I.2 Videography on the Way to the Analytical Short Film
Managing the Ambiguity in Interaction regarding Video Material

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This chapter gives a brief overview of research methods using video material, lead by the question how these manage the ambiguity lying in interaction regarding this footage. The argument is put forward that, from a perspective of symbolic interactionism, in order to adequately make assertions regarding video material it is necessary to use video itself as a key statement in scientific discourse.

Introduction

Advances in technology, especially the digital revolution, can be seen as one main impulse for the usage of video in empirical pedagogical research (Schnettler and Baer 2013, 9; Seidel and Thiel 2017, 2)[1]. Like an adolescent that is so eager to use a new technological gadget without really knowing what to do with it, the methodological progress could not keep up with this

1 Seidel and Thiel (2017, 2) differentiate the role of video in this field as (1) a medium for the documentation in a process-based perspective, (2) teaching material or (3) as stimulus in standardised tests (mostly referred to as video vignette, see below). This article explicitly deals with how the medium video can be analysed in research, thus referring loosely to role (1). Regarding the usage of video material in university education, especially in teacher education, compare e.g. Janik et al. 2013; Helmke 2012; Riegel 2013 for an overview, Brouwer and Robijns 2013; Pea et al. 2004; Seidel et al. 2010; Zahn et al. 2009 for exemplary settings with accompanying research; and Dorlöchter et al. 2013; Krammer and Reusser 2005 for a wide array of best practice examples. The question of the usage of video of students' own or others' teaching is discussed in Seidel et al. 2011; Mina íková et al. 2016, the performative function of the camera in the classroom is brought into mind by Fankhauser 2016. One scenario with accompanying research is also sketched in Chapter IV.1 *The Analytical Short Film in Teacher Education*. The usage of short videos as stimulus in empirical research is often referred to as video vignette originating from the tradition of the vignette as "variable description of persons or situations" (Baur and Blasius 2014, 721, Transl. DP), see Baur and Blasius 2014, 723; Fankhauser 2016, 32; Moser 2012, 263. For exemplary scenarios compare Lindmeier 2013, 54–55, 2013, 46; Schwartz and Hartman 2007, 11, regarding the creation of vignettes (which is often not made transparent) Seidel et al. 2010. Although being widely used in research, their advantage over text-based vignettes could not yet be shown clearly, see Lindmeier 2013, 58.

pace (see Helmke 2012, 357). This can be seen as one cause of the current situation with its confusing multitude of methods for analysing videos (Corsten et al. 2010; Goldman 2007; Rauin et al. 2016).

The merits of using audio-visual media in education research, especially in music teaching, cannot be neglected (Fankhauser 2013, 1; Rauin et al. 2016, 9–10). For a music-pedagogical perspective which is often focussed on aesthetic processes as well as aesthetic products (e.g. Wallbaum 2000), the possibility of addressing both in the analysis of video can be seen as a huge benefit (Gebauer 2011, 18). Also, significant aspects of musical or general communication like gestures are only discernible in the audio-visual medium (Kranefeld 2008; Kranefeld and Schönbrunn 2010). The possibilities of using video as a "time-machine and microscope"[2] (Rauin et al. 2016, 10; Rene Tuma 2016 i. pr., 64–73) in the analysis of data is another among the multitudes of purposes that make the use of video nearly indispensable in contemporary (music) pedagogic research.[3] Using video in pedagogic research can also be seen as an answer to the problem of the missing relevancy of practice in this discipline (Einsiedler 2011, 43).

The multitude of opportunities and problems the medium of video proposes in social empirical research (Dinkelacker and Herrle 2009; Goldman 2007; Helmke 2012) also leads to the multitude of classification systems of corresponding approaches. Methods of analysing video have been sorted by the inference of the coding procedures (Janik and Seidel 2009), their ways of dealing with the question of transcription (Moritz 2010), the influence of the camera on the recorded scene (Fankhauser 2013, 1), different epistemological understandings (Goldman 2007, 6) or by ethical issues (Goldman 2007, 7), just to name a few. This multitude of systems may at first yield a picture of disorder. However, if a taxonomy is not only seen as a means for giving order to existing, but for the constitution of new knowledge (see Kaiser 2004, 76–79), the diverse taxonomies of videographic research methods can be understood as a sign for the evolving discourse around this topic.

2 In the sense of repeatedly watching a sequence and having the possibility of slowing down or speeding up the action, zooming into details of the picture, etc. ...

3 A big part of recent empirical (music) pedagogic publications use video in some part of their mostly mixed-method-oriented approaches (e.g. Burnard et al. 2008; Goldman 2007; Wallbaum 2010, 2012, 2013; Hammel 2012; Kranefeld and Heberle 2014; Tobin et al. 1989). For a brief overview regarding publications and conferences in general didactics research compare footnotes 2–4 in Rauin et al. 2016.

The Problem of Video: Syntactical Density and Ambiguity

This chapter puts forward the argument that video material itself should be used as a means for scientific statements. For this, we want to order methodologies of videographic research by how they manage the *special ambiguity* that manifests itself in interaction regarding video material.[4] One pre-condition for this approach lies in the assumption of symbolic interactionism that "all aspects of the social world are negotiated, constructed, and reproduced […] through ongoing processes of interaction and subjective interpretation" (Johnson 2011, 111–112)[5]. In the following, we argument that a specific difference in symbol schemes we resort to when interacting regarding video or text material leads to a difference in interaction regarding these sources.

First, we want to make clear what we mean by referring to the concept of *syntactical dense symbol schemes* and the differentiation between *depictions* and *descriptions* following the philosopher Nelson Goodmann (Fankhauser 2013, 11; Goodman and Philippi 2010). A *symbol scheme* is understood as "a collection of symbols, or 'characters,' with rules to combine them into new, compound characters" (Giovannelli 2010, ch. 3.2) that is "governed by *syntactical* rules – determining how to form and combine characters" (ibid).[6] In everyday life, e.g. when reading this text, we generally resort to a specific symbol scheme, for instance the English alphabet. Second, *depictions* (e.g. a picture of a chair or a video of a music classroom) and *descriptions* (e.g. a text describing what the chair looks like or what is *happening* in the music classroom) differ in one central property of the symbol schemes that can be used to *read* them. When reading a text, we would, (**before** starting to interpret what we are reading) refer to the symbol scheme of the English language. This scheme consists of the letters of the Roman alphabet (a, b, c …) and a (theoretically infinite) number of their possible combinations (all possible words). When *reading* a depiction we would, (again **before** interpreting it,) depending on our point of view (often implicitly), refer to another specific

4 This approach is inspired by the idea of communicating through the medium of a film presented as the primary function of the ASF combined with reflexion on dealing with blurring in wholes and parts (Excursus "Dealing with Unschärfe", 101–109) in Chapter I.3 *The Analytical Short Film*.

5 Regarding the relation of symbolic interactionism and practice theory, which can be seen as guiding background for the ASF, compare Kneer and Schroer 2013, 384.

6 In opposition to symbol systems which are governed "by *semantic* rules – determining how the range of symbols in the scheme refer to their field of reference" (ibid).

symbol scheme: colours, luminance, object types, object relations, and others. Even if both symbol schemes may have an infinite number of elements, the difference between the symbol schemes used to *read* either descriptions or depictions lies in their *syntactical density*.

The term *density* is derived from the way it is understood in mathematics. For example, the well-known symbol scheme of *real numbers* (the numbers we normally operate with in everyday life) is dense because between any two given numbers, e.g. 1 and 2, there can always be found one in between, for instance 1.5 in this example. Then, I can go on and find a number between for instance 1.5 and 2 and so on, ad infinitum. In contrast, the *integer numbers* are not dense because there exist entities in the symbol scheme between which there are no more entities of the scheme. For instance, I may be able to find the number 3 between 2 and 4, but I will not be able to find any number between 2 and 3. Easily speaking, we can refer to a *syntactical dense* symbol scheme with the term *continuous* as opposed to *discrete* in *not syntactical dense* symbol schemes.

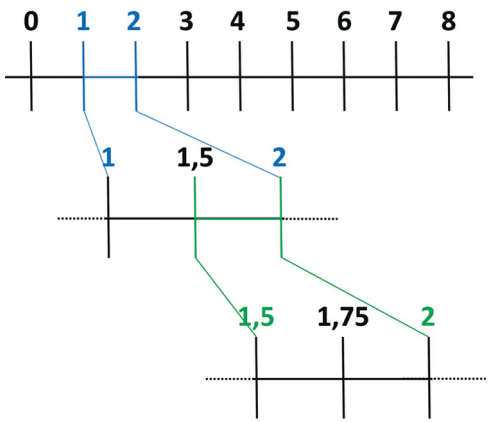

Fig. 1: The density of the real numbers

The symbol scheme of for instance, the English language is a discrete (not syntactical dense) scheme. When I put all of its members (all letters and all possible combinations of them [i.e. words]) in a specific order (e.g. alphabetical), I will not always be able to find a word or letter between two others. Even if I would use all possible combinations of the 26 letters in the English alphabet and sort them in alphabetical and word length order, there would be no word between e.g. abc and abd. In contrast to a language like English a symbol scheme used to *read* a depiction, for example a picture of a chair, would be continuous (syntactically dense). For instance, there is no limit to the number of the different shades between brown, yellow, blue and red in the symbol scheme colours I could resort to when wanting to describe

Foto: privat

Fig. 2: Focussing on specific details of the photography of a chair, zooming in: Within each element in this sequence, an infinite number of elements can be found.

the colours in the picture of an object like a chair. Putting this thought in different contexts, in analysing the texture of the wood, I would always be able to differentiate further in my findings. Or, when focussing upon a specific detail, between any grades of magnification, there will always be an infinite number of additional perspectives that can be taken in.

Consider the screenshot of a scene in a music classroom below (Fig. 3). If we start to read this picture (from our perspective as music education researchers), we might resort, for instance, to a symbol scheme that differentiates between the teachers, the students, furniture, and so on. Regarding the teacher, we can differentiate clothing, posture and more. However deep we go, *as long as we decide to take in every imaginable differentiation*, there will always be something more in between in this symbol scheme we use to read the depiction of the music classroom. Just like the real numbers where I can always find a number between any two others, symbol schemes we refer upon when reading depictions are syntactical dense or, easier speaking, continuous. In contrast, as soon as we decide to write down or talk about our ob-

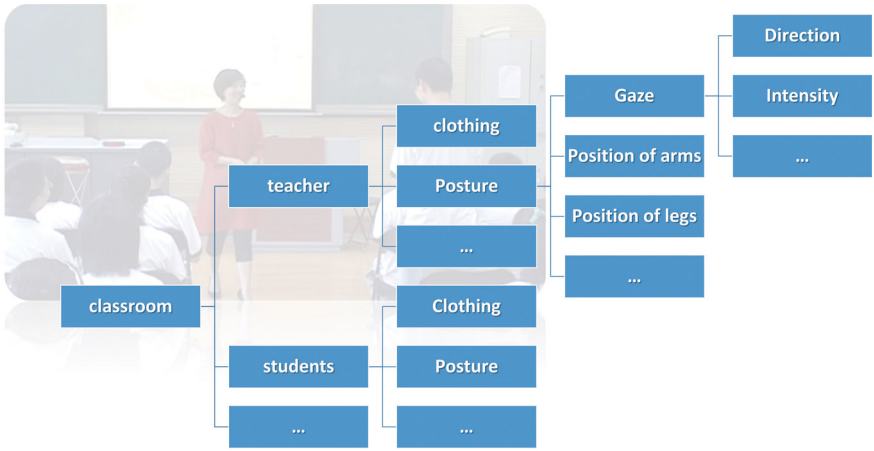

Fig. 3: Syntactical density of a symbol scheme for reading video data: Just as I can always find a number between any two numbers in the scheme of the real numbers, I will always be able to differentiate more in the symbol scheme I refer to when trying to describe a picture or a video (Source of the screenshot: Beijing-Lesson, angle 1, 39:03).

servations, we will do this using a discrete symbol scheme of e.g. the English language.[7]

Now what does this mean for the above stated *special ambiguity* that manifests itself in interaction regarding video data? Although interpretations of both depictions in videos and descriptions in words can be diverse, we claim that the depiction still has a higher degree of ambiguity than the text. Even if we might disagree with another person's interpretation of a specific text, we would agree that we both are reading the same characters and words – be-

7 This is to be held apart from different interpretations of a text. While descriptions may be discrete on a syntactical basis regarding the used symbol scheme, on a semantic basis there still exists a continuum of possible connotations with different words that are largely dependent on cultural issues. (This is why Goodmann does not refer to natural languages as so-called "notational" (in other terms: one-to-one corresponding) symbol systems, see Giovannelli 2010 and John Lee 1998.)

cause we are referring to a *discrete* symbol scheme.[8] In the case of a video, we can only agree that we are both *reading* the same thing if we agree upon using a common symbol scheme. For this symbol scheme to work reliably, very clear distinctions would need to be made. We would, for example, decide upon a specific palette of colours, types of textures or types of teacher and student behaviour: a discrete symbol scheme would have to be established. With this, we always have at least one additional "transformation step"[9] when analysing depictions in comparison to descriptions, thus always giving interaction regarding video material a special ambiguity.

The following sections illustrate and evaluate how three different empirical approaches handle this special ambiguity in interaction regarding video.[10] At the end, traits of a new approach to working with video data, the Analytical Short Film, are formulated.

Approach 1: Raising Objectivity with Narrow Perspectives – Theoretically Evolved and Low-inferent Codings

In order to reach scientifically approvable standards when working with the information overload from video data, narrowing the perspective upon specific and very clear questions can be one approach. In our picture of the chair, even if we see the whole chair, we would for instance focus only on the structure of its backrest without going in too much detail (Fig. 4). The symbol scheme we refer upon would consist only of a selected number of

Fig. 4: Focussing on a specific part of a chair

8 For example, we can completely agree that this sentence starts with the letter "F" and not with something a little bit apart from it between an "E" and an "F" (syntactic dimension). However, we could discuss about the role this sentence takes in this specific publication (semantic dimension).

9 In the understanding of Latour that the world is transformed in several steps to find its way into the scientific discourse with each step moving further away from the empirical findings as described in Fankhauser 2013, 8. See also Latour 2007.

10 The following is inspired from a classification by Janik and Seidel 2009 which differentiate between large-scale deductive and small-scale inductive approaches to video material.

items, like a pre-defined selection of colours, of materials, and of forms. We would thus look upon the video material from a very specific perspective approaching only the information necessary for getting clear answers.

This approach is common to large-scale video-surveys (see Lotz et al. 2013; Pauli and Reusser 2006; Reusser and Pauli 2013) with their low-inferent[11] and theoretically evolved codings. This applies also to settings with very clearly set theoretical models (in effect-based research, see Proske 2011, 15–16) like the dependence of singing performance on instructional forms in choir rehearsals (Davis 1998), the impact of sign language on the usage of a singers' voice (Tervoort 2010) or the impact of literary fiction on the Theory of Mind (Kidd and Castano 2013).

Example 1: Taking a selected segment from the Beijing-Lesson, we could for instance decide to analyse the interdependence of gestures of the teacher and the students in detail in orientation on a specific classification[12].

1	2
33:10;03	33:12;08

1	2	3
33:13;00	33:13;23	33:14;26

Fig. 5: Interdependence of hand/arm-gestures of the teacher and upper body inclination of a student (Source: silhouetted stills of the Beijing-Lesson, teacher: angle 1, student: angle 2)

11 In contrast to high-inferent codings, a low-inferent approach requires a small amount of interpretation (=inference) by the coding researcher. This is usually achieved by formulating very clear indications for specific codings.

12 For instance, Sager 2005 (following Ekman 1988) proposes a detailed system for analysing body movements e.g. by the elevation, pivoting, inclination, rotation and bending of the shoulder, the upper arm, the elbow, the hand … in different ways.

In Fig. 5 above, stills of two gestures of a teacher and three gestures of a student are shown. We can see, that from still 1 to 2, the teacher raises her chin and inclines her upper body, and, about a second later, an exemplary student also changes the inclination of his upper body and chin in a 3-step-process. We could now record hand, arm and upper body inclination angles. As modern video analysis software (*Kinovea;* Dartfish) allows these observations to be done on a semi-automatic basis, this can be accomplished over a great number of teacher-student-interactions and exported for analysis in statistical software. With this information, a theory regarding the interdependence of certain body movements in classrooms could be formulated.

However, if following this idea of referring to a discrete (and thus easier measurable) symbol scheme for analysing video, two main questions remain: (1) If a video (or the picture of a chair) can be read with a continuous symbol scheme as described above, what is the result of ignoring the bigger part of the information that can be drawn from it? (2) And, if one formulates several theories about isolated aspects of educational praxis in the above way: Is it always possible to apply them together when explaining classroom praxis?

Regarding the first question, one result is that the ambiguity in interaction regarding video material is clearly reduced. However, we strictly rule out alternative (and potentially more plausible) interpretations from differing (scientific) perspectives. Also, the relevance of the context is neglected: If you evaluate an isolated aspect like the quality of a piece of wood in Fig.4, it would be relevant to know that it is the backrest of a chair and to know its function, because otherwise you risk making an implausible evaluation. When analysing chin and upper body inclinations in classroom praxis, context information like the words or other sounds that can be heard in the scene are ignored, again opening up the risk for implausible evaluations. This stands in context with the general problem of "projects working in quantitative-generalizing style that have to contextualize their results and translate them into 'locally meaningful terms'" (Rauin et al. 2016, 23, transl. DP).

The second question refers to the principle of superposition known from the natural sciences: When, for example, an object is thrown into the air, physicians describe the way it moves by isolating two independent forces: first, the initial force executed on the object by the hand that moved the ob-

ject, second, the force downwards derived from the earth's gravity. Natural scientists know that patterns of movement that are calculated with theories regarding each of these two forces can – in this case – just be added up resulting in the pattern of movement of the thrown object. Of course, the principle of superposition only works if the two forces do not influence each other. In educational praxis with its high complexity and multitudes of influences, this assumption can hardly be held up regarding any two causalities regarding phenomena in the classroom.[13] Thus, even if we formulate a clear thesis, for instance about the influence of teachers' gestures on those of pupils: it might (latest) lose its validity when used together with a thesis about the same influence for instance regarding the tone of voice, as the influence of this upon gestures cannot be neglected.[14]

What is more, it should be noted that the idea of direct causality in classroom praxis that is put forward by theories like the ones presented in example 1 is severely put to question by newer system theoretical approaches to education research that put the contingency of classroom praxis at the centre (Proske 2009, 811).

Fig. 6: Focussing (nearly) all the details on specific parts of a chair

Approach 2: Discovery in Grounded Perspectives – Lost in Detail?

Another approach dealing with the ambiguity in interaction regarding video can be found on the one hand in the documentary method (Bohnsack 2009) and on the other hand in

13 Also compare Chapter I.3 *The Analytical Short Film* (section "Dealing with Unschärfe") regarding (1) classroom praxis as a resonating process (106) and (2) that a depiction like a video cannot be described as "composite in an absolute way"(104).

14 Of course, we could start putting these influences into a universal theory. However, we claim that, when doing this, due to the above considerations regarding syntactical density of video, we would be caught in an infinite process, thus leading the point of narrowing our perspective upon specific measurable phenomena ad absurdum.

grounded theory-oriented settings that use video data alongside other data (Miko 2013, 153; René Tuma und Bernt Schnettler 2014, 877; see Strauss 1998, 27). In contrast to approach 1, simply speaking, the goal is to include as much information as possible regarding very specific situations in the video data. Referring back to our picture of the chair, we would focus on one (or more) specific parts of it and go into detail as much as possible (Fig. 6).

Examples for this approach can be found e.g. in studies about different aspects of classroom culture (Hecht 2010; Mertens et al. 2014) that take a very detailed and reflective look at classroom praxis.[15] Techniques useful for such research can be found for instance in the (video) sequence analysis (Dinkelacker and Herrle 2009, 75–92) where the course of interaction in a videographed situation is analysed in an iterative manner in a process consisting of seven different steps (with a multitude of sub-steps each)[16]:

Example 2: Again, we can choose the perspective on teacher-student-interaction in the Beijing-Lesson. For exemplification purposes, we do this only partially in a very rough scheme as analysing video in this way always goes very deep into the material. After selecting a relevant sequence for our analysis (step 1) we have to decide upon the individual entities lying in our interest (step 2):[17] In the example with two clips of 1–2 seconds length included on the Analytical Short Films-DVD, the focus lies on the teacher's movements and utterances ("the text")[18]. For reason of representation, we want to identify them here with the following two stills:

15 A special example for an approach of this kind is represented by the video-interaction-analysis that tries to discover "resources, knowledge and practical considerations" (René Tuma and Bernt Schnettler 2014, 879) of interactants as well as the sequential order of interactions.

16 Other techniques proposed by this author are (1) the constellation-analysis, which follows a similar pattern like the sequence-analysis, but focusses on the simultaneity of actions, (2) the configuration-analysis, which refers to the position of objects in the videographed situation and (3) the segmentation-analysis which tries to give a structure to the course of events of a video. Especially the latter can be used as predecessor to the herein presented sequence-analysis. A very helpful overview is given in Dinkelacker and Herrle 2009, 113.

17 Dinkelacker speaks of "individual utterances" ("einzelne(n) Äußerungen", transl. DP, Dinkelacker and Herrle 2009, 76).

18 To help keep focus, in a specific process of analysis, the researcher should differentiate between the action of his or her interest (the text) and the influencing context (Dinkelacker and Herrle 2009, 77). As stated below, the context data is suspended for a moment in steps 3–6 of the sequence-analysis.

Fig. 7: Two stills from the Beijing-Lesson representing the two entities (in the form of two short video clips) of our sequence-analysis. The focussed person of this analysis is marked.

The next step (3) would be to find a multitude of possible interpretations of this entity while intentionally ignoring our pre-knowledge of the situation. To accomplish this, first of all (3.1) the entity is to be paraphrased concerning auditive or visual utterances:[19]

We can see a person in a red dress who is moving her hands up and down two times over her stomach region while moving her head from down-left to mid-right. She is standing in an upright position. At the same time, she changes the position of her feet from open (in about 90°) to nearly parallel. All three movements seem to correspond to the rhythm of the Chinese words she is speaking. These translated into English mean: "Pay attention to your breath."

Secondly (3.2) different interpretations are to be formulated as "stories in which the utterances can be a suitable element" (Dinkelacker and Herrle 2009, 82, transl. DP):

a) Supporting gesture: The speaker is explaining that in order to put the focus on the respiratory system it is helpful putting both hands on the stomach region in order to identify where the air is going.

b) Final gesture: The speaker has given a talk about the importance of the respiratory system and is making her final statement: "Pay attention to your breath", supported by the up-and-down-movement of her hands.

c) Humorous chitchat: In style of chitchat the speaker has been talking about a good meal she has had before – using the gesture of the hands

19 As the classroom action is visible from three perspectives at once, the paraphrasing can be done in a very detailed manner.

moving up and down over the stomach region as an illustrative support of her feeling of fullness afterwards. As a humorous addition, she is telling that it is not easy to breathe when having eaten so much.

d) *Dance instructor: The speaker is doing different very small dance movements to a specific text. She also wants to tell other persons that they should focus more on their breathing while dancing in order to control their body tension.*

As a last part of step 3 (3.3), we try to identify similarities and differences of these interpretations:[20]

In all cases, the speaker person is in a somewhat elevated position as she is telling something to other people. However, the grade of this elevation differs: while interpretation (c) puts her into a partner role like someone joking with friends, interpretations (a, b, d) put her into the role of an instructor. The gestures she uses are interpreted either in an illustrative function (a, c, d) or in a moderating function in putting an end to the previous talking (b).

In the following steps 4–7, we would now think of possible following actions (step 4) and then start watching the next entity of our sequence. In this process, some of our possible interpretations from above will be supported while others will have to be modified or dropped. This process is then repeated with the following entity and so on (step 5). As a result, we will have constructed a hypothesis regarding the structure of our analysed sequence – maybe we will come to the point that the speaker is increasingly using her hands as supporting gestures or that she has the goal of controlling the posture of other people. This hypothesis is further to be refined (step 6) and finally confronted with the context information, for example regarding the other people in the classroom or regarding the fact that she is a teacher (step 7). Upon analysing a multitude of sequences in this way, we could for instance formulate a theory about how the teacher deliberately uses her body language in order to control the students' movements.

20 It is important to point out at this stage that in sequence-analysis we first deliberately ignore the simultaneous context outside of our chosen text, the teacher's actions, as the focus of this method lies on analysing the action sequentially. Of course, in many cases, an additional constellation-analysis will be recommendable. Refer especially to Dinkelacker and Herrle 2009, 82–83, regarding this point.

The resulting product of our research will be a text composed in a discrete symbol scheme. Again, as in approach 1, we have reached the possibility of communicating with less ambiguity regarding the video material. Also, resulting theses have a more describing character not proposing direct causality in the classroom. This also makes it more viable using them together, as theories of a describing nature cannot be "just added up" in the way theories from approach 1 could be. Last, through the very detailed analysis of specific parts of classroom praxis that takes into account different interpretations, the possibility of implausible evaluations that rule out the context gets smaller. However, the possible multitude of ways of reading video material and thus the possible multitude of interpretations still gets – necessarily – cut down by the use of a discrete symbol scheme.

When following the idea that one central aspect of classroom praxis is its contingency (Proske 2015, 27) – simply speaking the observation that nothing can be completely determined in such complex situations – we can see that videos in contrast to texts have a higher potential of making this contingency visible. Even if this reduction of contingency might be somewhat desirable in scientific statements, it can be interpreted as a loss when referring to video through the idea of *gestalt theory* that small parts[21] together can be sufficient for a "whole" to emerge *in praxis*.[22] Even if video is only a depiction of praxis, it is much more plausible for a gestalt to emerge in referring to a continuous rather than a discrete symbol scheme, as possibilities for interpretation are far more open, thus making the "leap to a Gestalt" (Stern 2010, 5) more probable. Thus, a gestalt of a lesson, for instance the RED-atmosphere in the Bavaria-Lesson (see Chapter II.1 *RED – A Supposedly Universal Quality as the Core of Music Education*) or moments of self-paced learning in the Scotland-Lesson (see Chapter II.8 *Enacted Possibilities for*

21 Which ones of course depends on our perspective, see Chapter I.3 *The Analytical Short Film,* section "Dealing with Unschärfe", regarding Wittgenstein: "That depends on what you understand by 'composite'" (104). This does not mean that any Gestalt can emerge from a given video.

22 The easiest example is the picture of three circles with a missing edge each, which, when put in a specific order, make a triangle appear between them, cf. Fig. 4 in Chapter I.3 *The Analytical Short Film,* 105. As in current Gestalt-Theory, Wallbaum claims this principle not only for visual phenomena.

Learning in Goals- and Results-based Music Teaching), can emerge in a more plausible way by seeing it in praxis or at least in video.[23]

With this, a key moment in video analysis inherent to both approaches presented above stands out: the step when the video is being transformed into text or (compare above) when the continuity of the symbol scheme is being left behind. In our example of the sequence-analysis above, this happens at the beginning of the 3rd step in the paraphrasing of the focused entity. In the low-inferent analysis in example 1 (78), this happens at the point where the inclination angles of specific body parts are extracted. Throughout the arsenal of videographic methods, this process of transformation (mostly referred to as *transcription*) is being dealt with in different ways: Some approaches put it at the very beginning of their analysis[24] using different levels of reflection regarding the symbol schemes used (see Moritz 2010). The ambiguity in talking about video material is overcome through the use of a necessarily narrowing (discrete) symbol scheme. Some approaches try to make their symbol schemes very elaborate and complex in order to capture as much as possible of the praxis – these systems often show the danger of "getting lost in the thicket of symbols" (Reichertz and Englert 2011, 36, transl: DP). Other approaches reflect this problem in moving the process of transcription to a later state in the research process, thus still keeping the contingency of praxis before transcribing a video sequence (Rabenstein and Steinwand 2016). Whichever way it is taken, from the moment the video is being "transformed" into text, the possibility to identify the emergence of a gestalt is being more or less suspended.[25]

23 Also compare with the claim in Rauin et al. 2016, 24, that the meaning of central codes that emerged in qualitative analysis can very often not be transported adequately through thepresentation of "illustrative transcribed instances" (ibid.).

24 Or even before analysing the material from the perspective of the main research questions, e.g. in a TIMMS-study where videos were verbally transcribed with removal of all "country-specific information", Pauli and Reusser 2006, 784.

25 A case in-between can be identified in the reflective picture interpretation, shown e.g. in Bohnsack 2009, 61–65, where the formal composition of a picture or a video still is being shown by graphic means ("The reconstruction of the planimetric composition aims marking the overall composition of the picture-surface by as few lines as possible" in Bohnsack 2009, 61, transl. DP).

Approach 3: Broaden the Perspective at the Cost of Clarity

Approaches that try to keep the possibility of reading video with a continuous symbol scheme, thus giving the possibility for a Gestalt to emerge, can be found in ethnographic studies using video data. Here, the contingency of (classroom) praxis is partly being handled by the researcher from the moment of data collection, e.g. in choosing specific "view aisles" ("Blickschneisen" Mohn 2011, 95, transl. DP), thus using the camera as a medium for *audio-visual notes* in a self-reflective way. The focus does not lie in a specific and objective "thin description" of a video document – it lies in the reflecting subjectivity of the researcher that is being shown in order to give a "thick" picture of the field in study (see Geertz 1973, 6)[26]. In order to achieve this, researches often include *video as substantial statements* in research reports. This is done, for example, by means of the documentary movie (see Mohn 2013), the ethnographic film (Ayaß and Bergmann 2011) or the sociological film (Kaczmarek 2008), thus following a demand of Reichertz and Englert 2011 that videographic analysis should hold up the multimodality and complexity of the moving picture. Like the sociological film that tries to show "the social reality with sociological knowledge" (Kaczmarek 2008, 4), these audio-visual documents can be understood as scientifically recorded and scientifically edited material (Kaczmarek 2008, 8; referring to Knoblauch 2004, 126).

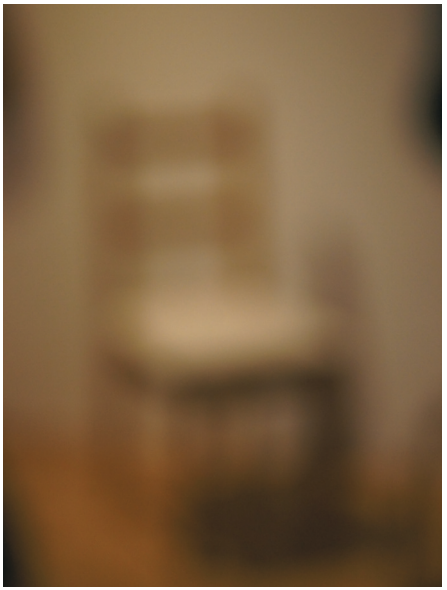

Fig. 8: Covering the "whole chair" for the cost of clarity

26 Geertz 1973, 6, differentiates roughly between the thin description of a situation that describes what can be seen (phenomenologically), and the thick description that shows a special interpretation on the basis of a "a stratified hierarchy of meaningful structures" the researcher builds up in field. Also see Chapter I.1 *On Comparing*.

Short Example 3: Regarding the Beijing-Lesson, the researcher would not settle only upon the video material supplied with this book. He or she would rather take his or her camera into the classroom making visual notes, thus arranging these (e.g. in a video editing program) in a first interpretation process, reflecting this process and then going back into the field to gather more information, in an iterative manner (see Mohn 2011, 94–97). A result could be a documentary movie showing in detail several scenes about the way the students and the teacher interact in the classroom, supplemented with videos from individual or group interviews and other situations outside of the classroom.

In contrast to the approaches 1 and 2 above, the presence of video in our final statements keeps the contingency of classroom practice visible. As the viewer has the possibility to resort to a continuous symbol scheme in the reception of the research product, different gestalts can emerge more easily. However, this also shows a problem of this approach: In contrast to approaches 1 and 2 above, the ambiguity in interaction regarding video is not reduced. Even if these films are created following clearly laid out standards, like the criteria for the sociological film (Kaczmarek 2008, 10)[27], if they (alone) are received like final theses of a study, they yield the possibility of misunderstandings between the researcher and his or her audience much more than their traditional counterparts. Also, the question remains if whether criteria of good practice in qualitative research, such as transparency, can be held up in the creation of a documentary movie. To stay in our picture of the chair, these approaches would try to grasp "everything" with the price of getting a kind of blurry image that (only) gives us a vague idea of our chair.

27 The film should be about a sociological theme, the researcher creating it should have sociological as well as technical competence, the picture, tone and commentary should be suitable to the theme, the film has commentaries and is not being set in scene for the production and the filmed actors are disturbed in the least possible way during the filming.

Mastering Ambiguity with Consequent Transparency

A way of reducing this possibility for misunderstandings[28] for a visual research product lies in strictly following the rules of transparency by making as clear as possible – in a suitable form, preferably text (we call this the Complementary Information) – the process of the creation of this product. In this way, the ambiguity in interaction regarding video is on the one hand reduced by offering a discrete symbol scheme for the interpretation of the visual research product; and on the other hand, by including video itself in the final research statement, a Gestalt can emerge (in a slightly guided way) due to the possibility of resorting to a continuous symbol scheme in reading the video material.

According to the idea that an argument can be formulated in audio-visual media (see Kurt 2010, 199), this chapter thus proposes the usage of video (the ASF) supplemented by an additional text (the CI) as a medium for presenting scientific findings in the form of scientifically produced visuality (Kaczmarek 2008, 8; Miko 2013, 155). For being accepted in a scientific community, comparable to established discourses, specific ways of communication in the audio-visual medium in the sense of "viscourses" (Miko 2013) would have to be established (see Krammer and Reusser 2005, 48). We believe that using the method of the Analytical Short Film presented in this book in various ways can make this possible.

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28 Together with effectiveness, Strauss 1998, 325, proposes clarity as central traits of a scientific report.

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