CONFLICTS AND ALTERNATIVE SOLUTIONS: HOW HOSTILITIES OBSTRUCT ALTERNATIVE SOLUTIONS

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The construction industry is said to have realised fewer productivity gains than other industries. At the same time, it is marked by a claims culture resulting in conflict and hostility between project partners. Improving project performance, however, requires cooperation between these partners. Therefore, I seek to explore the contingencies between claims culture and the exploration of alternative solutions. Within the autoethnographic paper, I use personal observation from my business practice as owner of a construction company of 40 employees in Germany. I provide and analyse two contrasting examples from my perspective as an employer on construction projects to problematise these contingencies. To illustrate these effects of a claims culture I describe incidents where alternative solutions were fostered and where potentials for creative solutions were not used. My first example shows that hostility stemming from the claims culture appears to be a severe hindrance to alternative solutions. The hostilities force contractors to a strong focus on contractual provisions and obligations. In consequence, the involved persons concentrate on defending themselves and their positions and refrain from exploring and suggesting new or creative solutions. These effects become even better visible in the contrasting second example, in which the claims culture and its hostility were absent. The project partners explored alternative solutions to the satisfaction of all parties involved. However, all project partners need to embrace the cooperative approach to make it a success and still the risk to be exploited remains. Although I present practitioner research, which often is solution orientated, I focus on describing and understanding the problem from my personal perspective. My aim is not to solve a problem, but to foster a discussion by providing heartfelt insider experience.

Keywords: alternative solutions, autoethnography, claim culture, practitioner research

INTRODUCTION

This autoethnographic paper seeks to investigate the relationship between a claims culture in the German construction industry and the reluctance to pursue alternative solutions within the industry. The claims culture is characterised to have a tendency towards conflict and to act opportunistically (Rooke, Seymour and Fellows 2004). Actual or anticipated conflict leads to a defensive attitude on the side of all actors in project teams. Therefore, the problem I address here is how a defensive attitude within the project team stemming from a claims culture influences contractors' approach to alternative solutions. I wonder how the claims culture influences individual's actions about alternative solutions. One may relate this to innovations as they are "new idea[s ...] implemented in a construction project with the intention of

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deriving additional benefits although there might have been associated risks and uncertainties." (Ling 2003: 635) However, I focus on the hostile and defensive attitudes are an obstacle to alternative solutions.

Autoethnography

To illustrate the problem, I draw on my experiences running a construction business in the wider Berlin area (Germany). The business employs ca. 40 persons most of the bricklayers and carpenters as well as some administrative staff. Our jobs consist predominantly of building structures from concrete and brickwork. Most of the jobs are on residential buildings, but we also build commercial buildings and work for agricultural businesses.

Among the many different forms of autoethnography, I research in the backyard (Wolcott 1999) of my own business. I tend towards the evocative application of autoethnography, where the emotions and impressions of the research move in the foreground (Bochner and Ellis 2016). However, I also include an analytic lens to understand my experiences within the wider academic context (Anderson 2006). The ethnographic material predominantly consists of fieldnotes and journal entries. I write field notes about experiences I made in my business. Usually, I take short notes briefly after the event and develop these notes into longer field notes in the evening. However, some material - stories and especially context - I create from memory. Often, I connect the experiences to my readings. Indeed, my attention to some problems is a product of what I read and hear in academic discussions. Ethnography and in particular autoethnography is not a straightforward method; it instead relies on what the ethnographer regards as significant (Emerson, Fretz and Shaw 2011). As it is in the case, I like to discuss here. The problem is one I struggle with in business. Therefore, I regard my approach close to "action research for the individual" (Ellis 1999: 677)

Claims Culture and Alternative Solutions

Construction contractors frequently find themselves in fierce competition during the tender phase. Often "tender prices submitted by contractors will be uneconomically low, with adverse effects on all participants in the construction process" (Latham 1994: 8) In other words, contractors submit under-priced tenders which do not cover their cost and subsequently do not produce a profit for the business (Latham 1994). Hence, they have to generate additional income. Filing claims and effectively managing them is often part of the business strategy of contractors to make projects profitable (Klee 2013, Rooke, Seymour and Fellows 2004). A vivid illustration of planning strategies to generate claims is found in Rooke, Seymour and Fellows' (2004) account. Claim management forces the parties to the project into contractual behaviour (Rooke, Seymour and Fellows 2003).

During recent chats about planning strategies to file claims as outline by Rooke, Seymour and Fellows' article (2004) a manager of a German construction company and a construction dispute lawyer confirmed that such mechanisms are widespread in the German construction industry. For contractors, it is disastrous if everything runs according to plan (Rooke, Seymour and Fellows 2004). Some unforeseen things need to happen to file claims. Otherwise, projects will not produce enough profit for the contractor, the manager emphasised.

My experience suggests that claim management practices as described above are more common on large-scale and public-sector projects. Regardless of project-size and

sector, all parties involved in construction process have experience with claims in one or the other form. Therefore, they are aware of cost impacts of claims. Especially the employers as well as their engineering and managing teams are suspicious of contractors as being "claims-conscious" (Chan *et al.*, 2010) and engaging in "claimsmanship" (Zack 1993). This suspicion appears to make it difficult to advance alternative solutions to making a project profitable.

In the process of filing claims, changes to the design or construction process usually play a central role (Rooke, Seymour and Fellows 2004). Changes are, thus, generally seen as problematic and costly (Shipton, Hughes and Tutt 2014). Yet. Shipton *et al.*, argue that changes can represent innovations and improvements to the project. Hence, changes should not be seen solely as negative and problematic instead one should consider positive effects of changes as, for example, improvements or cost saving.

However, when a negative attitude towards changes (e.g. alternative solutions) prevails, the opportunity of cost-saving is often neglected lest changes are assumed to produce additional cost (Shipton, Hughes and Tutt 2014). However, containing cost and generating profits not necessarily exclude each other. In my business, we seek to partner with employers; we explore the project files to identify ways of making the design more cost-efficient. Most of the time we share part of the saved cost with the clients but keep some of the money in 'our company's pocket'. That makes for an attractive offer for the client while raising our profit margins. (Bresnen 2009) As the project was due to commence, I came across the following experience:

DIFFICULT CONVERSATIONS

A couple of days ago we had signed a contract for a new residential project, and preliminary work on the project was about to commence. The project was an old industrial estate south of Berlin which underwent massive changes to the structure. Apart from the outer walls and some rows of columns and beams everything inside, and the complete roof had to be demolished. Our job was to improve the foundations, to secure the outer walls and to build a new internal structure of walls, ceilings and staircases.

During the tender phase of the project, we developed an alternative solution to enhance the capacity of the foundations. We brought in an external engineer in with whom we worked successfully on several prior projects. With his help, we could significantly simplify the process and hence save a reasonable amount of money. Yet the relationship with the project-engineer who designed the first solution was quite tense. The employer welcomed our solution yet raised the question why the project-engineer did not come up with something close to our proposal. And he expressed his frustration about the project engineer's performance.

I haven't been to these conversations, but I can imagine that the employer was quite frank in his critique. My experience with him suggests he is friendly and fair as long as everything runs according to plan but if not, one might find oneself in a very rough conversation with him. He won't be unfair, but the talk might be anything but comfortable. And I imagine this happened to the project-engineer he commissioned.

During this 'warm-up' period when the work was about to start, I took a closer look at the project. The original design said the ceilings should be made from a beam and claim block system. On previous projects, I had learned that compared to a simple concrete ceiling the original solution was quite expensive. Subsequently, I discussed my idea with my two site-manager involved in this project. We agreed on the fact that a concrete ceiling could save up to 30% of the cost for the ceilings. Yet both were reluctant to pursue my proposal. One of the site manager - who was involved in the negotiations with the client - said to me something like:

Haven't you seen how the employer acts? If anything goes wrong, he won't let us off the hook. And haven't you seen how defensive the engineer is? You can expect him to search for every minor flaw in our proposal make a fuss of it. On top, he won't cooperate, and he won't come up with solutions. Listen, when we propose this change, and they agree we're accountable for everything. If anything with our solution does not work - even minor things - they will hold us to account. And you don't want to be held accountable by this employer. He is really tough. And you have understood how defensive the engineer is. You don't want to be in a sandwich position between the two. If we stick to their solution - the beam and block system - we can charge them for everything unforeseen, but if we switch to our proposal, they could charge us for everything unforeseen even if it has nothing to do with the ceilings. And you know, there is much uncertainty in old buildings.

Consequently, we abolished our plan to propose this alternative.

The two cite managers recommended to me not to follow the established route of proposing changes and sharing saved cost but to do business as the contract required of us. The argument originated from an idea of defending oneself. They essentially said, don't make us vulnerable to counterclaims from the engineer. I could entirely understand their concerns.

On other projects, I had had very bad experiences with changing a design. Years before a particular project was weeks over time due to late permissions. I saw that we could meet some important deadlines by a slight change in design and thus save the clients from claims of another contractor. So, I proposed these changes and we agreed. We met the deadline of the other contractors and avoided damages. Afterwards, the client and the architect argued that the changes would not have been necessary and claimed money from me for lower quality.

The recollection of such experiences still angers me. Even now I can feel the disappointment and frustration caused by this incident. Among a lot of positive experiences with proposing design changes to support clients, I made only a few negative experiences. However, I could easily see what the site manager's rationale was not to propose the changes.

They agreed that there is a cost-saving potential, although I assumed the savings to be higher. Therefore, I was more inclined to propose changes as they were. But their argument inhibited me from doing so. But more than that - it also reduced my intentions to search for further cost-saving potential.

There are essentially three major interactional aspects which contributed to our refusal to propose an alternative solution: a) a perceived defensive attitude from the project engineer, b) our impression of strictly contractual behaviour from the employer and c) our own fear of counterclaims and the inability to file claims ourselves.

That an adversary attitude connected to the claims culture results in defensive behaviour is well established in the construction management literature (Zack 1993). This defensive attitude is closely connected to a lack of trust. To trust means to make oneself vulnerable to the actions of the trusted (Mayer, Davis and Schoorman 1995). Cooperating to make construction projects more cost efficient does, however, require trust (Santorella 2017). Most alternative solutions contain a new and unknown element. Hence, this unknown element inherent in alternative solutions makes the one proposing them as well as the one accepting vulnerable.

The Defensiveness of the Engineer

We first proposed a change to system improving the foundations. We proposed it to the employer, but the reaction of the project engineer was a swift rejection. To win the contract, we involved an external engineer who got the design approved. Subsequently, we could make a far more competitive offer without sacrificing our potential profit margin. Our strategy worked so far.

However, that did not go down well with the project engineer. Especially because the employer did confront him with the lower cost of our proposal. On top, there were other smaller scale issues where we held the position that the engineer's design was too expensive for the purpose. However, I sought to anticipate the engineer's position. The engineer might have been criticised by the employer because we challenged and questioned the engineer's design. Hence, it was perfectly reasonable that the engineer must have seen us as 'enemy'. Therefore, it looked to me as if the engineer was defending himself pre-emptively against suspected hostility from our company.

The Demanding Attitude of the Employer

Within the contract negotiations, we talked about the project engineer's performance. The employer expressed his dissatisfaction and hinted to discussions with the engineer about the high cost of improving the foundations. We assumed that the employer was very tough towards the engineer. This impression alerted me, and I believe my project managers also to the fact that we could find ourselves in the same situation as the project engineer if the employer gets unsatisfied with our performance. Hence, we sought to safeguard us against it. But, regarding the ceiling and saving cost could have also worked as a way of positioning us as working for the client. Yet, we chose not to act in an integrative manner (Fisher and Ury 1981) but stuck to a contractual course of action (Rooke, Seymour and Fellows 2003).

Weakening Our Position

Especially refurbishment projects contain a lot of uncertainty. One architect once coined it this way: "You never know what's hidden under an old floor unless you lift the boards." Of that kind was the concern of my project manager. He did not know whether the walls that supported the ceilings whereas stable as they seemed. He knew little about the old iron beams beneath the ceiling, which should be kept in place and support the new ceiling. He knew there were a lot of unknowns.

Since the surveying and assessment of the old building parts as well as the design were the engineering team's task, we were not accountable for anything related to it. Altering the design would have changed this. We would have been in part liable for faults or incorrectness. As long as we left the old design as it were, we were not to blame for deficiencies and so could retreat to contractual behaviour. Pursuing the change, we would have deprived us of this option. One may argue that although we did not plan for any particular claim (Rooke, Seymour and Fellows 2004), we kept open the options to file for claims.

But even more, we would have seen us defending against perhaps spurious counterclaims from the client due to unanticipated cost. We suspected that there were some deficiencies or hidden risks. The possibilities ranged widely; there could be, for example, a hollow wall, some bricks defect, or a beam too heavily corroded. We just did not know "unless we lifted the boards". Yet we suspected a negative reaction from the client to rising costs, and we thought the engineering team would defend themselves. Hence, we believed they would seek to shift the blame on us and our proposal. Not raising the issue, not changing the design was our pre-emptive defence strategy. This threat manifested itself in the project manager's statement that we would be held responsible for everything even if it had nothing to with the proposed change.

Fostering Divisions - Widening the Gap

Moore and Dainty (2001) argue that cooperation is restricted through the division of the design stage and construction stage. Each party defends his idea about how to realise the project. A discussion about the underlying interest and reason for the positions (Fisher and Ury 1981) does rarely take place. Subsequently, the necessary exploration of the others' interest is lacking. For my side, I do not pay enough attention to others' concerns, and I do not share my interests when embroiled in hostile relationships common in a claims culture environment. Sometimes, I am already reluctant to explore when I anticipate or suspect such climate. I concentrate on safeguarding my position. That hinders me to search for options actively.

Exploring and Creating

I do not explore the others' interest and concerns. I rather look at the project file to see what is required of me by contract. It is very contractual behaviour (Rooke, Seymour and Fellows 2003) that I employ. I do not ask why the client wants a certain quality or a special material or what the purposes for the employer's choices are. Neither do I investigate why the design team made the choices now reflected in the drawings. Without this knowledge or at least an idea about the underlying reasons, I cannot begin to search for more suitable solutions. Without knowing what the others have in mind my suggestions for alternative solutions feel like mere 'fishing in the dark'.

The other aspect is that I am far too engaged in defending. I seek to safeguard myself against potential attacks. I try to stick as close to the contract as possible. I seek to expose myself as little as I can. I engage in distributive behaviour (Fisher and Ury 1981, Rooke, Seymour and Fellows 2003). And on top, I search for flaws and deficiencies in the design and the work of others that I may exploit immediately or later. I am not concerned about helping them to make the project better but only to look after myself.

The felt hostility, one may call it aggressiveness, and subsequently, my defensive attitude results in a lack of attention to the concerns of the others involved (Lévinas 1994). That inhibits me from seeing options for beneficial changes. Thus, I am unable to propose them, and subsequently, the options for alternative solutions are missed.

The employer and engineer seemed not to be interested in whether a certain design 'works' for me or not. I too did not investigate whether another material or detail would have met the engineer's requirements. This open discussion between the engineer, architect, and me did unfortunately not take place.

GOOD CONNECTION

To contrast the first example, I will draw in the following on another very recent experience with another client.

Some ten years ago I met the employer first on a building site in Potsdam. He had a lot of experience in the real estate sector in Potsdam and had developed a lot of projects over the years. For him, we worked on logistically tricky site in Berlin.

The engineer on this project was known to me by name only - I had worked with colleagues from his consultancy before. Yet, we could easily work together solving problems that occurred during this project. Our thinking in term of engineering issues was very similar. I could effortlessly explain what I thought, and he could easily follow and vice versa. The project ran smoothly to everybody's satisfaction.

Over the years we worked a couple of times on the same team together - the employer, the engineer, and my company. One day the employer called me to talk about a new project. There was no question if I should do the job but only whether I have the necessary capacities for a new project we were talking about. That does not mean that we were not haggling over prices; the employer wanted a good deal. However, the negotiations were never aggressive, there was always the underlying question of how we could make it work for all involved.

Preparing the last two major jobs with this client, I met with the engineer to discuss details, materials, special problems etc. The meeting during the preparation for the last project was very special. Both projects were closely related and had some similarities. Therefore, the discussion resembled around, 'how we did it last time' and 'could we make it any better'.

When we came across a problem, the engineer often said what he needed to address a certain structural issue. Then we discussed advantages and disadvantages of possible solutions each seeking to understand the other's concerns. One may use the metaphor that we faced a problem together. We worked together, not against each other when solving a tricky issue.

The client himself was not involved in the discussion directly, although he encouraged us to discuss the project. Of course, he had the final say about the design. However, many issues we were discussing no one recognises when using the building. For example, foundations are usually hidden in the ground. Hence their size makes no difference to the appearance of the house. Yet other things like the surface of concrete wall interested him very much because he had a clear idea how things should look like. However, within these margins, we were free to decide.

One may argue that in the case above a close integration of planning and building good contact and exchange between the design team and contractor - was present (Moore and Dainty 2001). When we discussed solutions, we constantly tried to think the other's way. I tried to understand his argument and connect my suggestion to his problems while telling him about costs of material and necessary manpower. In a way, we dissolved our roles for the moment (Winch 2000). This understanding of each other also leads to quite amicable relations between the parties on such projects. There is a back and forth between understanding each other's concerns and good relations. In the example above these relations were good from the beginning and have grown over the years. It was a positive spiral.

The problem in the first example was that we were engaged in hostilities almost from the very beginning of the project. I could not imagine that a fruitful discussion about the design could have happened in a hostile environment. Even if I were involved in the design process, would not have suggested much.

Knowing that I would almost certainly get the job was a great motivation for me to engage in the discussion about the project design. There is little value for me in sharing my knowledge when I may just be used to streamline the project without the benefit of the job. The attitude here was rather one of appreciation. The client honoured my engagement in designing a fit-for-purpose-building by awarding me a lucrative contract. Commitment is a driver of new solutions in general (Winch 2000), yet this example demonstrates that commitment is especially important on the individual level.

It is this impression that the employer seeks a good deal but does that in a manner of 'live and let live'. We were not in fierce competition to get the contract awarded but in an honest discussion about the cost and the budget of the project. With this impression and the feeling of being valued, I am much more willing to contribute. It is the mutual interest in the other's concerns that fostered the search for alternative solutions in the second example (Fisher and Ury 1981). The very close relations and the open exchange would not have been possible without the amicable relations.

Risk Involved

Comparing the two examples, we anticipated far more risk within the former project. The anticipation is not based on facts but a mere gut feeling that the relations could easily deteriorate during the project. Whereas in the second example the relations had been already 'proven' to work smoothly. However, hard evidence for this assumption is missing. It was the subjective impression of the employer and the engineer that made the difference.

Additionally, we compared the risks involved with the possible benefits. We assumed it was not worth the effort and could backfire. In case the amount of expected saving would have been higher we may have given it a try. However, with the employer and the engineer from the second example, I certainly would have discussed the issue.

That shows a hostile climate on projects may particularly inhibit incremental changes. Large-scale radical changes (as for example strengthening the foundations) might be applied, but opportunities for small-scale incremental changes will certainly be missed. That is regrettable since in sum small improvements could make a huge difference as, for example, the lean approach has shown (Santorella 2017).

Regrets

The shift in me is that I am much more reluctant to advance alternative solutions in such situations, which is regrettable in itself but probably, more importantly, I do not actively search for options to improve the project, for possibilities of cost saving. I can only guess how many options I miss.

Only when I think about the wasted money projects, it 'hurts'. Wasting money on bad or inefficient solutions is something I experience as uncomfortable. It runs against my ethos a civil engineer to build something I consider a solution not fit for purpose. That can be either wasting money on too expensive material or unnecessary use of material (e.g., too much steel in a concrete beam), but it includes solutions that will not work (e.g., insufficient thermal insulation) or bear an unacceptable high risk of failure. In turn, when I am forced to do exactly that due to contractual requirements my commitment to the project vanishes. Hence, I am far less inclined to foster better alternatives.

What I do in these situations is shifting accountability away from my business. I seek to notice the architect, project manager, and the client about the risks involve, and so avoid liability. Sometimes I build constructions of which I think they are not serving the best interest of the client. I do that only because a contract requires me to do so. But I am doing no one favour doing it. Luckily this is seldom the case.

SUMMARY

Although my examples stem from a different context and different persons were involved, I could show that the claims culture has a negative impact on the attitude towards alternative solutions in the construction industry. This is especially the case for small incremental changes. These possible improvements only surface to specialist's eyes when working on projects. Hostilities within project teams seem to pose a particular danger. The first hurdle for improvements was my inability to see the opportunity. Due to hostilities, I was more engaged in defending myself as in exploring the project partner's concerns. This lack of knowledge about my project partner's interests left me unable to see possibilities for alternative solutions. Hostilities cut short the very inclination of specialists like me to search for options to improve the project performance. Interestingly, no one could coerce me to search for alternatives, to save costs. It ultimately depends on my willingness to be creative.

Even if I spot them, I do not propose them because I fear suspected risks involved from making and realising my proposal. The reluctance to propose changes is the second hurdle caused by hostilities. In sum, hostilities among project partners lead me into a defensive mode of action and not to pursue creative solutions.

The research shows that a hostile environment stemming from a claims culture has a negative impact on the pursuit of alternative solutions. How to address these hostilities is beyond the scope of this research, but given the results presented in important question to raise. The nature of my research does not allow for giving figures on the missed alternatives, which could be an interesting route of exploration. Another very important question could be how to turn the tide to less hostile relations in the project team. So far, I keep investigating because cooperating with a nice team and building constructions I am proud of is so much more fun.

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