teacher 3 realize this and

spontaneously create a variety of (half-)off-record, more informal peer domains—and that these were highly appreciated by the students (cf. email data in Section 5.2).

So indeed, our analyses of the constraints of online data have also highlighted affordances of offline classroom situations that often remain under the radar. Peer play and more generally classroom ‘noise’—that is, interactional behaviors that the teacher does not see/hear (or willfully ignores)—do not usually end up as data: as having relevantly happened in class. Technically speaking they are ‘non-events’: they do not move the agenda and therefore literally do not count in mainstream classroom research. New eyes and ears (a new perspective) are needed to tell us where to look, where to listen. In that respect, the COVID-19 pandemic may be considered a worldwide breaching experiment: it provides evidence that classroom ethnography and, more in general, systematic, detailed, insider-relevant investigations are needed to make sense of what actually happens in class.

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Notes

¹ <https://www.nrc.nl/nieuws/2021/02/10/coronanieuws-eenzame-studenten-a4031391>; NRC 21 February 2021. Accessed on 21 February 2021. Translation authors.

² Transcription conventions

T	teacher
Sx	unidentified student
SR	identified student, initial indicating first name
SS	several students simultaneously
SSS	(nearly) all students
NO	capital letters, indicating emphasis
↑	marked rise in pitch, often indicating question
–	unmarked pause
=	immediate adjacent turns
[overlapping utterances
[]	contextual information, including prosodic features, events in the situation,
[]	non-verbal features
(())	English translation
xxx	unintelligible

³ In computer-mediated interactions there is often a time lag between consecutive incoming turns (cf. Seuren et al. 2021) that may differ for different relay modes. For that reason details of timing are difficult to interpret.

⁴ For reasons of triangulation we invited SK to comment on the episode described in Data 2: “[I] must admit that my feelings are accurately captured in this study. It did feel frustrating to start over again three times without getting picked, but I must also say that the IRF sequences were running much more smoothly in the follow-up classes. The module was one of the most interactive courses of this academic year and [the teacher] certainly enabled us students to critically engage with the material that we had seen over the course of eight weeks.”

- 5 SK also spontaneously shared his reflections on Section 4.2 as a whole: “[T]he parts about non-verbal and multi-modal practices [...] cleared up some education-related questions I had asked myself in the past (questions that are primarily related to non-compliance of students in an online setting). Personally, I always thought that us students were deliberately more reserved in an online setting because of the newly acquired anonymity that Zoom and other conferencing apps have to offer, but the finding that gaze-, and sound-cues were missing definitely explained why participation can stagnate at times.”
- 6 Although in principle Zoom shows 49 participants on screen in gallery view, the size of the individual images of course decreases according to the number.

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