

Trans-sequential Analysis, or: A production-focused approach to procedurally organized work

Martina Kolanoski

Goethe University Frankfurt/Main

ABSTRACT

The article provides an introduction to Trans-sequential Analysis (TSA) – a sociological approach to the study of discourse work. TSA focuses on the procedural production of ‘discourse objects’ (formative objects) in legal, administrative and political sites as members’ work. The methodological guidelines that set out how to conduct a trans-sequential analysis, that form the focus of the first half of the article, emerged from studies of the specific kinds of collaborative practices found at these sites. However, TSA is often positioned as a research approach applicable to worksites of all and any kind. In order to address the question of TSA’s domain of applicability, I will take it outside the fields of law and politics. I will first outline the main ideas of TSA, and subsequently present empirical material from a NATO airstrike to discuss the value of TSA for military research. My analysis shows that ideas developed under the rubric of TSA can be used as methodological sensitising devices for studying collaboration in workplaces in which members do not organize their work trans-sequentially. I argue that the conceptualisation of a military target as a complex formative object allows for a new and better understanding of military practice in the context of today’s air wars.

INTRODUCTION

Sociologically, organisations can be understood in terms of their capacity to construct a whole range of different kinds of tangible or intangible products (Giddens 2006). But just what organised human activity is actually geared to producing as well as how it produces it is largely neglected in sociological work. The analytical approach presented in this article, Trans-sequential Analysis (TSA), focuses on the products of procedurally organised work at political and legal sites. It begins from the observation that members orient to the things they produce – the subject

matters matter – and that work in social theory and the heuristics used in empirical studies should, therefore, be equally concerned with them.

TSA is a sociological approach to investigating the methodic, multi-sited, collaborative, multi-modal production of ‘discourse objects’ such as political positions or legal cases. Thomas Scheffer has developed the approach in a series of ethnographic studies and a growing number of scholars are now working with the ideas outlined as part of TSA, either explicitly deploying it as a method of analysis (Stoll 2018), a “theoretical focus” (Schmidt 2016) or selectively using elements from it (Porsché 2018; Kolanoski 2017, 2015b; Kiefer 2017; Preiser 2017). Although the main ideas of TSA have been developed in English publications on “adversarial case-making” (Scheffer 2007, 2010; Scheffer, Hannken-Illjes, and Kozin 2007), the bulk of the literature, including texts which introduce TSA as a distinct approach to discourse research, have been published in German (Scheffer 2008, 2015; Scheffer et al. 2017; Scheffer 2014c, 2013, 2014a). This article seeks to fill this gap by outlining the main ideas for an English-speaking audience, drawing out the links to ethnomethodology in particular.

TSA was developed in and through a series of ethnographic studies in legal, administrative and political settings. The methodological guidelines that set out how to conduct a trans-sequential analysis emerged from studies of the specific kinds of collaborative practices found at these sites. The research methods thus reflect the members’ methods and intendedly so. However, TSA is applicable to other worksites as well, and I want to explore how the study of work practices outside of law and politics can profit from ideas developed in TSA. To that end, I will first outline the main ideas within TSA, and subsequently present empirical material from a NATO airstrike to discuss how TSA can be used for investigating, for example, military targeting as an illustrative extending case.

I. IN THE PROCEDURE: EVENT AND PROCESS

TSA draws on many different authors and is best placed alongside approaches such as “multi-sited ethnography” (Marcus 1995) or laboratory studies (Knorr Cetina 1988). However, an initial and enduring interest in these studies was an empirical engagement with Luhmann’s conception of procedures as autonomous social systems. A key concern was to address what procedures mean when studied as something that people do, as things they methodically produce and orient to.

According to Luhmann, procedures are said to be parts of other systems that ‘entertain’ them (e.g. legal procedures in the legal system), but they develop an autonomous structure through their emerging history; a *procedural* history. Procedural histories make it possible to reduce the complexities the procedure was designed to deal with. Indeed, what qualifies a procedure as an autonomous system is the fact that it lays down its own internal historical tracks in distinction to the “general history” outside of the procedure (Luhmann 1983, author's

translation). In a legal case, this achieved procedural history makes it possible, for instance, to continuously eliminate possibilities until the case can be decided, the so-called procedural funnel.

TSA looks at the practices of ‘procedural funneling’ and studies how, in the course of these practices, the creation of ‘just this’ product emerges from the continuous elimination of other possibilities for its composition. It conceptualises procedures as a “multi-temporal event-process-relation” (Scheffer 2010) and analyses the “business of the procedure” including the “business suppliers” (Zulieferbetrieb) that deliver the necessary materials for that business (Scheffer 2015, author's translation). Notions like “Zulieferbetrieb” are taken from economics and, as I will show, one aim of TSA is to treat production processes at discursive sites similarly to the fabrication of cars or other produced goods at their sites of manufacture.

While conversation analysts tend to treat talk to be the primary locus of sociability (e.g. Schegloff 1987), TSA's focus on the ‘discursive things’ relates situated talk to the procedural production process. Making a contribution to an ordinary interaction can involve saying or doing various things, or failing to say or do something when saying or doing something is expected, and co-participants interpret those sayings and doings as turns in the conversation. These contributions are produced in-situ and require in-situ work. A case in the legal system or a position in political discourse involve different kinds of contribution with respect to the more distributed forms of collective work that go into their production. These ‘discursive things’ are accomplishments that still exist when the talk is over and they are available for further use at other times and other places.

Understanding what it is the members are procedurally accomplishing is thus an important initial empirical task. In the case of work inside parliaments, for instance, the ethnographer can hear people repeatedly refer to ‘positions’: “We need a position on this topic!”, “Office X has a different position on this!” (Scheffer 2014b, author's translation). The question for the ethnographer doing a trans-sequential analysis is, then: Where do these positions come from? How are they fabricated? How do people work together to produce something like a unified position on, e.g., ‘rural development’? How do participants orient to these objects-in-the-making so that they are able to know their ‘career’ and thus maintain the ‘what’s next’ orientation within these extended processes that enable them to develop further? Which media and materials are used to save the production process ‘so far’?

Where and when is the field?

TSA examines the mutually constitutive features of events and process. Talk here of ‘*processual events*’ highlights the significance of events for the process and, vice versa, the significance the process has for events: „Processual events add to the

process by means of organised memory and legitimate expectations (...) Claiming that an event is processed does not render the event irrelevant (...) The process may empower the event. The process may multiply its effects and consequences. In return, the process can never fully determine the event's course" (Scheffer 2010, 55).

Writing and recording are fundamental means used by members to link situated work to a production process and to accumulate the various individual work contributions invested in them (Scheffer 2013). TSA instructs us to look at the methods, manoeuvres, technologies, media and material equipment with which participants talk up, in several senses, their discursive objects across a range of scattered situations. The ethnographer looks out for those situations that are recognisable as episodes in the production of the 'object-in-the-making': a lawyer dropping a note on the case after a discussion with a client, or a Member of Parliament (MoP) presenting the position-in-the-making in a work group meeting jotting notes on the printed draft. Following the position-to-be/the case-to-be, the ethnographer observes participants constantly translating and transforming discursive materials for follow-up uses:

In court, the barrister keeps up his analytical stance, listening with his fountain pen and notepad ready. He receives the witness testimonies in the same fashion as the written statements, by taking notes (...) Inaccessible to the public eye, his notes are focused on 'just words' that are instantly and carefully modulated for later utilisation. These 'permanent' modulations harmonise disparate materials and representations. They 'translate' disclosed texts as well as staged testimony [into procedurally relevant materials]. Different times and places are folded into one format. (Scheffer 2010, 146)

To reconstruct the formation of the object through the procedural work process the ethnographer assembles diverse, multi-modal materials. She follows the practical course of the work, keeping field notes and keeping track of the produced materials, including its modifications. The multi-modal ethnographic design thus mirrors the multi-modal practices of those observed. Consequently, participants' working documents are key in reconstructing procedural work as a members' accomplishment. As a result, discarded documents become a most promising site from which to look out for supporting materials once used to drive the procedure along.

Temporally, a trans-sequential constellation can comprise shorter or longer chains of episodic work (PEI-PEX, see figure 1). It may include, e.g., the preparation work of a barrister before a hearing, interactions and paperwork during the witness-examination, and preparations for a closing speech. The event-process relation is then reconstructed as a practical achievement of the various participants who have managed to collaborate and invest work in the things being worked on.

Spatially, the production process is not bound to a specific location: the ethnographer finds her field everywhere, and just where, participants invest work in the object.

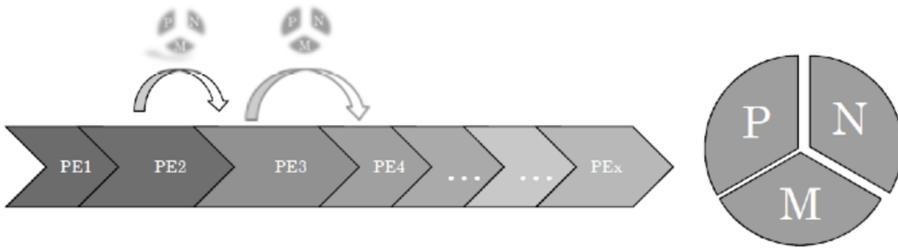


Figure 1: Procedure and its processual events (PE)

Following the product-in-the-making (instead of specific actors or the actions at a specific work site) makes it possible to explore its circulation and multiplication, as well as the different involvements, translations and transformations which constitute it. Figure 1 shows the production of the formative object in the course of linked processual events. The components of the objects (P, N, M) will be introduced later in this article.

Two temporal orders

These work episodes are analysed in their real-time unfolding but also with respect to their “productive fall-out” (Scheffer 2014b, author's translation) or, perhaps, “fall-in”. That is, the sequential unfolding of action is analysed with respect to two temporal orders: 1) the moment-to-moment sequential unfolding of the situation, and 2) the sequential unfolding of a process in which sequences of situations are linked through imports and exports. Ethnographic observations are carried out with these two temporal frames in mind and involve constant returns to the question of the practical linkage of event and process. These might include: “How is a brief meeting linked to the process of case-making?” “How do the barristers’ (...) protocol notes matter in the [case’s] further course?” (Scheffer 2010)

Emerging agency of the work objects

TSA stresses the emerging agency of the work objects in the course of their own production. Situations of work are not only structured by those involved (as a narrow sequential approach to the analysis of action suggests), but co-structured by the object-in-the-making. The work done ‘until now’ belongs to the situational circumstances insofar as it is made available in the present situation. This shift does not give up on the analysis of action as practical action but it includes the

‘formatting’ effect of the object-in-the-making and how it mobilises the collectives that work on it (Scheffer 2015). From this perspective, participants are not so much disciplined by rules or action programmes (as classical organisation theory suggests) as they are by their orientation to a possible and success-promising object which increasingly generates demands for circumstantially appropriate contributions at circumstantially appropriate times. For academics, the most familiar example might be collaboration on a joint journal article. Beginning with a research idea that may have been orally discussed over an after-work beer with a group of colleagues, some of the thoughts find their way into a first rough draft, maybe as a combination of full phrases and vague bullet points. Contributions are often defined at this stage and the paper itself informs those collaborating about the status and possibilities for contributing to it. Reaching certain thresholds makes it increasingly more difficult to make changes, and disciplines the changes that can (still) be made. Most remarkably perhaps, the moment the paper is translated into another language, or after receiving the official file, changes come at increasingly higher costs and those involved will try to avoid further alterations to the content wherever they can be avoided.

Example: Communicative context established in an asylum hearing

Scheffer’s early study of the asylum seeking process in Germany (Scheffer 1998) sets itself up as an extension of the conversation analytical concern for the moment-to-moment organisation of talk. Scheffer argues that participants competently organise sequential connections between procedural situations by turning episodic work into a procedurally historicised and thereby recoverable past. In this way, the *situation* is methodically woven into the procedure.

An asylum hearing brings together an official case worker, the asylum seeker and, if required, her interpreter. This situated encounter can be analysed in terms of the sequential organisation of questions, answers and translations, revealing the collective accomplishment of just-this conversation by the participants’ verbal and non-verbal contributions. This approach to the data shows the participants in their joint activities of methodically accomplishing the situation they are in. As Scheffer puts it, “[the] participants appear as an ensemble in a joint endeavour of sense-making” (Scheffer 1998). But these situations also contain utterances that are not directed to those present. This becomes obvious, e.g., when the case worker uses his microphone to dictate the protocol of the hearing: “Good morning, please note the following protocol file number E2084215246 after justification 23, please [insert] the following text question colon in your application for political asylum at the Bundesamt you have declared that you are not in possession of identification papers full stop” (Scheffer 1998, author's translation).

This utterance is not meant to be understood by those present, nor are they meant to respond to it. “Justification 23” works as a ‘coded instruction’ for those

non-present others who will go on to type up the protocol and make the changes to it at a later date. The here/now orientation is thus complemented by a procedural orientation on the part of the administrative staff: how exactly to proceed with IT in what follows. The ‘communicative context’ thus includes absent but procedurally implicated audiences. Diverging from conceptions of “extra-situational context” proposed by Cicourel and others (Duranti and Goodwin 1992), who point for instance to frames of reference and shared background knowledges, TSA formulates an extension of the conception of the situation based on the methodic production of a turn taking organisation and the cumulative and accumulating work on some thing beyond the situation as a members’ accomplishment. It equally diverges from the concept of “inter-situativity” (Hirschauer 2015, author's translation) in that it does not propose the chaining of entire situations but only certain sequences of activities. Members are found to pass along sequences of their situated work. They connect their present work to earlier accomplishments (imports), meanwhile making their work available for further treatment in future episodes (exports). Conversation analysis, the arguments goes, concentrates on the management of a present encounter and thereby falls short of the retrospective and prospective orientation of participants. To understand singular events as steps in a procedurally organised work process, the argument continues, the analysis of situations of action needs to be conceptually open to these imports and exports.

II. THE FORMATIVE OBJECT AS ORGANISED COMMUNICATION

There comes the moment when a procedure ends and the formative object leaves the (multi-sited) place of its production. The ethnographer as well as the producers are left behind; the creators inside MoP’s offices, for instance, may now find their position again reflected back at them in newspapers or in television coverage. Once published, the discursive object has significantly increased its outreach and can, potentially, be picked up by people outside the organisation. It is ‘out there’ and can be connected with other products of a related kind; a case can be related to other cases, a political position is in conversation with other political positions. Drawing on and respecifying Luhmann’s theory of social systems again, the procedurally developed ‘discursive thing’ appears to have become a communicative turn within the functional systems of law and politics.¹

¹ For Luhmann, social systems emerge through the continuation of communication (Luhmann 1981). His approach to analysing communication (and thus to society), however, starts from the initial premise that communication is, *prima facie*, improbable. The conditions for continuing communication are said to be different on the interactional level (with persons being co-present and mutually perceiving each other) than on the level of functional systems where “the logic of connectivity follows generalised symbolic media” (Nassehi 2005). Generalised symbolic media (such as money in economics, power in politics, truth in science or justice in the legal system) provide a

Following Luhmann, TSA is also interested in communicative “connectivity” in law and politics (Nassehi 2005). But it does not follow Luhmann in treating connectivity as provided by what a communication symbolises, it instead focuses on the features of contributions that certain systems require to continue their operations. It therefore studies politics, for example, not in the mode of governing, as Luhmann would do, but as a professionally established form of discourse which provides for the stabilisation of and interplay between political opinions. Or, that is, ‘political positions’.

Following this production-based approach to social communication, it is not power that makes it more likely that political communication continues, as Luhmann argues, but rather the ingenuity that went into the making of political positions, their usefulness for various purposes and their capacity to remain coherent and not lose their shape. Similarly, it is not justice, or the hope for justice, that guarantees the continuation of legal communication, but the finalised cases that make up the case-system and the fact that legal actors will (re)turn to them later – as, e.g., precedent – in their legal work. In this regard, formative objects are considered in terms of how well they serve the conditions of participation in politics or law. Politicians need political positions in order to deliver convincing speeches in parliament, i.e. to participate in parliamentary politics; lawyers need to have finalised cases that will become cases in the case-system in order to do law.

The figure below spells out my understanding of the relation between interaction, organisation and society as envisaged by TSA. The finalised formative objects can be detached from the procedures which generated them as a stable communicative unity (triad) and can be communicated outwards.

solution to the problem of communication, i.e., ‘will this be understood as it was designed to be?’, as they provide reasons to accept the intended meaning of a communication: they render acceptance of communication expectable in cases where rejection is probable, e.g. in written communication (Luhmann and Barrett 2012). Political power, for Luhmann, thus provides the condition for enhancing the chances for governmental communication to be accepted: “Government authorities are obeyed under the threat of physical force and because it must be assumed that society regards this threat as legitimate (e.g., as lawful).” (Luhmann and Barrett 2012, 121f.)

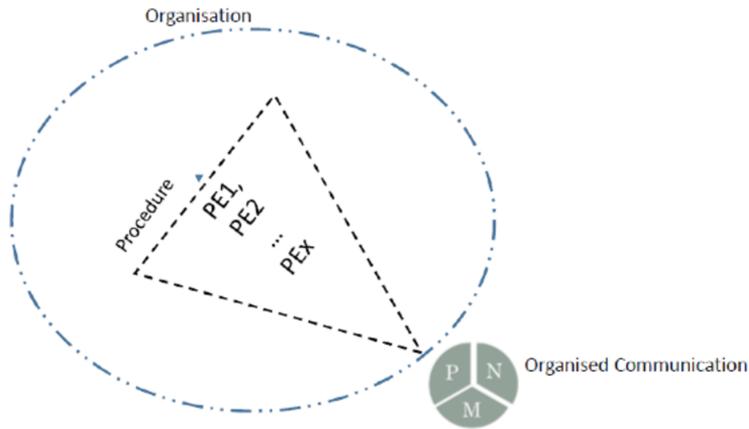


Figure 2: Formative objects as organised communication

Scheffer draws on Luhmann and uses the term ‘generalised communication media’ for the formative objects in their finalised version (Scheffer 2014b). The term indicates their relevance for ‘communication in law and politics’. I prefer to speak of ‘organised communication’, also a term used by Luhmann and one which describes how organisations ‘communicate with their environment’.

*The tri-partite composition of the formative object:
More than a world known in common*

What is distinct about the conception of the formative object is its tri-partite character. The fabricated object is more than the ‘construction of [a bit of] the world’, more than a ‘screened object’ (Anderson, Hughes, and Sharrock 1990) or a ‘cultural object’ (Garfinkel, Lynch, and Livingston 1981). Studies in ethnomethodology have demonstrated how norms and morality are implicit in the construction of things in the world – they inform and guide our perceptions, are tied into our sense-making and into the accounts we give, e.g., when making a course of action (un)recognisable, etc. (Jayyusi 1984, 1991; D. R. Watson 1978). The concept of formative objects thematises the relation differently. While not denying that norms play a constitutional role in the creation of facts, it also understands norms as a separate component of the object, next to the action performed or suggested in it. Formative objects combine a ‘world known in common’ with normative assumption and an action orientation. In working out a political position, for instance, a problem definition is brought together with the ideological convictions of the party and suggested measures to be taken. The political position thus incorporates an understanding of the world (P), a proposal for political action directed at that world (M), supported by general party convictions (N) as applied. This kind of triad can also be found in legal case work where a completed case brings together

the facts of the case, rules and judgment – here, the finalisation of the case concurrently performs the judgment; it is action itself.

It is quite common to think about legal decision-making as a sequence of three successive activities, where each prior step constitutes the basis for the next. Latour, too, identifies these three steps (Latour and Brilman 2010, 229): (1) constitute the facts of the case, (2) subsume the facts into the rule of law, (3) arrive at a judgment. The concept of the formative object brings these activities together. The activities solidify into object components. The three components inform each other, and, once they are integrated into a unit, their mutually informative character has a stabilising effect on the object. This is Luhmann's 'procedural funnel' performed by the formative object: a continuous reduction of possibilities in all three respects. It is not possible to change one without effects on at least one of the others. If the problem is described differently, then different norms will come into play and different measures can be suggested.

The unity of the formative object

The formative object is an object in the sense that it 'remembers' and chronicles the work of other people at other times and other places. Participants in proceduralised processes can be routinely observed in turning to their diary notes, briefing papers, files, etc., because those things make 'work done' available to them in the situation. Different material things thus serve as media to transfer situated accomplishments across episodes and settings of work. Yet, the formative object is not any of its materialised forms. While the developed/-ing discursive unity requires materials as content carriers, it exists independently of them. Though it is transformed as it is shaped and reshaped, the formative object exists across its realisations. It is exactly the identification of the three components which hints at the cross-cutting form of the existence of the things that have been fabricated. The components have been fastened together to become a stable unit. It is a unity which transcends its different material or immaterial realisations. Thus, *the* 'political position' can be found in the final paper, IT can be quoted in a newspaper, IT can be explained in a speech before parliament, IT can be spun and re-spun. The people who write speeches and give them do not invent the political positions they set out but formulate THEM in particular ways for particular audiences for practical political purposes according to the demands of the situation.

The procedural production of the object does not, however, resolve the issue of meaning and sense – or absolve us from engaging with it. The fact that a discursive object is produced and that its components are created and tied to each other does not mean that its meaning is fixed in the process: making sense of the product remains a situated achievement. Research findings need to be read and discussed; a case needs to be found, interpreted and related to other cases; a position needs to be placed somewhere, heard and responded to, etc. Often just one component

is singled out for critique. A political position, for instance, may be criticised on various lines; as being wrong in the definition of the problem, as signalling a party is not sticking to its own stated values, or because it introduces measures that are ineffective or counterproductive.

II EMPIRICAL CASE: TAKING TSA TO PLACES OUTSIDE LAW AND POLITICS

Trans-sequential analysis, as I have demonstrated in the preceding section, provides both a description of specific collaborative practices in formal procedures, i.e. members' methods, and instructions for undertaking sociological inquiries. However, if TSA as a set of methodological guidelines for researchers has indeed emerged from studies of members' methods as empirical phenomenon, this might suggest it can only constitute a coherent ethnomethodological research approach when followed in settings where members themselves organize their work trans-sequentially. At the same time, TSA is often positioned as a research approach applicable to worksites of all and any kind.²

In this section, I will address the question of TSA's domain of applicability by taking it outside the fields of law and politics. I will do this by discussing how TSA can be used to study work settings which do not share much of the practical features of legal case work or political positioning. My empirical example is not based on ethnographic fieldwork but takes a transcript which documents soldierly work during a NATO-airstrike in Afghanistan as its single piece of data. I intend to use this material to draw out some initial ideas about how we might treat a military target as a formative object and discuss the benefits of the concept for a new and better understanding of military practice. I will show that the concept of the formative object can be productively employed to explore the collaboration of military personnel across various sites. I shall argue that TSA as a methodological sensitising device sheds light on the following aspects of soldierly work: 1) participants' limited access to the work of their collaborators, 2) the composite nature of the military target and its grounding in more than sense-making of the world 'down there', 3) the mutually informative and stabilising effects the target's components have on each other, and 4) the status of the military target as a complex form of military communication and a turn in war.

² I am referring mainly to discussions within and around the colloquia 'Political Ethnography' held in Berlin and Frankfurt/Main organized by Thomas Scheffer over the last ten years. The colloquia are very inclusive both in regard to what is considered 'political' as well to what is considered 'ethnographic' and it has become an intellectual exercise to draw on TSA (or elements from it) to think about any empirical data presented.

The Case

On September 4, 2009, a German command unit based in a ground camp in the province of Kunduz, Afghanistan, called in two U.S. F-15E fighters to provide air support for ground forces, a mission also known as ‘Close-Air-Support’. The situation they were called in to deal with involved a group of Taliban fighters and two hijacked fuel trucks stuck on a sandbank in the Kunduz River.

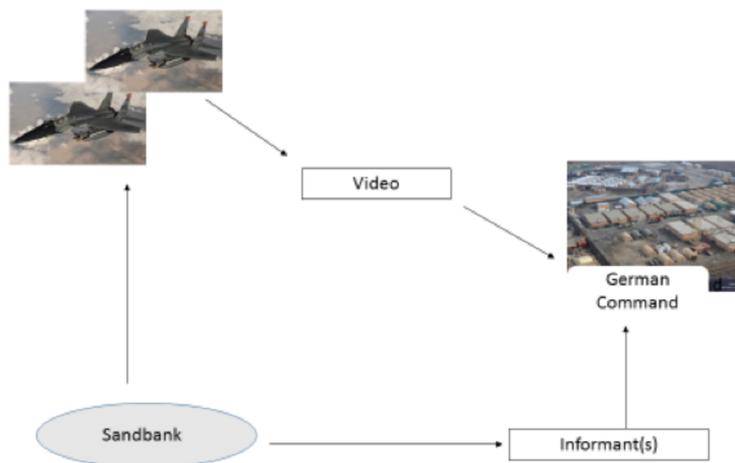


Figure 3: Simplified illustration of collaboration in particular military operation

The people on the sandbank had been identified as “All Insurgents” and killed as such. In the investigations that followed the attack, however, it soon became clear that large numbers of civilians were killed or wounded in the attack, with numbers ranging between 20 and 179 dead. A parliamentary inquiry and legal proceedings followed to establish what had gone wrong (Spiegel Online, November 27, 2009; Ruttig 2013; Gregory January 2, 2014; Deutscher Bundestag Drucks. 17/7400; Generalbundesanwalt beim Bundesgerichtshof, 16.04.2010; Wilke 2017; Kolanoski 2017, 2015a). In the end, however, no-one was held responsible.

The intense investigations into the airstrike did not lead to a widely accepted “master narrative” (Lynch and Bogen 1996) about the incident. Enduringly contested details include the point that it had been variously and sometimes simultaneously framed as a defensive and/or offensive attack. When the German command had requested Close-Air-Support to continue their observation of the hijacked trucks, the ISAF air support central had rejected the request and had given the information that they could only get air support if they were dealing with a ‘troops-in-contact’ (TIC) situation, i.e. a situation where ‘enemy forces’ were firing

on ‘friendly forces’. Subsequently, the German command did declare a TIC, and Close-Air-Support was provided. In his testimony before the parliamentary inquiry and the Attorney General’s office, the German commander offered a dual justification for his decision. He had wanted to use the chance to kill the Taliban leaders he knew to be on the sandbank (offensive), but he had also feared that the fuel tankers might be used to launch an attack against his camp (defensive).

The transcribed situation and the process of target development

A first question which comes up when seeking to do a trans-sequential analysis of military targeting is if it is procedurally organized. Targeting can in fact be very eventful in character; e.g. transcripts of WikiLeaks’ infamous “Collateral Murder” incident documents a situation in which a target is first spotted, then qualified and finally engaged in short order (Eley, Mair, and Kolanoski 2018). In the case at hand, by contrast, the process of target development covers a period of 5.49 hours, and comprises the situated work done between the time of the first report about the hijacking and the actual strike.



Figure 4: Multi-sited process of target development with transcribed situation and undocumented activities

Three pieces of ‘naturally occurring data’ document the targeting process: (1) a summary report of the intelligence information available to the command about what was happening on the ground, (2) mute video material taken from the two F-15E-bombers that carried out the airstrike, (3) the transcript of the cockpit conversation recorded in one of the aircraft. The transcript contains communication involving and hearable by the two U.S. Air Force personnel on board of one of the F15 aircraft: a pilot and a weapon system officer (WSO). The original audio track is not available. U.S. authorities produced this redacted transcript and the German parliament published it after completing their investigations into the airstrike. The pilot uses separate communication channels to speak to his WSO, the crew in the other aircraft, the German Joint Terminal Attack Controller (or JTAC, the officer in charge of coordinating air and ground troops on behalf of the command) based

in camp Kunduz, and others. What is said on one channel is not available beyond those who have access to it.

There is then a distinctive form of procedural organisation at work in this case. The next question is whether the transcript constitutes sufficient data from which to reconstruct the targeting process and analyse the transcribed situation as a ‘processual event’. The answer here would seem to be unequivocal. The transcript in no way satisfies the requirements for data-gathering set out for TSA outlined above. I did not do ethnographic field work and I could not therefore follow the instructions for assembling field notes, audio-visual material, documents, files and interviews. The transcribed situation also only covers the 33 minutes before the strike. Mission-essential activities within the German camp were not recorded and could only be recovered through the various after-the-fact and partial testimonies provided by participants in reconstructions of the events. The whole process is thus documented in a sketchy way and this incompleteness cannot be ‘repaired’.

I want to argue, however, that the prospects are not as bleak as they may seem. This is because the lack of data can be understood as a feature of the field and thus itself a members’ concern. Limited data is not primarily a difficulty for ex-post facto investigators and researchers, but provides the lived conditions of informational asymmetry that the participants find themselves having to manage (Steensig, Mondada, and Stivers 2011; R. Watson and Carlin 2012). When the aircrew is introduced into the ongoing process through the device of the TIC call, the process is largely opaque to them. As a result, they have to work to recover the process of target development so that they are able to make sense of the situation they are in and tie it into a wider course of action. The object focus of TSA suggests that members, at least in part, establish an orientation to such processes through an orientation to the object of work and its ‘career’. I will show that it is possible to take up this line of questioning with just the transcript in hand.

Target handover

The transcript begins with the aircrew in the first fighter – labelled ‘F-15E-1’ in the transcript – passing on a first fragment of information to the aircrew in the second fighter: “the words we got were imminent threat”. In legal and political settings, participants make recordings, write down notes and other texts and thereby translate and transform discursive materials for follow-up procedural uses (multi-modal practices). Compared to document-based work environments where physical, semi-permanent records proliferate, the target as object seems to be less tangible as it is merely orally transmitted. From the ground command (GC) to the

aircrew (AC), and from one aircraft to the other, the target-in-the-making travels across different worksites without any printed forms or written messages.³

The following passage is taken from the very beginning of AC-GC interaction. Shortly after the F-15s entered the airspace in which communication with the ground became technically possible, the JTAC contacts the first pilot to pass on some of the target's properties in a scripted, condensed way. The verbal fact sheet supplies the pilots with crucial information. It is an instructive report (prospective: what to do next), but at the same time it is also a display of the work done: it is a specifically reduced summary of the parameters of the situation established so far. With this summary report, the aircrew is introduced into an ongoing process.

JTAC > F-15E-1

20:38:05 1 [redacted] number 1 .. [redacted] for number 2 [conversation
 2 stepped on by other radios] We've got err 2 trucks on a sandbank
 3 err with err roughly 50 up to 70 [redacted] no friendly forces in
 4 the target area [redacted] we've got also mortars in Camp Konduz
 5 with a gun-tgt-line of [redacted] with a max all of [redacted],
 6 clearance authority is with [redacted] [JTAC], we've got no
 7 restrictions, no restrictions on ordnance, hazards Konduz airfield
 8 is cold, and err [unreadable] is hot from [redacted]
 20:38:11 9 [redacted] actual QNH 1012 with 29,88 inches and weather is
 10 workable, how copy?
 11 [Control - F-15E-1 communication]

F-15E-1 > JTAC

20:39:12 12 [redacted] [F-15E-1] copies all
Excerpt 1: Fact sheet of the target

This orally communicated 'factsheet' tells the aircrew about the target-on-the-ground (who and what had been identified/spotted, Lines 2-4), the target's strikeability (here: availability of weapons on the ground and other parameters of action like the weather conditions, Lines 4-5,7-8) and the normative considerations in play (clearance authority and possible restrictions on the use of force, Lines 6-7). One could look at this sequence as an instance of 'sharing information' and topicalize the 'career of that information' (cf. Harper 1998) but the point is that the military is not working on information as such. They need the information to

³ Which doesn't mean that forms and documents are not in play. As part of the military accounting practices, the WSO actually writes down the 9-line in a pre-given form. However, my point here is that the form itself is not handed to the aircrew. Instead, the information for the form (9-line) is passed verbally through (repeatedly interrupted) radio channels.

assess the situation and use these assessments to plan, coordinate and conduct their planned action: engaging a military target. TSA instructs us to look for the things this activity is based on. The target handover in the above sequence provides a first indication that the thing the military is working on is more than the information about the people on the sandbank – it is more than just ‘seeing them as’ such and such (Wittgenstein 1967) although that is certainly involved too (alongside, e.g., ‘striking them as’). The making of a target integrates that which the military wants, can and will be able to attack – including all the physical and technical preparations of assembling technologies, machines and human beings in situ for that purpose. Based on the target handover, the military target can provisionally be depicted as comprising the following components:



Activities involved in the production of a military target:

I Wholwhat

- Target identification
- Target definition

II Rules

- Selecting and following applicable rules (RoEs)
- Following chain of command
- Seeking/giving clearance

III Strike/-ability

- All technical and physical preparations
- Getting in place, aiming cross-hairs, etc.
- Engagement

Figure 5: Components of the military target

While democratic principles of transparency and reproducibility are reflected in the way parties to legal and other formal procedures set up their work as an open archive offering multiple opportunities for re-assessment, the military target is not documented for that purposes. To the contrary, the career of the target is organized along thresholds which discourage practices of re-assessment, both during the operation and afterwards. The target handover can be interpreted as performing one such threshold. The target-as-produced that the aircrew receives from the JTAC is disengaged from the activities that have produced it so far: local uncertainties and contingencies in the target development process are deleted. Travelling across sites, the target-as-produced is constituted in a way which does not allow to revisit its production process.

How the aircrew proceeds from this point repays scrutiny. Cases of ‘collateral damage’ in which the military has killed the ‘wrong’ people, commonly raise questions about military identification work: how the military employed the distinction between civilians and combatants. Records of cases of military targeting that have been made public, as well as to publicly available military handbooks and instructions, suggest that responsibility for target identification is not strictly attached to a specific ‘worksites’ (e.g. the aircraft) nor to a specific role (e.g. a pilot or a JTAC) nor can it be treated as a consequence of access to a specific technology (e.g. live video feeds) per se. Making sense of what is seen and identifying alleged enemies based upon that may (or may not) be the aircrews’ task and they may (or may not) be thought of as having the proper resources for “reading a scene” (Suchman 1997). These are, instead, context specific matters and TSA helps us trace how they are resolved.

It does so because TSA asks how the object-in-the-making increasingly prescribes/reduces what can still be done with it and suggests that participants in these production processes orient to the career of the object to find out what has to be (or can be done) next. In this case, this means asking how the aircrew established an orientation to the career of the target and how they were able to tell what was still left for them to do. The sequential analysis shows that ‘questioning’ and ‘answering’ are key to the organization of joint targeting and for the aircrew to establish the remaining tasks for them when set against the discoverable and discovered career of the target. The conception of the military target as a tri-partite object helps us to understand that, in this particular case, the identification of the people on the ground was not the aircrew’s primary concern. Instead, they worked on identifying the military target as the command’s object of work, determined the specific things left for them to do, and, as a specific feature of this incident, tried to figure out what was causing them to think “something doesn’t seem right”.

Mutually informative components

The data shows that the ambiguous nature of the airstrike (defensive and/or offensive) constituted a source of trouble for the aircrew which they were unable to resolve. In the 33 minutes between their arrival above the target area and the bombing run, the aircrew struggled to make sense of the situation in light of the information they had received. Given that they were called to a TIC situation, an expectable scenario would involve ongoing hostilities with friendly troops at (or nearby) the target area. What is more, reading the transcript, it becomes apparent that the declaration of a TIC had not only led them to expect a specific kind of situation on the ground, it also suggested possible courses of action to be taken once there (doing a ‘show of force’ to scatter the people) and how these actions were to be legally covered. Various perceived inconsistencies thus commanded the aircrew’s attention: a) the action frame of ‘imminent threat’ AND the absence of

friendlies “anywhere close”, b) the kind of attack they were involved in AND how the Commander wanted it to be done (no show of force – an option that was explicitly ruled out contrary to procedural expectations), and, linked to that, c) bombing “that” (what they could see – probably, but not explicitly, the sheer number of people) AND the “current ROE and stuff like that”, i.e. their understanding of the compatibility of the specific command they had been given with wider operational guidelines¹.

Shortly before the release of the bomb a member of the aircrew uses the inter-cockpit channel to state that “something doesn’t seem right, but I can’t put my thumb on it” (21:02:54). In light of the civilians killed by the attack, one can be inclined to read this remark as anticipating the misidentification. But that interpretation would play down the obstacles in the way of the aircrew identifying what exactly might be wrong. The understanding of the target as an object consisting of three mutually informative components provides a useful instrument for exploring the organization of doubt and trouble during the airstrike. From that point of view, the trouble results from a misfit or misalignment between the target’s components in the airstrike.

In communication with the JTAC, the aircrew developed different approaches to reconciling the perceived inconsistencies. With respect to the identification of the target (I Who/What), they repeatedly questioned the whereabouts of the civilian contractor drivers (the only protected category of persons potentially on site the AC could deductively know about), and they also reported new people arriving, using this to query the definiteness of the command’s continuous claim that “everyone down there is hostile”. Alongside work of this kind, the aircrew repeatedly suggested they should engage in a show of force that would disperse the crowd rather than engage them and thereby displayed a ‘what’s next’ orientation that, over the course of time, became more and more clearly recognisable as in opposition to the commander’s plan (II Strike/-ability). Finally, they also tried to change the normative framework they had been told they were operating under (III Rules).

After the JTAC had ultimately dismissed the lead pilot’s proposal to set up the strike differently, namely by engaging in a show of force and only destroying the vehicles, the pilot explicitly refers to the ROEs that were to legalize their activities, the planned strike.² By suggesting the employment of an alternative legal programme to cover the engagement, the pilot moves from an orientation to adapting

¹ Just two month prior to the attack the Commander of the ISAF-operation had issued a tactical directive that limited the use of force and declared the prevention of civilian casualties a key factor for a successful mission.

² In other cases, these rules are not explicitly named, although worked with and applied (Elsy, Mair, and Kolanoski 2018).

the action to the rules of engagement, to an orientation to finding the type engagement which provides the permission for the action they are about to do.

F-15E-1 > JTAC

21:03:06. 1 [redacted] [JTAC] from [redacted] [F-
 2 15E-1], just in accordance with out Roe
 3 right now err is there anyway we can pursue
 4 this as a TST and get [redacted] approval,
 5 i.e. looking for a [redacted] on this so we
 6 are both covered

7 *[Inter-aircrew communication]*

JTAC > F-15E-1

21:03:28. 8 Clearance approval by Commander is given he
 9 is right next to me and I want you to only strike
 10 on the sandbank, only the sandbank

Excerpt 2: Alternative target category to cover planned action

In excerpt 2, the pilot suggests treating the target as a different target category, a TST (Time Sensitive Target), which implies that he would have to get approval from a higher authority. A TST is defined as the highest priority target category which needs to be engaged immediately: “In most cases, TSTs require immediate response because they pose (or will soon pose) a direct danger to friendly forces and/or non-combatants, or are highly lucrative, fleeting targets of opportunity” (Department of the Army - Joint Chiefs of Staff 31 January 2013).

About three minutes prior to the conversation in excerpt 2, the JTAC had declared the target to be “time-sensitive now”. As an attached feature of the target, time-sensitivity urges the aircrew to get ready for engagement as soon as possible. But as we will see, the attachment of the feature can also be used to draw further conclusions about the kind of target, the objectives and the normative framework. The upgrading of urgency had come as a response to the pilot’s report that people were leaving the sandbank. This local chronology may have confused the soldiers in the aircraft who were called to assist friendly troops under fire. On the face of things, it would certainly be plausible to expect that an “imminent threat” becomes time-sensitive with the realisation of the threat, and not with the premonitory disorganisation of the gathering. The GC’s reaction to the people leaving the sandbank may have given rise to the pilot’s impression that they might be dealing with a “highly lucrative, fleeting target of opportunity”.

The pilot justifies his question with reference to ROE issues: ‘being covered’ (Line 6) can be heard as a solution to the aircrew’s problems with respect to their ROEs. In response, the JTAC merely affirms the clearance approval by the

Commander (Line 8) and then initiates a change of topic, moving to the practical side of things (Strike/-ability): he gives up on the plan to attack the group in the river and states he only wants one bomb on the sandbank (Lines 9-10). As in other answers to the pilot's queries, we may ask if that is an answer to *this* question. It becomes hearable as an answer to a question that has, at least audibly, been received by picking up the topic "clearance approval". But it does not engage with the specific problems and concerns raised in the question. The GC doesn't share the "ROE issues" and the problems don't become shared problems, i.e. operationally relevant procedural problems. Instead, the ROE-issues remain the AC's problem while the GC seems to be dealing with the problem of a troubled AC. The JTAC has parried the pilot's 'attack' on the target-as-produced and stabilized the unity of the 'legitimate military target'.

Switch of interaction system

"On the hammer", eventually, the bomb is released. The release marks a point of no return: it fixes the object (first the object of work, not yet the object-on-the-ground which is still moving and reassembling) and performs the act of targeting. It is the 'military target' as an object that allows the participants to switch from an organisation of turn-taking within the team to an organisation of turn-taking with the 'other', the alleged enemy. The making of the military target, as it manifests itself in the act of targeting, thus comes to constitute an observable turn in a system of armed conflict. Targets are interpreted as turns in war; they are located, assigned, counted and responded to. Just as there is no law without cases and no politics without political positions, we may say, there is no war without a continuous generation of military targets.

'Brute violence', some have argued, cannot count as communication (Matuszek 2007). In that respect, it is important to note the transformation of the target in the moment of attack. The released bomb does not transfer the three components that the attack was constituted by: for the people on the ground it does not matter what kind of work was invested, which rules were applied, which categorisations employed. The tri-partite discourse object (as the soldier's object of work) is transformed into a turn in armed conflict that does not communicate anything else but destructive force. In the aftermath, the military target can re-transform into a discursive object again. It did so in the airstrike dealt with here; after the fact, it became clear the wrong people had been killed, and the whole process was returned to with the identification, the norms and the ways of proceeding questioned in the process. But at this stage, it was not the military's object anymore but part of the investigators' work object.

CONCLUSION

In the first section I outlined TSA as a coherent research approach to the study of procedurally produced 'discourse objects' (formative objects) in legal, political and administrative settings. As a research approach TSA sets out the parameters for a multimodal ethnography of procedurally organized work. It instructs the researcher to study situations in a procedure as 'processual events' in which participants invest work into the making of a 'formative object', which it conceptualizes as a tri-partite unit of solidified activities.

As a members' method, TSA describes the multi-modal practices of members and how they constantly translate and transform discursive materials for follow-up uses in procedurally organized work. TSA as members' methods thus refers to a specific kind of analysis which can be found in document-based environments. In these settings, the relative role of 'just words' diminishes next to writing and recording practices which select, highlight and recoverably record local work achievements.

The empirical analysis presented in this article drew on TSA for the study of a different kind of setting to those it is normally applied to, a military operation. The analysis focused on an aircrew introduced to an ongoing multi-sited targeting process and investigated how they oriented themselves to a joint work object; the military target. With reference to that example, I have attempted to show that ideas developed under the rubric of TSA can be used as a methodological sensitising device for studying collaboration in workplaces in which members do not organize their work trans-sequentially.

TSA as a methodological sensitising device rather than a full research approach provides the researcher with a set of questions (rather than a list of analytic steps) which pave the way for an object-focussed, procedural analysis: What do people work on? How do they manage to collaborate on an object over a period of time comprised of discontinuous episodes? Does the object develop its own agency; i.e. does the object co-structure the situated work done on it? Does the object of work bring together a description of the world, with norms and an action orientation, and are these components mutually informative and stabilizing? How is the object stabilized and fixed? How is it destabilized and undone? The manner in which these questions can be addressed depends on the actual features of the practical field and on how these practices can be accessed.

Data from the military field often give us incomplete access to the work of targeting. This paper approached this methodological challenge by showing that this is also a practical problem for participants in these situations. The target-as-produced that the aircrew receives from the JTAC is disengaged from the activities that have produced it so far. Asymmetric access to the production process can be considered a salient feature of military targeting which is oriented towards the ability to act/respond quickly. Apparently, military accountability is strictly

forward-directed, denying participants' options to 'go back' and re-assess. What is more, the conceptualization of a military target as a complex formative object shows how, for the purposes of the attack, identification work is inextricably conjoined with the military's use of violence and the legal regulations governing it. It is in revealing such considerations that the object-focused approach to procedurally organized work offers invaluable lessons for sociological research.

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