

Airport security contradictions: Interorganizational entanglements and changing work practices

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Chiara Bassetti

University of Trento, Italy

Abstract

Taking the highly-institutionalized, socio-technical domain of airport security as its empirical basis, the article focuses on interorganizational workplaces marked by public/private dialectics, and their impact on changing work practices, identity processes, and power-resistance relations. The empirical material stems from the ethnography that I conducted at an Italian international airport (April 2013–March 2015). Data include fieldnotes, interviews, and video recordings. Having described the institutional and operational scenario, I outline the contradictory pressures characterizing the considered setting, and the way security personnel make sense of and cope with them. Then I discuss a case of techno-organizational change concerning a technology in use at security checkpoints (Threat Image Projection). I show how the interorganizational context produces unforeseen and undesigned 'second order' change effects, and how such effects may escalate workers' resistance. I close with some general reflections on ambivalent interorganizational working orders.

Keywords

airport security, interorganizational workplaces, mission ambivalence, occupational identity, techno-organizational change, socio-technical systems, work practices, resistance, entanglement, sense-making

While airports and airlines focus on an economic model of 'throughput', the number of passengers and aircrafts per hour, security services focus on 'detection' [...] Faced with internal pressures by subcontractors for profit and external pressures by airlines

Corresponding author:

Chiara Bassetti, Universita degli Studi di Trento, via Sommarive 9, Trento, 38123, Italy. Email: chiara.bassetti@unitn.it

and airports for consistent and efficient throughput, the demand by government administrators for detection is expressed in term of 'customer service'. (Salter, 2008: 61 passim)

Airport security checking requires operators to be accurate and thorough in controlling passengers and their belongings; on the other hand, security guards should simultaneously provide a nice, possibly brief experience for airport customers. This is one of the manifold contradictory pressures characterizing the highly-institutionalized socio-technical domain of airport security, and this is largely due – I argue – to the complex interorganizational nature of such a domain, and the public/private dialectic it entails. These bring in opposing rationalities and potentially conflicting cultures – occupational (Van Maanen and Barley, 1984) and organizational (Kunda, 1992) ones – that impact identity processes (Johnson et al., 2006; Ashforth et al., 2013) as well as changing work practices (Barley, 1986; Orlikowski, 2000; Leonardi and Barley, 2008) and power-resistance relations (Levina and Orlikowski, 2009; Thomas et al., 2011).

The considered domain is deeply regulated by a large, multilayered (international, national, local) corpus of rules. It involves diverse institutions and firms, hence manyfold inter- and intra-organizational power relations, and a whole field of authority positions, where everything is down in black and white except for the ambiguous position of passengers. The context also entails multiple, intertwining, often contradictory goals and ends, such as quickness and thoroughness, flow and detection, mobility and security – that is, there is mission ambivalence at the interorganizational level. Moreover, an ensemble of technological tools and artifacts mediate (Button, 1993) and structure (Barley, 1986) work activities (cf. Heath and Luff, 2000), and bring in further rationales and practical logics. Finally, rules and tools are not only reinterpreted and 'repurposed' together (Molotch and McClain, 2008), but in the context at hand they also change at a fast pace. Changes are almost ever present, yet they are rarely planned at the interorganizational level but rather emerge from the local entanglement (Barad, 2007; Orlikowski, 2007) of the activities of a multiplicity of individual and collective, local and distant, public and private actors, without a systemic, general vision of the working order on which they (will) impinge.

As employees of a private security company yet working as 'public officers' in the considered context, security guards sit at the nexus of the contradictions emerging from such an entanglement, and basically incarnate them. That is why the article moves from their experiences and related accounts to open a window on identity processes and changing work practices in complex interorganizational workplaces marked by public/private dialectics. In fact, in domains in which diverse organizations and institutions are involved, and changes in rules, technologies, procedures and policies are frequent, 'the negotiation among several competing rationalities which weave the texture of practices' (Gherardi and Perrotta, 2010: 611) is particularly complex, and its unintended consequences significant. Moreover, workers' accounts with respect to the 'reasonableness' of ad hoc tactics

(Garfinkel, 1967: 96–100), adjustments (Zimmerman, 1970) and acts of ethical subversion (cf. Folger et al., 2013; Bloom and White, 2016) are particularly complex as well, given that the stock of knowledge, rules and (moral) concerns on which sense-making is based is multifaceted and often contradictory.

Based on the ethnography I conducted at an Italian international airport (cf. next section), the article describes the institutional and operational scenarios of airport security, and then outlines the contradictory pressures characterizing security work as seen from the perspective of the guards who perform that work. Pressures stemming from interorganizational, public/private tensions constitute the general milieu on whose background any change is interpreted and negotiated, and power-resistance relations (re)arranged. Indeed, I then present and discuss a case of techno-organizational change concerning Threat Image Projection, a technology in use at security checkpoints, and I draw some reflections on 'second order' effects in *ambivalent interorganizational working orders*. I conclude by briefly considering sense-making and accounting practices in such contexts.

Fieldworking at the airport

Surveillance and security are common features of contemporary urban scenarios. Transportation settings, or 'places of transit' (Cresswell, 2006: 221), are perspicuous contexts from this point of view (e.g. Adey, 2004a, 2009; Pallitto and Heyman, 2008; Cresswell and Lemarchand, 2016). Given the almost intrinsically international character of aviation, and the increasingly global nature of airport security, its governance has become a matter of particular concern both for policy-makers and researchers. Mirroring the ambivalent and multifaceted quality of the context, airports have been conceptualized as spaces of flows (Castells, 1996), non-places (Putz, 2012; cf. Augè, 1995), spaces of exception (Kruger et al., 2008), landmarks (Pearman, 2004), places of consumption (Klauser, 2009), vessels of conception (Pascoe, 2001), laboratories of socio-technical innovation (Fuller and Harley, 2004), and mobility filters (Lyon, 2003). Knox and colleagues (2008, 2015) looked at airports as complex organizations through Actor-Network lenses. Except for some workplace studies on air traffic control (Harper and Hughes, 1993; Goodwin and Goodwin, 1996; Suchman, 1996; Koskela et al., 2013), however, detailed empirical analysis of the actual practices that make the airport is missing – particularly with respect to security. Given perhaps the high sensitivity of the activity, the matter has been rarely addressed, and mostly through experimental methods grounded in cognitive sciences and psychological approaches (e.g. Bolfing and Schwaninger, 2009; Cutler and Paddock, 2009; Hättenschwiler et al., 2015; Rusconi et al., 2015). Such studies adopt an individual-based perspective and fail to acknowledge the situated and social character of security work.

The ethnomethodologically oriented ethnography that I conducted aimed to provide empirical analysis of airport security work and, more specifically, to understand (a) how operators practically and interactionally accomplish their contradictory tasks, (b) how they collectively (continue to) learn to do so,

and (c) how both activities are managed and reconfigured in facing critical situations. The considered international airport is located in northern Italy and, despite being medium-sized, represents a central node of the area. Fieldwork started in April 2013, after six months spent accessing the field – which included taking a course and passing a test to obtain the 'airport ID' allowing me to stay and move in the 'sterile area' (without boarding pass or uniform of any sort) – and lasted 13 months. Covering different seasons, weekdays and times, observation took place especially (a) at the checkpoint, where security guards (more than 100) work under the official supervision of the police, (b) at the passport control points, and (c) in the surveillance and control room where police officers (around 90) serve. I also had dedicated meetings as well as informal interviews with airport managers and public authority representatives. The documentary analysis of laws and regulations preceded and accompanied fieldwork. Moreover, I collected video-recordings (35.5 hours) of hand-luggage x-ray screening, which represents a - if not the most crucial task in terms of policy-makers' and security personnel's conceptions, decisions and actions (alongside passengers' experiences as travellers and 'security subjects'; cf. Redden, 2012; Kraal et al., 2013). Recordings have been transcribed and analysed through qualitative video-analysis (Heath et al., 2010). Finally, between August 2014 and March 2015, I conducted semi-structured interviews with guards (n = 24) and police officers (n = 14). Lasting 70 to 90 minutes on average, they have been audio-recorded, transcribed, and analysed through an iterative, abductive process. Interviews focused on: learning and career path; everyday work and its diverse tasks; and interaction with passengers, colleagues, and managers/ chiefs. Since the issue emerged as relevant, interviews with guards focused also on the techno-organizational change that took place in Autumn 2013 and that the article takes into consideration.

Security checkpoints

Institutional scenario

Airport security is arranged as a cascade of rule(r)s. On the top of the mountain, there is the International Civil Aviation Organization (ICAO, founded in 1944 in Chicago, now located in Montreal), with its 195 member countries which regard ICAO Regulations as recommendations. There are also several international conventions, each a sort of 'reaction' to some hijacking or other attack (cf. Pascoe, 2001; Lyon, 2003; Putz, 2012). Descending one level downstream, within what has been called 'Fortress Europe', a fundamental role is played by the Schengen Agreement (26 March 1995). The European Civil Aviation (ECA) adapted ICAO recommendations, and added the 'One Stop Security' protocol (see EC 300/2008, EU 185/2010).

One step further down, we find national authorities. In the Italian context, the National Authority for Civil Aviation (ENAC, founded in 2009) is responsible for coordinating and monitoring the application of European regulations, and for

editing, applying and updating the National Programme of Security (PNS). Interministerial Decree 85/99 brings us another level downstream, with the mandate given to airport management with respect to some security measures. That is why each airport director is responsible for editing, applying and updating an Airport Ordinance in which the application of the PNS is stated, and some domain-specific measures are added. Airports are subject to inspection by ENAC officials twice a year.

Decree 85/99 also contains implementation norms for Art. 5, Decree 9/1992, which states that some 'control services' can be delegated from police officers to security guards (Guardie Particolari Giurate) in the airport domain. Airport security guards are employees of private security firms, and yet serve as 'public officers' at the airport. To do so, they must attend a course, which is then 'refreshed', as they say, once a year, and pass a test (both oral and practical), for which they must 're-qualify' every three years. None of this appears to influence their employment position and wage, since they are considered 'non specialized workmen' although 'public officers' when on duty. To further complicate the picture, specific tasks (e.g. checking airport supplies) and roles (e.g. supervisor) require specific training, certification and consequent authorization to carry out the task or to enact the role.

The issue nowadays at stake is authority segmentation (cf. also Klauser, 2009). It is true that 'air transportation security is a matter for international institutions, which ensure that procedures are normalized beyond national borders' (Jobard and Linhardt, 2008: 80; cf. also Wallis, 1998), but it is also true that private policing and, more importantly, 'plural policing' (McCahill, 2008) are expanding phenomena, and show specific interorganizational dynamics, marked by public/private dialectics. From a methodological viewpoint, this calls for an analysis able to reach the situated level at which normalized procedures are (diversely) enacted in everyday local practices, and the threads constituting the entanglement are visible to, and 'pickable' by, the researcher.

Operational scenario

With their array of technological instruments, security lines are dense sociotechnical microcosms within the whole airport sociomaterial system, and mark a fundamental boundary. Tools and artifacts, whose presence is mandatory and use regulated, include (several kinds of) boarding pass scanners, x-ray machines, metal and explosives detectors. Guards at the checkpoint work in groups of four at each line, or they operate two lines in seven (the so-called 'experimental'); a further guard stays 'outside', as they say, and checks boarding passes one by one with a portable scanner.

At each line, three guards alternate every 20 minutes in different tasks. This is called 'the round', and its timing is given by law, since it stems from the rule according to which x-ray screeners cannot carry out the task for more than 20 minutes. The rule rationale rests on a widespread conception of attention dynamics derived from cognitive studies, and on the belief about screening being the most

important procedure at the checkpoint. The three tasks, which can be regarded as situated roles, are:

- (a) unpacking at the beginning of the line, that is, instructing passengers to extract LAGs (Liquids, Aerosols and Gels), electronic devices, etc. I call this role G@b, guard at the beginning/belt;
- (b) screening at the x-ray monitors, that is, visually inspecting images of passengers' belongings G@m, guard at the monitors;
- (c) attending to the metal detector arch (patting), to the screener's requests (e.g. baggage manual inspection), and to any other need (e.g. explosives controls) G@a, guard at the arch and as attendant.

The fourth guard in each line (or the seventh in two for the 'experimental') is the supervisor: s/he is responsible for the line(s), and basically acts as a G@a though not taking part in the round. The presence of two guards who may attend archrelated procedures is relevant also with respect to the same-gender rule in force for patting. Such a rule affects the distribution of the guards in the rounds, the daily assignment of the supervisor role, the way in which breaks are managed, and the situated coordination of activities within and beyond each line. \(^1\)

Contradictory pressures

Employment conditions, high work control, and legal as well as felt responsibility make airport security a stressful and emotionally-charged context (cf. also Bassetti et al., 2015) – not only for passengers, as repeatedly noticed (e.g. Redden, 2012), but also for security operators.

It's around 6am, Albert tells me of the security guard job and its '360-degree stress', stemming both from the passengers, 'who are pissed off in the 60–70% of cases', and from the various managers. [Fieldnotes, 18 May 2013]²

You have 1000 check procedures, it's not that you say 'It's like working as a bartender, I make coffee, I greet Tony, I wash'. And we're controlled for everything. [Joan, 11 May 2014]

To this, contradictory pressures are added. They stem from the primary – foundational – contradiction concerning *public service vs. private profit*.

What is security?

This translates, first, in security vs. mobility, detection vs. flow. In the words of a guard:

'They tell you: "There's the line, go on!" What does it mean go on??!', Leonard rhetorically asks me. Pressure for avoiding line formation, he explains, starts from

airport management and descends towards private security management, shift-chiefs and supervisors, until screening guards. [Fieldnotes, 15 May 2013]

Consider also the case of an inspection, which shows how market-driven managerial logics indirectly affect public institutions too.

It is about 6 pm when I arrive [...] Eve – very concerned – informs me of today's cover story: ENAC inspectors have arrived this afternoon. The inspection modality for security screening has changed: inspectors do no more pass-through 'in plain clothes', as normal passengers; they have randomly chosen some guards and explicitly examined them. The test consists in screening four complex baggages in less than 30 seconds, without ever stopping the belt if not for a bomb. Eve tells me she has immediately stopped the belt for zooming in, 'since there was all an intertwinement of cables', and the examiner has said 'Ma'm, maybe you didn't understand, you shouldn't stop the belt'. Eve laments the absurdity of the evaluation procedure: Here we do security, not... a race! [Fieldnotes, 1 October 2013]

The issue at stake is *security as a defence from threats vs. security as a normative procedure*. The procedure, more specifically, is differently regarded by security managers and airport authorities, on the one hand, and security personnel, on the other. For the former, it is something normatively prescribed to comply with, but also something impeding flow, profit, and customers' satisfaction, and therefore something that has somehow to be 'contained'. For guards, on the contrary, the procedure, though not exempt from critiques (e.g. the '100 ml. max.' rule is regarded as foolish by most operators), represents the means by which security is performed and attacks/threats are prevented.

This also calls into question issues of discretion, autonomy and expertise.

Olive describes the job as subject to much pressure [...] and endowed with very little autonomy. 'Personal initiative, and the consequent use the guard may make of her/his experience, competence and expertise, are discouraged [...] When I'm at the arch I look at faces: maybe the alarm doesn't sound, but the passenger has a preoccupied, weird attitude that alerts me, for instance if I think one has something hidden in a shoe, then I send him back to take shoes off [...] even if the alarm hasn't sounded – yet in the management's opinion I shouldn't.' She says that the same goes for the patting procedure: 'Abel [company middle manager] wants us to pat in only one and the same way. He wants little soldiers, only the procedure counts. [...] This is certainly not the way one can work well!' [Fieldnotes, 4 May 2013]

In Olive's opinion, the management fixation with, and understanding of, the procedure as something to comply with and/or automatically granting security constitute a threat to actual security. For guards, security procedures are not an impediment to flow, mobility and profit, but rather what makes these possible; on the other hand, security does not equal normative procedures, and the guard's job

does not (or should not) consist in 'slavishly' following rules, least of all their local application by management.

Who is the passenger?

As the following excerpt shows, this holds not only in terms of threat detection, but also of passenger assistance – two sides of the same coin: the protection of passengers, or the security guard's job. Until further proof, are passengers customers to satisfy, citizens to protect, or potential threats? What constitutes such a proof? Who has the authority to make that call?

If there's a [medicine over 100 ml. and not requiring prescription], and I see there's an old lady, then the question is: Do you let her pass with it or do you act 'rigidly'? So, maybe you let her bring it after asking some questions, having understood if and why she deems it important to carry the medicine with her, and maybe you also make her taste it. There, in making such decisions, the emotional aspect becomes heavier, precisely in taking such judgement calls. And maybe there are colleagues who slavishly follow rules, but I prefer to judge case by case, because, I mean, I definitely have to manage this emotional aspect of... humanity. Maybe the passenger is going to a funeral, maybe she has never flown out, she is scared... [Lucretia, 10 July 2014]

Besides reminding us of Baines' (2011) social workers, the excerpt shows the following: both the airport and the security company organizational take on the issue of guard-passenger interaction is not so much concerned with passengers safety and/or well-being, but – once again – with their satisfaction as customers, to avoid any complaint. The contradiction revolves around passengers as *fellow humans vs. customers*, whether they are regarded as innocent until proven guilty, as most guards do, or 'terrorists until proven to the contrary' (Fieldnotes, 19 August 2013), as some guards who stick to the former statement say of other colleagues.

Alongside avoiding line formation while following procedures, guards are instructed to be polite – which is different from thoughtful, for instance – in front of basically any kind of behaviour by the passenger, and/or to call the police if the latter is 'unruly' and they are not able to have her/him undergo controls. Indeed, the contradiction between flow and detection comes in plain sight in the presence of travellers who are unwilling to be checked, protest, and variously insult guards. Most 'unruly' behaviours, that are wide-ranging (Bassetti et al., 2015: 438–9), can be regarded as practices of resistance on the part of the passengers. Given the managerial mandate not to engage in discussions, least of all fights, with travellers, no matter their impoliteness or rudeness, guards feel exposed and unprotected ('We are nobody, so we must suffer in silence', Fieldnotes, 16 July 2013). This is also why, despite the greater responsibility (and the TIP-related risk, cf. further), the role of G@m, which rarely entails interacting with passengers, is almost unanimously preferred.³ From the guards' viewpoint, management puts customers(' satisfaction) before employees(' dignity) – as occurs in large service

corporations – and does not take seriously but superficially travellers' well-being. In accounting for this, the fact that at stake here is a public concern, such as security intended as travellers' protection, is crucial and systematically opposed to the private concern about profit that characterizes the company in which they are employed – and this marks a difference with respect to service corporations.

There are two issues to underline in terms of intra- and inter-organizational dynamics respectively. First, the security company middle manager, Abel – who mostly controls employees to appear unimpeachable in front of the senior manager and, by his mediation or directly, airport management – 'allies' on this specific matter with the other employees. This is due to his daily presence (although during office hours) at the checkpoint: looking at security lines from the huge window of his office, or standing behind guards at the lines, he witnesses uncomfortable interactions⁴ with passengers, and sometimes has to participate himself. The issue is that of closeness vs. distance from the concrete theatre of work activities, co-presence vs. absence in/from face-to-face interaction with passengers and both the cognitive and emotion(al) work (Hochschild, 1983; Bolton, 2005) it entails.

Abel says that 'the airport hears passengers' complaints only'. Therefore, 'guards pass as rude' and receive contestation letters by company management. He adds he is glad I am here to witness what actually happens. [... He] informs me that the police and custom told him they would not write any report on what happened earlier with the unruly passenger, but he is not thrilled, because the passenger would certainly institute a complaint, so that the airport and company managements would learn about the episode anyway. [Fieldnotes, 16 July 2013]

The second issue I intend to highlight has precisely to do with the role of the police, which calls into question the role of the guard.

Who is the guard?

What is established by law is that guards must perform security checks under police supervision. Police officers, in other words, should control guards' compliance with procedures. However, officers' knowledge of the latter is generally limited, at least as compared to that of the guards. As one policeman told me:

It's not that one can stay here for six hours with one's eyes kept peeled.⁵ It's impossible to observe everything. So, we simply remain in the vicinity and, when guards call for us, we judge case by case. [Fieldnotes, 9 May 2013]

Guards' representations and narratives concerning the matter are quite similar:

Sarah says 'you rarely see officers at the lines. It basically happens when guards call for them, or when there is the [ENAC] inspection'. She adds, almost self-talking: 'they don't know procedures, though'... [Fieldnotes, 15 May 2013]

The issue at stake has to do with actual expertise vs. official authority.

The presence of 'unruly' passengers, once again, highlights the contradiction. As a shift-chief told me: 'What a security guard should do when confronted with an unruly passenger? He [or she] asks for the police to intervene' [Fieldnotes, 22 April 2013]. That is, guards stop behaving as mediators of the law and leave that role and responsibility to those whom the law grants higher authority. This is an individually enacted but collectively legitimated and recounted practice of resistance with respect to the 'politeness obligation' guards must fulfil.

[She] walks him to the closest police office [...] On her way back, she says to me and another guard: 'I'm not taking responsibility. My job ends here', and she gazes at the row of re-packing tables behind us. [Fieldnotes, 21 December 2013]

However, in so doing, guards also hand power over both to the police and to the passenger: they expose themselves to the possibility of the latter pressing charges or making a complaint, and for the former making a report on the event.⁷ In short, this is a wicked version of work-to-rule resistance.

Guards are also concerned with officers' 'case by case' judgements and decision-making. In fact, to avoid complaints, policemen as well are instructed to behave in a way to satisfy passengers:

'in most cases, they decide in favour of the passenger. And thus they deprive our work of dignity and professionalism', Rose tells me. [Fieldnotes, 15 May 2013]

However, this is a secondary concern. For guards, it is not so much the police taking passengers' side – and the paucity of inter-occupational competition (Allen, 2000; Bechky, 2003) is notable – but the company putting costumers before employees.

As a result of what has been described above, guards distance themselves and their identities from the managerial way to organize (and control) their work, and from the threat such a way poses on their work and occupational identity (e.g. in terms of lack of autonomy). Most guards do consider themselves as such; they identify with their work and occupational community, although not with the organizations they work for (security company) and within (airport). They are not detached from their occupational role (and this marks a difference with large service corporation employees), nor from security regulations, which they sometimes criticize but basically respect and appreciate as their work's legitimation; they rather distance themselves from the local application of such regulations, as imposed by the interorganizational entanglement of managerial and institutional entities. What matters to them is not the value/s of the organization but the value/s of the work itself, the work they get done. And it is, in the end, occupational identity that they defend – and collectively reinforce – when engaging in *displays of distance* among fellow colleagues such as gossiping about management. It is

Bassetti I I

occupational identity and its moral order that they (re)produce when engaging in *ethical subversion*, such as acting on a suspicion although contravening local procedural rules (Olive), or contravening regulations for actually fulfilling what one regards as her true duty (Lucretia). It is occupational identity, finally, that they defend when engaging in more 'caffeinated' (cf. Contu, 2008) *forms of resistance* such as those enacted with respect to the techno-organizational change that we are about to see. As Bloom and White recently theorized, 'performances of subversion' accompanied by their moral justification provide 'a means for navigating the (often) hopeless task of fulfilling the duties of a responsible organizational subject in practice' (2016: 6).

A case in techno-organizational change

The change process that I discuss concerns Threat Image Projection (TIP), a technology in use at checkpoints that requires some preliminary description.

TIP ordinary order

TIP exposes guards to artificial but realistic x-ray images during routine baggage screening. Images (TIPs) randomly appear on the monitors, positioned within passengers' belongings as if part of them. The screener should recognize the image as such – a projection not equipped with an actual material referent – and push a specific button on the keyboard within the next 15 seconds. When s/he succeeds, a green-backgrounded message pops up, stating the TIP has been detected, and identifying the projected object category (e.g. 'knife-4'); simultaneously, a red rectangle appears around its image (Figure 1). Failed detections cause the same outcome, except that the message is red-backgrounded and states that TIP has not been detected (Figure 2). Finally, when guards press the button in absence of a TIP, a yellow-backgrounded message appears, stating there was no projected image (Figure 3) – this is what guards call 'non-TIP'.

TIP has the following purposes (cf. also Cutler and Paddock, 2009):

- (a) attention enhancement: maintaining and periodically recalling guards' attention by (i) the awareness of the presence of the TIP technology itself and (ii) the sudden appearance of dangerous thus alarming objects;
- (b) on-the-job training: allowing guards to actually see screened images of dangerous objects (e.g. how does a primer⁸ appear under x-ray?), since they are not frequently found among passengers' belongings (to this, mandatory sessions at the so-called 'simulator' contribute as well);
- (c) performance assessment: recording guards' performances (as detection percentages over various periods of time, generally monthly) and, if needed (detection under 80%), taking action on such a basis, that is, having the guard attend further training.



Figure 1. Detected TIP instance.

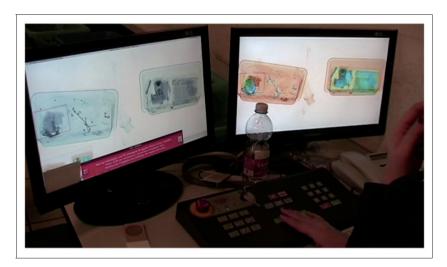


Figure 2. Undetected TIP instance.

This is the institutional logic behind TIP and its regulated use. Yet there are other logics at stake.

First, organizational logics. Detection percentages are the basis for several measures that have virtually nothing to do with the above mentioned 'further training' prescribed by EU regulations. TIP detection performances, for instance, affect the 're-qualifier' test that guards must take every three years and that is held locally by

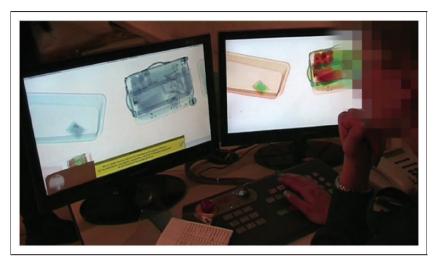


Figure 3. Non-TIP instance.

police and ENAC representatives, at the presence of the security company local manager. Moreover, as we shall see, monthly detection percentages can be the object of sanctions by the employer.

Second, there are the both individual and collective practical logics of the guards who cope everyday with TIP as an element of the working order. When detecting a TIP, guards detect a particular representational object among the others. They do so by recognizing a known image, stored in a sort of mental folder, or by individuating certain qualities either of the image, such as a slightly different luminosity of the pixels on the borders (although this is perceivable on some monitors and not others), or of the projected object, such as its incongruity with respect to the surrounding context constituted by other screened objects in the baggage/tray and/or the aspect of the passenger to whom it supposedly belongs. ¹⁰ It is a monothetic (Husserl, 1913) act of perception and judgement that the expert guard performs thanks to a know-how s/he has by then fully embodied.

Jasper detects a TIP. I ask him what it is and he replies 'Bah, a little bo::x (0.6) Uh, know what? Maybe the one to refill the lighter!' [Fieldnotes, 18 May 2013]

At the collective level, TIP-related work practices are primarily oriented towards the construction and everyday updating of a *corpus of shared practical knowledge*. This is achieved by making each and every instance of TIP appearance during work activities an occasion for collective learning and/or knowledge stabilization, and by leveraging on a corpus of TIP-related anecdotes used as conversational material. When a TIP appears, whether detected or not, the screener shows it to the colleagues that are proximal and 'available' at the moment and discusses it with them.

12.02 – 'Eve, see this one, it's new', says Leonard @mB [monitors of line B]. He has just detected a TIP that, he claims, 'was almost impossible to detect'. Eve looks at the screen: 'I've never seen that one'. [Fieldnotes, 28 October 2013]

It is a new piece of information (cf. Garfinkel, 2008) to learn and 'archive' for further TIP detection – whatever the represented object actually is and/or is for.

Isabel @mB exclaims 'Ah, I've got it!'. She is referring to a TIP she has just detected, and adds: 'What's this thing?! Three balls?'. Jacob approaches her and looks [...]: 'Ah, the three balls, yes!'. 'What's that?', I ask. 'How do I know?!', Isabel replies, 'Maybe three bombs, I don't know.' Jacob concludes: 'I was taken in by it too once.' [Fieldnotes, 28 October 2013]

Isabel is satisfied with mentally archiving the image under the label 'the three balls', as Jacob just confirmed. His final comment is not a reply to the issue that I reintroduced about the nature/purpose of the object, and that prompted Isabel to reply, thereby making explicit her lack both of knowledge and interest about the issue. On the contrary, by treating such an exchange (my question and Isabel's answer) as an 'insert sequence', Jacob disregards the matter and closes the whole interactional unit with a comment revolving around TIP detection (rather than object recognition – which would have entailed determining whether the represented objects were grenades, plastic explosives, other 'bomb-stuff', etc.).

TIP new order

In Autumn 2013, a 'TIP new order' was established. On the one hand, the quality of the TIP library changed. The library is composed of 6000 TIPs and is substituted every six months by the company responsible for the x-ray equipment, another subcontractor of the airport. Given also the embeddedness of TIP-related practices within the considered working order, the features of the library of fictitious images – difficulty (e.g. position in the screen, luminosity), represented object category, number of images, etc. – are of utmost relevance (cf. e.g., Hofer and Schwaninger, 2005; Cutler and Paddock, 2009; Steiner-Koller et al., 2009), yet most decisions are taken without interorganizational coordination. The library update of September 2013 marked an important twist: whereas images were previously representing mostly dangerous items (guns, bomb parts, etc.), they came to represent also many prohibited items (e.g. nail files, LAGs over 100 ml.) and even to-bescreened-separately ones (e.g. LAGs under 100 ml.) – and baggage is full of these two kinds of objects. This seems at odds with the cognitive-attentional logic behind TIP, and is regarded as a threat to good security work.

Because you're searching for 'Ah, no no no, wait: there are the Mentos [candies] here, it might be a TIP', then you push. But then you forget the knife! [Isabel, 30 October 2014]

This can be seen as an instance of 'atrophy of vigilance' (Freudenburg, 1992), a risk that TIP is precisely aimed at reducing, yet the case at hand presents a deflection – a hijacking, one might say – of vigilance and attention, more than its atrophy. As noted by Molotch and McClain (2008: 37), artifacts 'can turn out to be [...] contradictory to the larger accomplishment'.

On the other hand, the security company began a sanctioning policy for poor TIP-detection performances: guards with a monthly percentage under 80% received a 'contestation letter' and were sanctioned with unpaid extra working hours and/or wage curtailment (counterbalanced by a 50€ fuel voucher for the first three in the detection ranking). This was obviously taken badly by employees, for instance, as nothing but 'a strategy for assuring the possibility to fire personnel without consequences if needed, given the critical economic situation' (Fieldnotes, 23 December 2013).

The new order represents a truly *techno-organizational* change, resulting from the intertwinement of technological variation and organizational policy modification, with the two being originally independent and decided by two different organizations – it happened at the nexus of an interorganizational entanglement. Such a change heavily impacted on guards, who engaged in various forms of resistance. First, many employees started *girding for individual legitimacy challenges* by keeping track of their own un/detections and/or by taking pictures of debatable TIP instances.

10.45 – Leon 'misses' a TIP. It was a Swiss card, which, as Leon and Dorian comment, is not even prohibited and yet is among TIPs. Leon also takes a picture of the screen with his smartphone, to contest the contestation letter he will receive, he says. [Fieldnotes, 28 October 2013]

Notice how debatability concerns the rationale behind TIP whereby TIP is intended as an element of the working order ('is not even prohibited and yet is among TIPs').

Second, operators *mobilized for collective legitimacy challenges*. They organized and participated in meetings, union and not, and they brought the issue in front of the Work Inspectorate – a move that eventually led to the company dropping the sanctioning policy and adopting an informational one (letters now inform guards of detection percentage under 80% and the consequent need for two extra hours of training at the simulator).

Third, guards question the detection rates calculation method, since it is irrespective of the time – which can vary considerably – the guard actually spent at screening during the month. This was already an issue before, and its relevance increased dramatically with the new order. Operators started making a public affair of the TIP-related contestation letters they received. Given that they do not collectively support the calculation method, and TIPs' new quality especially, there is no need to feel embarrassed or ashamed if a poor detection rate becomes publicly

known – and showing the letter equates displaying such a belief, in a ritual in which the colleagues participate too.

Fidel receives the third TIP-related contestation letter of the month. He shows it to Eve and other colleagues when he has just finished his shift and is going to leave. Also Eugene has just finished his shift; he has a letter as well, the second of the month, he says. [Fieldnotes, 28 October 2013]

By 'advertising' contestation letters, guards ritually challenge the change legitimacy. Although poor TIP performances have an actual effect on their working lives, they no longer treat them as professionally delegitimizing. For the occupational community members in front of other members, ranging from apprentices to supervisors and shift-chiefs, it does not represent a threat to one's professional face. In this way, the techno-organizational change modified the local occupational culture. It is also worth noticing what did not change: guards' TIP-related practices of mutual help¹¹ did not disappear with the new order, despite the newly introduced, supposedly competition-triggering, monthly ranking and connected incentives.

Finally, and most crucially, guards started to challenge the change legitimacy in practice by enacting a new TIP-related practice that I call pushing to be s(ec)ure, which subverts TIPs' underlying rationale of attention enhancement – although for guards the new library already produces such an outcome – and increases waiting-line formation – although this is not the intended outcome of an oppositional practice (Ackroyd and Thompson, 2015) but the side effect of a regardedas-necessary work practice. It consists of pushing the TIP button, thus stopping the belt, for nearly each container that passes under x-rays (except trays with shoes or a laptop, basically). This helps in avoiding sanctions (to be sure), and mitigates the threat the new library poses for security work (to be secure) in that, by pushing 'in any case' (p. 32), the newly increased TIP-related cognitive load which engenders the risk 'to forget the knife' (p. 27) decreases. Attention is thereby diverted and vigilance hijacked, but to a lesser extent than it would be without enacting, as systematic adjustment (Zimmerman, 1970), pushing to be s(ec)ure. In short, there are now good practical reasons for not adhering to 'best practice' (Bloom and White, 2016: 13; cf. also Garfinkel, 1967: 186-207) with respect to TIP detection.

The result of the new practice, most of the time, is obviously a non-TIP. Whereas with the previous regime a high non-TIP rate was regarded as a sign of insecurity and professional immaturity by both peers and superiors, it is now considered the outcome of a legitimate practice – another change in the local occupational culture and in the organizational one as well. Indeed, pushing to be s(ec)ure is accepted practice even to the middle manager, Abel, who answers for guards' performances in front of his superiors, airport managers, and aviation authorities. Abel's endorsement is primarily tacit (not reprehending nor sanctioning the

practice) but at times has been made explicit, both to me, during conversations on the field, and, though sporadically, to the guards:

I've said to Abel 'I push for all the liquids. Either inside or outside [the baggage], even if separated, I push before sending it back and checking it. 'Cause I don't know whether it's the real or the fictitious one. I push.' – 'Yes, no, you're quite right.' he said. [Fidel, 11 November 2014]

As Kirke noticed in the army context, where rule bending/breaking 'not only made life easier for those concerned, but also contributed to the military success or reputation of the relevant organizational segment, then tacit or open endorsement by authority figures might well follow' (2010: 368). The new practice spread as it did also thanks to Abel's more or less tacit agreement and sporadic encouragement that in turn reinforced his power. Indeed, the legitimacy of any subversion – the possibility to frame it as moral action preserving a broader moral order – is ratified by those in control: 'power is associated not with a fixed assumption of what is moral, but in the dynamic authority granted to certain actors to authoritatively make such determinations' (Bloom and White, 2016: 19). 'This in turn means that [...] formal power imposes an obligation on those with authority to signal the limits of "OK-ness" (Kirke, 2010: 369), of rule bending/breaking legitimacy.

Finally, notice that the new practice did not disappear after the abandonment of the sanctioning policy.

I push in any case 'cause I need to be sure. I mean, I cannot say 'Who cares' then there's a TIP, then I receive the contestation letter – I mean, the formal letter, because now... [Fidel, 11 November 2014]

Even if the unfair sanctions are no more, detection performances are still relevant (e.g. for the 're-qualifier'), and the issue remains, in the guards' opinion, about the absurd composition of the library which, by including lots of common objects, engenders the risk of 'forgetting the knife', and forces guards to 'push in any case', thereby adopting a less-than-best practice – that is, which undermines their work and occupational identity (e.g. vis-à-vis colleagues of other airports).

'Second order' effects

The TIP new order fostered various forms of resistance, from traditional ones, such as union meetings and legal actions, to context-specific ones, like advertising contestation letters and pushing to be s(ec)ure. Such a phenomenon has been noticed in other cases of techno-organizational change (e.g. Balogun and Johnson, 2005; Szymanski and Whalen, 2011; Thomas et al., 2011). The change incoherence with respect to the local working order constitutes the cornerstone of resistance (Bassetti, 2012). This holds not only for the introduction of new technologies but

also for the modification of the working features of an extant one, and this means that there is no such thing as 'mere technicalities'. Further, when dealing with highly-institutionalized interorganizational workplaces, we are not confronted with one decisional entity but multiple, both public and private ones. They can be in conflict with respect to general goals and values – interorganizational mission ambivalence – and more specific issues alike – think of the security company and the police vis-à-vis airport management with respect to guard/officer-passenger interaction, or the security company vis-à-vis the x-ray provider with respect to the new TIPs. Furthermore, they can introduce changes – simultaneously, without coordination, and sometimes even without communication to fellow organizations – that may be directly conflicting or, probably worst, that may intertwine in such a way that derived 'second order' effects emerge in an undesigned, uncontrolled and unmanaged manner. And those 'second order' effects are the change effects, or outcomes, to which workers may react most vigorously.

In the case at hand, resistance might have taken place anyway, but it 'exploded' as it did given the intertwinement of technological and organizational variations impinging on the interorganizational workplace (Figure 4). Resistance was due neither only to new debatable TIPs introduced by the x-ray provider, nor only to new illegitimate sanctions applied by the employer on the background of working conditions such as high control, low wages, employment insecurity, and scarce prestige and authority. Sanctions were more numerous and felt as even more illegitimate given the debatability of new TIPs. On the other hand, having certain kinds of objects in the library became a moral and emotionally-charged matter. The new library, in the guards' opinion, undermines by itself the rationale behind TIP,

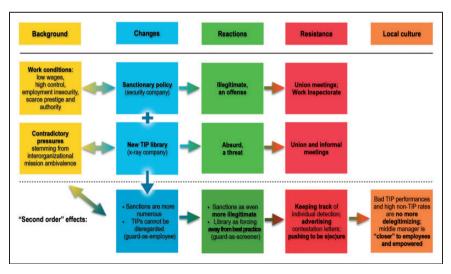


Figure 4. Change process and 'second order' effects.

which they generally approve; prevents them from properly doing their work, which they deem important for passengers' safety as well as guards' own enjoyment and satisfaction (e.g. putting oneself to the actual test with TIP detection); and does so even more given the new sanctions: in fact, guards-as-employees cannot entirely disregard TIP (they push to be sure), yet for guards-as-screeners pushing to be s(ec)ure, although legitimate, is not best practice – with all that this entails in terms of self-fulfilment, self-construction, and self-presentation. Furthermore, the intertwined variations must be seen on the background of the contradictory pressures stemming from the interorganizational context, with the threat such pressures pose by themselves on guards' occupational identity. It is not surprising then that they felt 'taken for a ride', with both occupational identity and personal *face* at stake, and reacted accordingly.

Concluding remarks

There are more and more (work)places characterized by the entanglement of manifold organizations, public agencies and authorities. This entails diverse, potentially conflicting cultures, contradictory pressures, and opposing rationalities. When a public/private dialectic fostering mission ambivalence at the interorganizational level is involved, the potential for contradictions is even higher – and 'private policing' reaches to the oxymoron. As we have seen, all this impacts (changing) work practices, identities and power-resistance relations, and entails consequences with respect to the ways in which workers make sense of and account for their practices – including ad hoc and systematic adjustments (cf. Zimmerman, 1970) such as, respectively, allowing an old lady to carry her medicine (Lucretia's example), and pushing to be s(ec)ure.

From this point of view, the considered case shows that when ambivalent interorganizational working orders are at stake, practices enacted within a specific portion of a given working order may be accounted for leveraging a set of knowledge, rules and moral concerns that belong to a different portion of that same order. Guards at security lines work as employees of a private company, yet they largely orient to security as a public concern and to what they consequently perceive as the objectives of security work when describing, explaining or justifying their actions as reasonable or ethical. On the other hand, public authority representatives such as ENAC inspectors are far from being untouched by economic models such as throughput. This phenomenon could even be what allows for ambivalent interorganizational working orders to persist despite their multifaceted character and intrinsic contradictions. More generally, this shows that the 'rationalities which weave the texture of practice' (Gherardi and Perrotta, 2011: 611) compete not only as attached to given groups of members, as part of distinct conflicting cultures. Far from being closed and self-contained, cultures are permeable and open to reciprocal pillage, should the circumstances require that. And this is orthogonal to the openness to change that each culture manifests.

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Notes

- 1. On this gender-related issue, see also Chan and Anteby (2015).
- 2. Because the research has been conducted in Italy, excerpts from fieldnotes and interviews have been translated from Italian to English by the author.
- 3. The possibility of sitting is another element (cf. Chan and Anteby, 2015: 15).
- These are mostly confrontational interactions but sometimes also sad/moving/depressing ones.
- 5. This sentence requires some background knowledge, and is challenging in terms of translation. As for the former, six hours is the length of the shift for policemen. As for the latter, the sentence, in the original Italian, reads 'Non è che uno può stare qui sei ore con due occhi cost'. The challenging part is the last section, 'con due occhi cost', literally 'with two eyes like that', a colloquial expression which means keeping one's eyes peeled to the maximum, being on the lookout for anything. Coupled with the 'six hours' reference (duration), the bodily-grounded expression also implies a sense of physical fatigue.
- 6. The formulation of the sentence in Italian does not require specify gender.
- 7. This is always a possibility, but the chances increase whenever the passenger is brought to the police.
- 8. A primer is a component of firearms such as rifles and guns.
- 9. In security personnel jargon, 'simulator' is the name for Computer-Based Training (CBT) system (cf. e.g. Koller et al., 2008).
- 10. The issue at stake here is that of incongruities as variations in 'normal appearances' (Sacks, 1972; cf. also Williams, 1975). A lipstick in a man's briefcase is but one example.
- 11. Engaged as they used to be in 'reading' the evolving work scene, guards are aware of their proximal colleagues' situated conditions (mutual awareness) and, if/when they spot a TIP (or something else 'problematic') on their monitors, they can quickly tip them off.

References

Ackroyd S and Thompson P (2015) Unruly subjects: Misbehaviour in the workplace. In: Edgell S, Gottfried H and Granter E (eds) *The SAGE Handbook of the Sociology of Work and Employment*. London: Sage.

Adey P (2004a) Secured and sorted mobilities: Examples from the airport. *Surveillance and Society* 1(4): 500–519.

Adey P (2004b) Surveillance at the airport: Surveilling mobility/mobilizing surveillance. *Environment and Planning A* 36: 1365–1380.

Adey P (2009) Facing airport security: Affect, biopolitics, and the preemptive securitisation of the mobile body. *Environment and Planning D: Society and Space* 27(2): 274–295.

- Allen D (2000) Doing occupational demarcation: The 'boundary-work' of nurse managers in a district general hospital. *Journal of Contemporary Ethnography* 29: 326–256.
- Ashforth BE, Joshi M, Anand V and O'Leary-Kelly AM (2013) Extending the expanded model of organizational identification to occupations. *Journal of Applied Social Psychology* 43(12): 2426–2448.
- Augè M (1995) Non-Places: Introduction to an Anthropology of Supermodernity. London: Verso.
- Baines D (2011) Resistance as emotional work: The Australian and Canadian non-profit social services. *Industrial Relations Journal* 42(2): 139–156.
- Balogun J and Johnson G (2005) From intended strategies to unintended outcomes: The impact of change recipient sensemaking. *Organization Studies* 26(11): 1573–1601.
- Barad K (2007) Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham: Duke University Press.
- Barley SR (1986) Technology as an occasion for structuring: Evidence from observations of CT scanners and the social order of radiology departments. *Administrative Science Quarterly* 31: 78–108.
- Bassetti C (2012) IS-related organizational change and the necessity of techno-organizational co-design(-in-use). An experience with ethnomethodologucally oriented ethnography. In: Viscusi G, Campagnolo GM and Curzi Y (eds) *Phenomenology, Organizational Politics, and IT Design: The Social Study of Information Systems*. Hershey: IGI Global, pp. 289–310.
- Bassetti C, Giorgetta C and Ferrario R (2015) Work- and Job-related Stress, Emotions, and Performance in Critical Situations. An interdisciplinary study in the context of airport security. In: Airenti G, Bara BG and Sandini G (eds) *Proceedings of the EuroAsianPacific Joint Conference on Cognitive Science*. CEUR Workshop Proceedings 1419 (http://ceur-ws.org/Vol-1419).
- Bechky BA (2003) Object lessons: Workplace artifacts as representations of occupational jurisdiction. *American Journal of Sociology* 109: 720–752.
- Bloom PN and White PJ (2016) The moral work of subversion. *Human Relations* 69(1): 5–31.
- Bolfing A and Schwaninger A (2009) Selection and pre-employment assessment in aviation security x-ray screening. 43rd Annual International Carnahan Conference on Security Technology 5–12.
- Bolton S (2005) Emotion Management. Harmondsworth: Palgrave.
- Button G (ed.) (1993) Technology in Working Order: Studies of Work, Interaction, and Technology. London: Routledge.
- Castells M (1996) The Rise of the Network Society 1: The Information Age: Economy, Society and Culture. Oxford: Blackwell.
- Chan CK and Anteby M (2015) Task segregation as a mechanism for within-job inequality: Women and men of the Transportation Security Administration. *Administrative Science Quarterly* 1–33.
- Contu A (2008) Decaf resistance. Management Communication Quarterly 21(3): 364–379.
- Cresswell T (2006) On the Move: Mobility in the Modern Western World. New York and London: Routledge.

- Cresswell T and Lemarchand M (2016) Ne pas dépasser la ligne! Fabrique des identités et contrôl du mouvement dans le lieux de transit. Paris: Édition Loco/Forum Vies Mobile.
- Cutler V and Paddock S (2009) Use of Threat Image Projection (TIP) to enhance security performance. *Proceedings of the 43rd Annual International Carnahan Conference on Security Technology* 46–51.
- Folger R, Ganegoda DB, Rice DB, Taylor R and Wo DXH (2013) Bounded autonomy and behavioral ethics: Deonance and reactance as competing motives. *Human Relations* 66: 905–924.
- Freudenburg W (1992) Nothing recedes like success? Risk Analysis and the organizational amplification of risks. *Risk: Issues in Health and Safety* 3(1): 1–35.
- Fuller G and Harley R (2004) Aviopolis: A Book about Airports. London: Black Dog.
- Garfinkel H (1967) Studies in Ethnomethodology. Englewood Cliffs, NJ: Prentice-Hall.
- Garfinkel H (2008) Toward a Sociological Theory of Information. Boulder, CO: Paradigm.
- Gherardi S and Perrotta M (2011) Egg dates sperm: A tale of a practice change and its stabilization. *Organization* 18(5): 595–614.
- Goodwin C and Goodwin MH (1996) Seeing as a situated activity: Formulating planes. In: Engestroüm Y and Middleton D (eds) *Cognition and Communication at Work*. Cambridge: Cambridge University Press, pp. 61–95.
- Harper R and Hughes J (1993) 'What a f-ing system! Send 'em all to the same place and then expect us to stop 'em hitting': Making technology work in air traffic control. In: Button G (ed.) *Technology in Working Order: Studies of Work, Interaction, and Technology*. London: Routledge, pp. 127–144.
- Hättenschwiler N, Michel S, Kuhn M, Ritzmann S and Schwaninger A (2015) A first exploratory study on the relevance of everyday object knowledge and training for increasing efficiency in airport security x-ray screening. *Proceedings of the 49th Annual International Carnahan Conference on Security Technology*: 25–30.
- Heath C and Luff P (2000) *Technology in Action*. Cambridge: Cambridge University Press. Hochschild AR (1983) *The Managed Heart*. Berkeley: University of California Press.
- Hofer F and Schwaninger A (2005) Using threat image projection data for assessing individual screener performance. WIT Transactions on the Built Environment 82: 417–426.
- Husserl E (1913) *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*. Dordrecht: Kluwer.
- Jobard F and Linhardt D (2008) The check and the guardianship: A comparison of surveillance at an airport and a housing-estate area in the Paris outskirts. *Sociology of Crime Law and Deviance* 10: 75–100.
- Johnson MD, Morgeson FP, Ilgen DR, Meyer CJ and Lloyd JW (2006) Multiple professional identities: Examining differences in identification across work-related targets. *Journal of Applied Psychology* 91: 498–506.
- Kirke C (2010) Orders is orders...aren't they? Rule bending and rule breaking in the British Army. *Ethnography* 11(3): 359–380.
- Klauser F (2009) Interacting forms of expertise in security governance: The example of CCTV surveillance at Geneva International Airport. *British Journal of Sociology* 60(2): 279–297.
- Knox H, O'Doherty D, Vurdubakis T and Westrup C (2008) Enacting airports: Space, movement and modes of ordering. *Organization* 15(6): 869–888.
- Knox H, O'Doherty D, Vurdubakis T and Westrup C (2015) Something happened: Spectres of organization/disorganization at the airport. *Human Relations* 68(6): 1001–1020.

Koller S, Hardmeier D, Michel S and Schwaninger A (2008) Investigating training, transfer and viewpoint effects resulting from recurrent CBT of x-ray image interpretation. *Journal of Transportation Security* 1(2): 81–106.

- Koskela I, Arminen I and Palukka A (2013) Centres of coordination as a nexus of aviation. In: Haddington P, Mondada L and Nevile M (eds) *Interaction and Mobility: Language and the Body in Motion*. Berlin/Boston: de Gruyter, pp. 245–276.
- Kraal BJ, Popovic V, Cave AR and Taris A (2013) Co-production of actions and activities at airport security screening. In: *Consilience and Innovation in Design: Proceedings and Program.* Tokyo: Shibaura Institute of Technology, Toyosu Campus.
- Kruger E, Magnet S and Van Loon J (2008) Biometric revisions of the 'body' in airports and US welfare reform. *Body & Society* 14(2): 99–121.
- Kunda G (1992) Engineering Culture: Control and Commitment in a High-tech Corporation. Philadelphia, PA: Temple University Press.
- Leonardi P and Barley S (2008) Materiality and change: Challenges to building better theory about technology and organizing. *Information and Organization* 18(3): 159–176.
- Levina N and Orlikowski WJ (2009) Understanding shifting power relations within and across organizations: A critical genre Analysis. *Academy of Management Journal* 52(4): 672–703.
- Lyon D (2003) Airports as data filters: Converging surveillance systems after September 11th. *Information, Communication and Ethics in Society* 1(1): 13–20.
- McCahill M (2008) Plural policing and CCTV surveillance. In: Deflem M and Ulmer JT (eds) *Surveillance and Governance: Crime Control and Beyond*. Bingley: Emerald, pp. 199–219.
- Molotoch H and McClain N (2008) Things at Work: Informal social-material mechanisms for getting the job done. *Journal of Consumer Culture* 8(1): 35–67.
- Orlikowski WJ (2000) Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science* 11(4): 404–428.
- Orlikowski WJ (2007) Sociomaterial practices: Exploring technology at work. *Organization Studies* 28(9): 1435–1448.
- Pallitto R and Heyman J (2008) Theorizing cross-border mobility: Surveillance, security and identity. Surveillance and Society 5(3): 315–333.
- Pascoe D (2001) Airspaces. London: Reaktion Books.
- Pearman H (2004) Airports: A Century of Architecture. London: Lawrence King.
- Putz O (2012) From non-places to non-events: The airport security checkpoint. *Journal of Contemporary Ethnography* 41(2): 154–188.
- Redden M (2012) How lines organize compulsory interaction, emotion management, and 'emotional taxes': The implications of passenger emotion and expression in airport security lines. *Management Communication Quarterly* 27(1): 121–149.
- Ruegg J, Flueckiger A, November V and Klauser F (2006) Vidéosurveillance et risques dans l'espace à usage public: représentations des risques, régulation sociale et liberté de mouvement. In: CETEL Publication No. 55. Geneva: Travaux du CETEL.
- Rusconi E, Ferri F, Viding E and Mitchener-Nissen T (2015) XRIndex: A brief screening tool for individual differences in security threat detection in x-ray images. *Frontiers in Human Neuroscience* 9: 439.
- Sacks H (1972) Notes on police assessment of moral character. In: Sudnow DN (ed.) *Studies in Social Interaction*. New York: Free Press, pp. 280–93.

- Salter M (2008) The global airport: Managing space, speed, and security. In: Salter M (ed.) *Politics at the Airport*. Minneapolis: University of Minnesota Press, pp. 1–28.
- Steiner-Koller SM, Bolfing A and Schwaninger A (2009) Assessment of x-ray images interpretation: Competency of aviation security. *Proceedings of the 43rd Annual International Carnahan Conference on Security Technology*: 20–27.
- Suchman L (1996) Constituting shared workspaces. In: Engestroüm Y and Middleton D (eds) Cognition and Communication at Work. Cambridge: Cambridge University Press, pp. 35–60.
- Szymanski MH and Whalen J (2011) *Making Work Visible: Ethnographically Grounded Case Studies of Work Practice*. Cambridge: Cambridge University Press.
- Thomas R, Sargent LD and Hardy C (2011) Managing organizational change: Negotiating meaning and power-resistance relations. *Organization Science* 22(1): 22–41.
- Van Maanen J and Barley SA (1984) Occupational communities: Culture and control in organizations. In: Staw BM and Cummings LL (eds) *Research in Organizational Behavior*, Vol. 6. Greenwich, CT: JAI Press, pp. 287–365.
- Wallis R (1998) The role of international aviation organizations in enhancing security. In: Wilkinson P and Jenkins BM (eds) *Aviation Terrorism and Security*. London: Frank Cass, pp. 82–100.
- Williams ML (1975) Seeing through appearances: Procedures for 'discovering' criminal activity. Paper presented at the Conference on Ethnomethodology and Conversation Analysis, University of California, Santa Barbara.
- Zimmerman DH (1970) The practicalities of rule use. In: Douglas JD (ed.) *Understanding Everyday Life: Towards a Reconstruction of Sociological Knowledge*. Chicago: Aldine Publishing Company, pp. 221–238.

Author Biography

Chiara Bassetti is an ethnographer and ethnomethodologist largely working within interdisciplinary teams. She is a senior research fellow at the Department of Information Engineering and Computer Science of the University of Trento, and an adjunct lecturer in Qualitative Methods at the Department of Sociology and Social Research of the same University. Her main focus rests on social interaction, with particular attention to nonverbal and nonconceptual aspects and the role of tools and technologies. She conducted fieldwork and video-based research in control rooms, emergency rooms, theaters, rehearsals rooms, classrooms, homes and bedrooms. Areas of interest include socio-technical systems and organizations, workplace studies, social informatics, performing arts, creativity, body and embodiment, rhythm, carisma, gender studies.