5. Unmoving Bodies: In-Flight Entertainment, Infrastructural Images and Cultural Techniques of Sitting

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"Never just sit"

When researching this article on my private PC during the global Coronavirus pandemic in 2020, I looked up various internet sources on the history of seats and chairs in general and airplane seats in particular. Inevitably, the search queries crept into my Facebook ads, which started to offer a plethora of chairs, stools and armchairs to me. Among them, one ad stood out with the slogan "Never just sit" (aeris.de 2020). It seemed rather unexpected for a company ultimately wanting to sell furniture to sit on. Indeed, the company's marketing strategy aims at selling (among other products) flexible office chairs and stools with a semantics of movement: "We are against motionless sitting, which makes you tired and sick" (aeris.de 2020), their mission statement reads. Citing health claims and evoking the powerful discursive registers of activity and mindfulness, 'sitting' is located here on the threshold between governmental concern about public health as well as worker productivity and body-centered techniques of the self. Moreover, it demonstrates how pervasive semantics of perpetual movement have become when even seating furniture cannot sell without being rebranded as a tool for movement.

In the wake of the mobilities turn and with regard to the increasing importance of mobile media, cultural and media theory does not escape this emphasis of movement, motility and mobility. In concerning myself with aerial mobility in this article, however, I aim to highlight the crucial role images play in *immobilizing* bodies for passenger flight operation. In-flight entertainment, I argue, is a media technology which, by making moving images accessible, aims at *unmoving* the passengers. While travelling across the globe, the images of in-flight entertainment therefore cannot properly be grasped as mere objects of transportation: rather, they are part of the operational logic of aerial passenger transport itself and thus take on the quality of infrastructural images. They contribute to a successful performance of aerial infrastructures precisely by occupying passengers *without moving them*.

In this chapter, I argue that within the potentially claustrophobic space of ultra-dense aircraft cabins, in-flight entertainment opens up a trajectory of escape by providing a vast media space that differs from the fact of flight. This media space, however, is closely guarded and managed by airlines so as not to disturb, frighten or incite viewers. It is therefore a space of inhibited, suspended and deferred affect, a class of affects which I call 'sessile affects.' This necessitates further elaboration on the interrelation between (suspension of) movement, images and affect from the perspective of affect theory and film theory. While these perspectives are necessary to kick off an understanding of how movement and feeling can be tied together within images, my approach will not focus exclusively on affect or film theory. Focusing on motionlessness rather than motion, I will outline how sitting can be conceived of as a cultural technique of the body, which is essential for understanding the inverted relationship between the cultural technique of sitting-down and the cinematic presentation of in-flight entertainment, where images serve the purpose of spectators staying seated and not the other way around. To further sharpen a comprehension of the crucial role of seats and the cultural practice of sitting-down irretrievably connected to them in aviation, I will then delineate how airplane cabins have become ever denser arrangements of seats in the jet age, due to safety as well as economic reasons. Seats from this perspective are efficient storage media for living human bodies, giving plausibility to the tongue-in-cheek description of passengers as 'self-loading freight' in aviation lingo. The emerging aerial regime of sitting is not only historically tied to the rise of in-flight movies and in-flight entertainment systems. Images in air moreover contribute significantly to the logistics of passenger transport itself by unmoving bodies. In-flight entertainment and its sessile affects, I conclude, therefore reveal the infrastructural power of images.

Making Space: Unmoving Images

Experimental attempts at 'airing' movies in-flight can be traced back to the 1920s, yet in-flight entertainment as an industry-wide practice really 'took off' with the advent of post-war jet travel and its densified interiors (cf. Groening 2014, 65–79). Boeing's 747, for instance, was designed from the outset with in-flight entertainment systems in mind (Groening 2014, 83–84). While early installments quite literally transformed the airplane and its darkened cabin with forward-facing seats into a movie theater by placing a screen in the front, a projector beneath the cabin ceiling and playing sound throughout the cabin,[1] airlines subsequently made in-flight movies increasingly accessible and opt-in, for instance through the introduction of multiple TV monitors hanging from the ceiling and the use of headphones (cf. Groening 2016). As full-featured entertainment systems installed into

the back (or armrest) of every seat and operated by per-seat remote or touch control, since the 1990s digital on-demand IFE has become more and more individually customizable and networked (cf. Groening 2014, 115–128), thereby pioneering the operational logic of digital media and turning spectators (of non-theatrical cinematic exhibitions) into users (of digital entertainment systems). While they may include premium services such as satellite-internet, live TV or in-flight telephony, access to most features of IFE systems (typically movies, tv shows, airline-specific promotional films, e-journals, audiobooks, podcasts, music, and games as well as flight information such as moving maps and, if available, exterior camera views of the airplane) usually comes free of charge to passengers. For airlines, however, IFE is a serious cost factor with IFE systems easily costing up to $10,000 per seat plus content license fees, and adding weight as well as maintenance complexity, e.g. in the form of excess wiring, to the airplane and its operation. Contemporary IFE solutions, produced by a variety of specialized third-party manufacturers, therefore scale back on hardwired back-seat monitors and rely increasingly on mobile wireless devices handed out to passengers or making use of private devices already brought on board by passengers (cf. White 2018).

While IFE is neither a distinguishing feature for airlines—passengers don't book a flight to see movies—nor a revenue source, it is nonetheless expected by passengers for long-distance air travel, "a service every airline must have in order to stay competitive" (Groening 2014, 83). The common denominator with which IFE manufacturers and airlines alike describe in-flight entertainment is the umbrella term 'experience,' often specified as 'spectacular,' 'immersive,' 'exceptional,' 'satisfying,' and so on. The concept is also present in the naming scheme of the corresponding trade association Airline Passenger Experience Association (APEX). What's noteworthy about these loose semantics is that—contrary to the earlier days of air travel (cf. Van Riper 2004, 83–107)—the experience does not lie in flight itself but within a media space. IFE is not an experience *of flight*, but an experience *in flight* that differs from experiencing flight itself.

This is due to safety concerns on the one hand, as flight itself can be perceived as inherently dangerous, and to the economics of the aircraft cabin on the other. For the experience of flight is foremost a visual experience that is tied to the 'aerial view' involving both estrangement from and sublime ascension above the landscape (cf. Dorrian 2007). This view, however, is tied to the presence of a window to look out of. In ultra-dense aircraft cabins of widebody jets, window seats are rare, and on transatlantic or transpacific flights they offer comparably dull views of the oceans for extended periods of time anyway. Thus, the paradigmatic view for commercial aviation does not follow a centrifugal trajectory towards the outside. Instead it follows a centripetal trajectory and is directed into the interior space of the cabin itself.[2] And while airlines try to make airplane interiors seem spacious and pleasant-looking—including coloring, lighting design (cf. Maeder 2018)

and the appearance of flight attendants (cf. Vantoch 2013)—the lack of space that comes with ever more efficient seat layouts makes the aircraft cabin a potentially claustrophobic environment, a "panic room sui generis" (Rothöhler 2009, 44). Passenger management thus includes drawing attention away from both the (potentially hazardous) fact of flight and the claustrophobic interior of the aircraft cabin. By opening up media spaces within the cabin, in-flight entertainment therefore also serves as a counteragent to the fear of flying:

> In a sense, the stimuli on these screens are attempts to transport the viewer outside the situation of flight. The distraction of the audiovisual on the screen gives the passengers the opportunity to imagine themselves somewhere else—anywhere other than thousands of feet above the earth in a metal tube. (Groening 2014, 139)

At the same time, however, the media spaces opened up by IFE are carefully managed as well, for they are intended to captivate but not move the audience from their seats, transport them 'anywhere' as long as they stay seated. This management of passenger captivation performed by airline IFE managers typically involves content selection—films about aviation disasters or plane hijackings, for instance, will usually not make it (in)to (the) 'air'—as well as editing and production. Movies have to be edited for technical reasons, to fit the screen ratio of IFE systems (typically 4:3 or 16:9) as well as for their contents. Film production companies even compile airline coverage notes informing airlines of potentially unwanted content such as nudity, excessive violence or controversial depictions of religion, race or culture, sometimes even producing alternate scenes to accommodate airlines' needs or simply editing or substituting undesired visual or audio contents in post-production (cf. Chariton 2005). While the standards of individual airlines may differ according to the cultural norms of their respective markets, they are always "aimed towards pacification and placation. Content that might provoke anxiety, violence, offence or indeed any strong feeling is discouraged" (Groening 2014, 141).

In this regard, airlines treat movies like television traditionally would, employing a 'family-friendly' strategy of 'least objectionable programming' (LOP), which eliminates any potential controversy by avoiding sensitive issues altogether. Especially the romantic comedy with its emphasis on personal communication, close-ups, accessible plots, and avoidance of outright depictions of sexuality in favor of courtship has accordingly been identified as the ideal movie genre for presentation on small screens in mid-air:

> if the romantic comedy itself relies on transforming that which cannot be named (sex) into a joke, it is a genre well versed in the art of diversion. Inflight entertainment thus puts romantic comedies into service of a double denial of sex and crashing. (Groening 2014, 141)

We may also read this 'double denial' as a sort of affective inhibition that circumvents the kinds of affective engagements that would truly move us out of fear, joy, arousal or excitement by obstructing them in the way seatbelts obstruct our motility.

That is, however, not to say that in-flight movies completely lack the potential to touch us. The kind of intimate sentimentality that the romantic comedy, as *the* genre of inflight-movies, produces is not aimed at proliferating affective intensities, which make us scream, flinch, jump, laugh out loud or burst into tears. Instead, here affect is incited only as much as it is deferred, suspended and inhibited at the same time. These feelings are not centrifugal affects that would move us and make us move, but rather centripetal affects, which touch us only so far as not to make us move, creating an "artificial interiority and inwardness" (Kappelhoff 2004, 29) rooted in a bourgeois culture of sentimental sensitivity, which cinema has been part of since the advent of narrative cinema (cf. Kappelhoff 2004, 16–20). While this culture of inward sentimentality is closely linked to film melodrama and its "mode of excess" (Brooks, quoted in: Kappelhoff 2004, 19), in-flight entertainment cuts off this excess in different ways: First, the screen size doesn't easily allow for the kind of narrative immersion necessary to give in to the filmic sensation completely. Consequently, other passengers' screens remain present in our peripheral vision, sometimes leading to parallel movie viewing. Secondly, airplane cabins never achieve, and this is deliberate, the same darkness as movie theaters because unlike cinema, they are spaces of asynchronous, individualized schedules. Thirdly, movie presentations may be constantly interrupted by in-flight services, other passengers, flight-related announcements or turbulence. The airplane does not serve the movies like the movie theatre would, the movies are subordinated to the airplane, they serve the operation of flight.

In this sense, sentimental sensitivity on the airplane is purposefully anti-excessive; while invoked, it is restrained, interrupted, fragmented. If we think about the suspension of movement as movement, about sitting-still as a way to move around, we can think of restraint, interruption and fragmentation, deferral, suspension and inhibition not as a negation of affect, but rather as a difference of affects. More precisely: sessile affects that unmove bodies.

Affect, (Suspension of) Movement and Cinema

Brian Massumi's seminal book on the theory of affect commences with a paragraph on the interrelation between movement and feeling that, although widely quoted across the fields of studies on affect and (moving) images, will be reproduced once again here:

> When I think of my body and ask what it does to earn that name, two things stand out. It *moves*. It *feels*. In fact, it does both at the same time. It moves as it feels, and it feels itself moving. Can we think a body without this: an intrinsic connection between movement and sensation whereby each immediately summons the other? (Massumi 2002, 1)

While I neither intend to challenge Massumi's assumption nor to delve into the intricacies and eccentricities of affect theory in general, I want to use Massumi's rhetorical question as a starting point for thinking about the relation between movement, affect and images by taking it seriously: Can we think a body without movement? And would that lack of movement necessitate a lack of feeling? It *doesn't move,* it *doesn't feel?*

In asking these questions, however, I do not want to suggest thinking of lack of movement as the opposite of movement: A living human body standing, sitting or lying certainly still maintains a relation to its capacity to move, its motility, to movement as a potentiality, while refraining, being unable or prohibited to actually move. And this lack of movement would certainly be felt as such by the body: *it feels itself not moving*. While my thinking about (lack of movement) therefore should not be regarded as a true challenge to affect theory, I cannot help but notice that Massumi's deeply affirmative stance towards movement and his emphasis on actual movement causes some of his disciples to one-sidedly privilege phenomena of actual movement, such as dance or gesture. Contributing to this privilege of movement over non-movement is that key figures of cultural theory such as Benjamin's flâneur or Deleuze's and Guattari's nomad conceptualize modern subjectivity as thoroughly motile (cf. Adey 2017, 81–92). This, in turn, means that phenomena relating to movement only in the manner of potentiality, i.e. as lack of actual movement such as sitting, standing-still or lying-down, have been underappreciated by cultural theory, mobility studies and affect theory, which sometimes seem to confuse actual movement with the potential capacity to move. The polysemic nature of the term 'movement,' which can be used to denote both motility and feeling, seems to contribute to such an understanding of corporeal movement through physical space (*to move*) as corresponding to an interior movement of feeling and sensation (*being moved*). Likewise, 'emotion' has an etymological root in 'motion.' 'Affect' then precisely denotes the "join" (Kavka 2008, 34) between these two kinds of movements, between motion and emotion, body and mind, which are not thought of as belonging to different realms. Rather, both the moving body and the body moved by feeling are thought of as inhabiting the very same physical realm.[3] While I would caution against giving in to the lure of language to quickly, there is no reason not to think of standing-still, sitting or lying as phenomena of movement from within the framework of affect theory itself.

First, there is residual (and mostly invisible) bodily movement in all situations involving lack of movement: the heart beating, the lungs expanding and contracting, and so on. On this level, there truly is no body completely without movement. This, however, is true for the dead body, too. At least for some time body fluids will continue to move through the body and its decay involves movement on a cellular level even for a longer period of time. Moreover, it's true for the entirety of physical entities in the known universe: atoms combining and decaying, quarks spinning, planets orbiting, the universe expanding. There's simply nothing without movement in some form. "All existence moves" (Sheller 2018, 137). Or, it *moves*, it *exists*. This might, whichever way you want to spin it, either support affect theory readings on the level of ontology or point to the need to establish a more precise terminology when speaking about different kinds of movement.

Secondly, lack of movement is only partial. We may for instance sit down to write a text and keep most parts of our body immobile for the better part of the process, yet our hands and fingers will move a lot to operate the keyboard and mouse, grab a book from the desk, etc. Likewise, our eyes will constantly move to scan the words written on the monitor, while occasionally our head will move as well, be it only to distract ourselves or because keeping it still is actually exhausting (and unhealthy) for our body. For the same reason we will arch our back from time to time, move our feet, etc. Even when lying down to sleep our body will perform these types of movements as well as be in motion in other involuntary ways, e.g. muscle twitching. Following Deleuze, we may think of this interplay between motion and motionlessness as characteristic for affect itself. With regard to the face, the prime example for his deliberations on the affect-image, Deleuze highlights the "relative motionlessness" (1997, 97) of the face as a precondition to it being able to provide an image and surface upon which the micro-movements of facial expressions become intelligible. The ability to be moved by affect comes "at the cost of motionlessness" (1997, 96)[4]. Moreover, partial motionlessness of the body, particularly in the form of sitting still, is a precondition to operating vehicles that provide a form of machinic mobility, notably biking, car-driving or flying.

Thirdly, situations involving (partial) lack of movement can be and often are situations of high or even heightened affective involvement, e.g. sitting down for a job interview, standing before the altar (or registrar), dreaming while lying down. This is particularly true for situations involving entertainment media: reading a novel, for instance, typically suspends bodily motion for the most part, yet can entail high affective involvement. Even more pertinent is the case of (narrative) cinema, where heavily restrained movement or complete lack thereof is a necessity for the collective reception of a movie. Here, the inability to move is even considered to heighten the experience of moviegoers, for it not only directs attention away from the body and towards the screen: the moving nature of cinematic images is thought of moreover as compensating for the corporeal motionlessness. In the cinema, we

trade—so to speak—one kind of motion (of our own body) for a different kind of motion (the motion of images). "And if the eye which moves," Jean-Louis Baudry writes with regard to the camera, "is no longer fettered by a body . . . the world will be constituted not only by this eye but for it" (1986a, 292). For Baudry, this trade-off between lack of bodily movement and movement of the images actually constitutes a favorable barter for the spectator. According to Baudry, camera movement unconstrained "by the laws of matter and time" (1986a, 292) allows for the phantasmatic presentation of an intentional object on screen and a corresponding transcendental subject, the camera and the spectator identifying with it, at the same time. Despite obviously following a different line of argument with wide-ranging implications, his reasoning may well be aligned in parts with affect theory. We may think of Baudry's transcendental subject, even against his liking, not so much as a subject of cognizance but rather of heightened affective involvement with the screen, for the screen does not merely represent an external object, but by virtue of the camera also connects subject and object as a "join" (Kavka 2008, 37). Summarizing yet another theory of film, Eisenstein's theory of montage, Hermann Kappelhoff puts it like this: "In the perceived figure of movement the spectator records a figure of expression, which he transforms into an emotion, a figure of sensation that he literally realizes on his own body"[5] (Kappelhoff 2008, 313). Or, again in Baudry's terms: "to seize movement is to become movement, to follow a trajectory is to become trajectory" (Baudry 1986a, 291–292).

Suspension of Movement as a Cultural Technique of the Body

Lack of movement and affective involvement, therefore, should not be thought of as mutually exclusive. Even from within a theory of affect, and especially with regard to film theory, (partial) motionlessness and affect are closely linked. In one way or another absence of motion even seems to be a prerequisite to affect flowing. It *doesn't move*, yet it *feels*. This opens up a wholly different perspective on affect, one that escapes the sometimes lofty and imprecise coupling of movement and affect. It urges us to consider the cultural techniques of non-movement, such as sitting, standing still and lying down as fundamentally corporeal techniques to attune oneself to situations of heightened affective involvement. As Marcel Mauss has argued, these "techniques of the body" (1973, 70) make the body appear as a hybrid "natural technical object" (75), which, in exerting its innate capabilities, makes use of the body as a technical means that can be operated in manifold, culturally contingent ways. Most notably, Mauss' catalogue of corporeal activity includes those techniques involving "suspensions of movement" (80), such as sleep and resting. The latter category encompasses "lying down, sitting, squatting" (81). Both sleep and resting, however, point to another dimension of cultural techniques, and in-

dicate that they often involve or even rely upon objects. For instance, Mauss makes his most basic distinction between "those societies that have nothing to sleep on except the 'floor,' and those that have instrumental assistance" (80) and continues to differentiate "people with benches and people without benches and daises; people with chairs and people without chairs" (81). Evidently, these objects are not thought of as merely neutral instruments for exerting techniques of the body, they are fundamental elements of the "operational chains" (Schüttpelz 2010, 111)[6] of cultural techniques. As such they always already include, teach, and, to a certain extent, predetermine how the body can be deployed: a yoga ball will make you sit differently to an armchair, just as a hammock will require you to lie down differently to a flat bed, for instance. These everyday objects are nothing less than archives and transmitters of cultural techniques of the body.[7]

The cinematic apparatus, as Baudry described it, relies so heavily on the audience performing the bodily technique of sitting-still that Baudry himself never convincingly considers how the audience actively immobilizes itself. According to him, instead they "find themselves chained, captured, or captivated" (Baudry 1986a, 294) and come to enjoy this "forced immobility" (Baudry 1986b, 303) as a re-discovery of the pre-mirror-stage experience of the child (cf. Baudry 1986b, 303). The force that acts upon the spectators, makes them lean back into their chairs, rather than being of metapsychological nature, may however be more precisely located in the seat itself: "A chair is only finished when someone sits in it" (Hans J. Wegner, quoted in Rybczynski 2017, 1). Seats make you sit because they are essential objects within the operational chains constituting the cultural technique of suspending bodily movement in the form of sitting-still. When there's a seat, we're accustomed to taking it. By no means is sitting-still therefore a mere function of the cinematic apparatus as Baudry suggests; instead, it is a cultural technique upon which a certain type of cinema can draw in order to develop its distinct mode of representation. Indeed, we learn to sit still from a very young age, for instance in school, in bourgeois dining etiquette, or in bourgeois entertainment forms such as theater. Even in cinema, arguably, sitting-still became part of cinema etiquette only through the advent of narrative cinema. While seats were an essential part of early cinema as well, audience conduct may have been more akin to the visceral experience of variety shows, which involved increased audience activity on a sensory as well as a physical level (cf. Gunning 1986, 66–67; Hansen 1991, 23–59).

The cultural technique of sitting-still therefore serves the cinematic apparatus: it produces the "forced immobility of the cine-subject" (Baudry 1986b, 313) upon which the cinema relies in order to deploy its mode of representation. This, at least, seems true for a classical era of cinema that is tied to the physical location of the movie theater. With the increasing dissemination of cinematic exhibition into non-theatrical venues such as television and (on-demand) video, the cinematic ties to the movie theater are loosening. Cinema, in Casetti's terms, is relocated by trans-

porting its content into other media and into different environments (cf. Casetti 2015, 47–52). Accordingly, the hierarchical relation between the cultural technique of sitting and the cinematic, i.e. sitting down *to* watch a movie, come into question. Parents, for instance, have long known that you can use television, tablets and other media to make (children's) body sit (rather) still. It cannot be taken for granted, therefore, that sitting down only serves the cinematic experience. The cinematic experience might in turn serve the purpose of making bodies suspend their movement as well. This is the case when another vector of movement is added into the equation of (un)moving bodies, moving images and moved minds, i.e. when the entire exhibition site is on the move. This is apparent in backseat entertainment found in (luxury) family cars and on airplanes, but can be applied to all sorts of mobile media-based in-vehicle entertainment, e.g. private tablets, smartphones or laptops used on trains, subways, long-distance bus services, etc.[8] These forms of moving images provided as in-vehicle entertainment are subordinated to the mobility of the vehicle: we do not enter cars or board planes to watch a movie. Rather, in-vehicle entertainment makes us sit still for extended periods of time and within the confined space of a single seat. The moving images do not move us, they are intended to suspend movement.

This becomes most apparent in in-flight entertainment (IFE) because the aircraft cabin is probably the physically densest as well as best safeguarded intravehicular space in passenger transportation. In the case of wide-body long-haul and ultralong-haul aircraft it is also shared by a large number of people for extended periods of time. Air travel has pioneered in-vehicle entertainment since the 1960s and therefore can be used as a prime example to showcase the inverted relation between moving images and their power to (un)move the spectator: In his landmark work on in-flight entertainment, Stephen Groening emphasizes this inverted relation between immobile spectatorship and the screen very well:

> Built into the structure of cinematic spectatorship is the presumption of immobility and captivation: inflight entertainment, however, is an instance of cinema in which the immobility of the spectator precedes the introduction of the film. That is, rather than carving out a special place for the spectator to remain immobile in front of the screen, the film industry had to construct a special place for the screen in front of already immobile spectators. (Groening 2014, 14)

Due to the extreme spatial constraints of the airplane cabin, the screen space has been 'carved out' of the seat itself, with back-seat monitors becoming the de facto standard of IFE since the 1990s and evolving into a defining feature of the visual atmosphere of an aircraft cabin ever since (cf. Fig. 5.1). Airplane seats therefore make the passenger sit in a dual sense: as they are the only piece of furniture available to the passenger's body, they necessitate him or her to sit down. And they

(are intended to) make him or her endure staying seated by putting images in his immediate field of view, which is the seat in front.

Figure 5.1: Array of screens 'carved out' of the seat-backs on an Emirates Boeing 777.

Aviation and the Cultural Regime of Sitting

Seats and the regime of sitting-down which they represent are so ubiquitous on today's airplanes that we barely think about them. While seats are not technically necessary for the operation of an airplane—the Wright Flyer, for instance, had the pilot lying on his stomach in order to reduce drag—piloting is an overwhelmingly sitting task due to the spatial confinements of the cockpit on the one hand, and the ability of the sitting body to use both feet and arms to operate the control interfaces of an airplane (most basically rudder pedals for yaw movement, yokes/sidesticks for roll and pitch, and throttle for thrust as well as toe brakes for deceleration on the ground) on the other. Moreover, the experience of flying aboard an airliner as a passenger is an experience firmly tied to the cultural regime of sitting-down even to the point of serious physical discomfort. Numerous reasons can be identified for this connection between air travel and the regime of sitting.

First, there is safety: a sitting body can be strapped to its seat with the help of seatbelts, preventing it from being flung around the cabin in the case of a hard landing or turbulence mid-air. Contemporary airplane seats have to withstand longitudinal forward forces of 16 g (cf. Anderson 2011, 6) and many airlines advise their passengers to keep their seatbelts on at all times, if only to avoid litigation. In addition, large-scale movement of passengers within the cabin might potentially interfere with load balance and have adverse effects on aerodynamic performance. Post-9/11, moreover, passengers standing up have been perceived increasingly as a potential security threat. Numerous filmic depictions of plane hijackings after as

well as before 9/11[9] have contributed to this fear of the rising passenger, especially if they are non-white. On flights into the United States, for instance, airlines are required to notify passengers not to congregate in groups in front of the lavatories. While standing up and walking around is recommended from a health perspective, safety announcements such as these do enable a safety regime of (calmly) sitting down, and a legitimate reason to deviate from this is required (such as a bathroom break).

Secondly, and more importantly, seats are tied to the economy of flight: with the advent of mass air travel by jet starting in the late 1950s, continuing throughout the 1960s and epitomized by the introduction of Boeing's 747 'Jumbo Jet' with its (theoretical) capacity of up to 550 passenger seats in 1969, airlines adopted an economy of scale that made transportation by flight vastly more achievable for the middle-classes, yet required airlines to densify the airplane cabin in unprecedented ways in order to accommodate large numbers of low-fare passengers (cf. Vantoch 2013, 96–110; Van Vleck 2013, 239–280). Deregulation in the airline industry from the 1970s onwards and the subsequent rise of dedicated low-cost 'no-frills' airlines such as Southwest, JetBlue, Ryanair, and Easyjet only accelerated this trend alongside rising fuel costs. Since the dawn of the 'Jet Age,' economy class seats are typically between 17 and 18 inches wide, while seat pitches nowadays may be as low as 28 inches. Cabin configurations, which vary between aircraft types, airlines and sometimes even within an airline's fleet, may include up to ten seats per row in wide-body, long-haul aircraft (cf. Fig. 5.2).

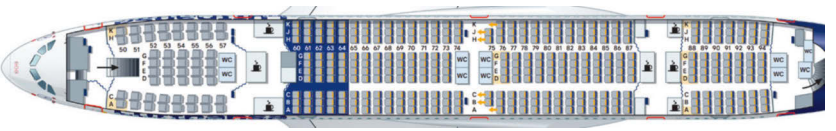

Figure 5.2: Diagram of a cabin configuration for the Lufthansa A380 lower deck with premium economy rows 50-57 in 2-4-2 layout and economy class rows 60-94 in 3-4-3 layout.

While staying seated has thus become increasingly uncomfortable, often getting up is not an easy option, as the lack of legroom necessitates other passengers standing up as well to let others 'out' of their row, while the aisle itself is often a narrow thoroughfare heavily trafficked by packed trolleys and busy flight attendants running on tight schedules to complete in-flight services (food, drinks, garbage collection, on-board shopping, etc.) on time.

Unsurprisingly, the availability of space itself and the opportunity to escape the regime of sitting is the prime differentiator between airfares. Business-class seats on most long-distance airliners these days feature the ability to fully recline to the

horizontal 'plane,' allowing for the body to lie down and (more easily) sleep. When retrofitting their long-haul fleet with 'fully flat' business seats in 2012, Lufthansa dedicated an entire TV commercial to this feature. Drawing upon the then-popular 'planking'-meme, the ad depicts people randomly lying down in public places (Figs. 5.3–4), visually most incisively on a glass roof with an airplane flying in the sky overhead (Fig. 5.5). "Because people like to lie down," the accompanying text reads succinctly before the commercial finally, but rather briefly showcases the reclining airplane seat, operated by a white middle-aged man (Fig. 5.6).

What is advertised here as a premium is the ability to fulfill a very basic need for physical comfort, more precisely: the opportunity to escape the regime of sitting without disturbing the operational constraints of the airplane cabin. Likewise, the introduction of premium economy classes within the airline industry following reduced demand for business-class travel in the wake of the financial crisis 2008, as an intermediary airfare between economy and business-class, uses space as a differentiator, mostly selling seats with slightly more legroom and seat width as well as marginally better in-flight service for significantly higher prices.

Figure 5.3-5.6: Lufthansa commercial for fully flat business-class seats (2012).

Evidently, airlines have a profound interest in minimizing passenger discomfort even for those passengers who cannot afford to pay premium fares, while at the same time having them stay seated. Here, in-flight entertainment comes into play as a technology that contributes to the cultural regime of sitting, not by expanding physical space but by opening up a different, mediated space of entertainment within the tightly confined space of the airplane seat: "the passenger is integrated into the spatial logic of flight management organized around the locus of the seat itself: part of the new ergonomics of the captive audience" (Govil 2004, 243).

Infrastructural Images

The sessile affects deployed and incited through in-flight entertainment are of crucial importance to flight operation, as they enable the long-distance transportation of large numbers of passengers by making them conform to the cultural regime of sitting, which air travel enforces. The true force of these images in motion can thus only be estimated when taking into account their power to suspend and inhibit movement. The power of these images is not due to their mobility, as they do not become mobile as proper objects of transportation in the first place. Unlike the postcards sent by air mail[10] or artworks and other pictures transported in the cargo holds of aircraft, it is not their purpose to travel. While they are *relocated* cinematic images (cf. Casetti 2015), they are *not* being *transported* from one place to another, instead they form *part of the logistics of transport itself* by perpetually staying in motion and suspending the movements of spectators/passengers. And while they may help travelers prepare for their journey—for instance in the form of travel documentaries naturally being an important type of in-flight movie selection—they, i.e. the digital files stored on hard drives from which actual images are generated, ultimately move back to the airport of departure aboard the very same aircraft with which they have arrived.

These unmoving images, therefore, can best be described as infrastructural images, which form a vital part of the operational logic of aviation infrastructure, as by being in motion they help unmove the body in its seat, prevent it from becoming unruly and thus enable the ensemble of men, things and machines that is the airplane to become mobile in an economically profitable as well as safe manner. Aviation infrastructure thus relies on media infrastructure, in this case: on images that contribute to aviation's infrastructure success by enabling passengers to adapt their bodies to a situation of severe spatial limitation. Media and infrastructures have been linked together increasingly in contemporary media theory, highlighting e.g. material media networks of cables, antennas or satellites (cf. Parks 2005; Starolsielski 2015; Parks and Starosielski 2015) or conceptualizing infrastructures as media and vice versa (cf. Schabacher 2013; Näser-Lather and Neubert 2015). Far from being merely 'immaterial,' 'virtual' or ephemeral to the materiality of media infrastructures, the infrastructural images of in-flight entertainment are endowed with a material force acting on human bodies. This enables them to play a vital role in transforming the airplane cabin into a moving storage medium for passengers. This draws attention to the similarity between transport vehicles and storage sites such as warehouses, which also temporarily suspend movement (of goods) as part of logistical operations (cf. Hockenberry 2020).

There are, of course, more types of infrastructural images involved in flight operation. The so-called 'glass cockpits' of current-generation airliners are essentially multi-screen environments for the conduct of flight, while radar-based surveillance

images are necessary to manage the traffic flow in the sky (cf. Budd 2009, 124–126) just as multi-screen control rooms are crucial for baggage routing inside the airport (cf. Potthast 2007, 110–130) or for the management of an airline's fleet in a flight operation center, just to name a few instances of infrastructural images in aviation. While most of these images require people to sit in front of them and perform the work of monitoring, it is not their primary purpose to make them stay seated. As "working images," to use Pantenburg's (2017) variation of Harun Farocki's term 'operational images,' they are part of work operations or even perform work themselves (cf. Pantenburg 2017). An image of a baggage belt being stuck, for instance, will tend to make the spectator/worker get up and see for him/herself what's wrong with it. In the same way, displays alert pilots to perform tasks related to the conduct of flight. While these very rarely involve getting up, they do almost always necessitate physical activity, ranging from pushing buttons, turning knobs and typing on keyboards to manipulating flight controls and the throttle lever. These images, although of an infrastructural nature as well, are usually data-rich and diagrammatic, and may be cognitively challenging, thus requiring (extensive) training. They require the suspension of movement only in so far as enabling specific moves when they matter.

The images of in-flight entertainment, however, only make us move when they switch off at the end of a flight. It is their absence that signals to our bodies to get up, that undoes their power to unmove us. Only then do we have to be verbally reminded to 'remain seated with your seatbelts fastened until we have reached our parking position.' A parked plane is the precondition for 'unparking' passengers.[11] And only then, with the airplane coming to a stop, are bodies allowed to move again, trading vehicular mobility for personal motility.

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Notes

1 To draw upon Casetti's distinction between cinematic relocation as "delivery" or "setting" (2015, 50–53), in airplanes, cinema found a venue, an environment that had been of cinematic quality due to its setting (forward-facing seats, darkened, enclosed) even before cinematic contents relocated to it.

2 For the distinction between centrifugal and centripetal aerial views, cf. Rothöhler 2009, 44–49.

3 In following a nuanced understanding of affect put forward by Kavka, my intent is to soften Massumi's strict distinction between affect and emotion by characterizing affect as a "zone of potential emotions" (2008, 31). For the physical transmission of affect, see also Brennan (2004).

4 All quotes translated from German are by the author: "das Gesicht in seiner relativen Unbeweglichkeit" (97); "um den Preis ihrer Unbeweglichkeit" (96).

5 "Der Zuschauer erfasst in der wahrgenommenen Bewegungsfigur eine Ausdrucksfigur, die er in eine Emotion, eine Empfindungsbewegung transformiert, die er buchstäblich am eigenen Leib realisiert."

6 Schüttpelz takes the term "operational chain" [German: "Operationskette"] from Leroi-Gourhan, but tailors it to his approach to a theory of techniques of the body and cultural techniques. For an overview on cultural techniques in German media theory, see also Geoghegan (2013).

7 For a cultural history of sitting as a technique of the body, cf. the catalog for the exhibition *sitzen: Eine Betrachtung der bestuhlten Gesellschaft* (Eickhoff 1997). For a design history of seating furniture with a focus on materiality, cf. Rybczynski 2017.

8 Watching a movie on a train with a portable DVD player also serves as initial example for Casetti's reflection upon the "relocation" (Casetti 2015, 47) of cinematic content.

9 Most prominently *Passenger 57* (United States 1992) and *Air Force One* (United States 1997), most recently *7500* (Austria/Germany/United States 2019) and the Netflix series *Into the Night* (Belgium 2020).

10 For a history of commercial aviation that emphasizes its ties to the postal service in general, see van der Linden 2002.

11 For an ethnographic approach to air travel that emphasizes the changing assemblages of things and bodies, cf. Schindler 2015. For the notion of 'parked' passengers, see page 302.