Organizational zemblanity

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Abstract

We introduce the concept of zemblanity to organization studies to refer to the enactment of disaster when, *in systems designed to impede risk key actors nonetheless construct their own misfortune.* The case of the Costa Concordia provides an opportunity to discuss organizational zemblanity. Active as well as passive behaviours by the Costa Concordia's Captain created a vicious circle of inappropriate decision-making with traumatic effects. These were complemented by structural elements to be found both in the individual behaviours of others (mainly, the vessel's first line of command) and the lack of other effective organizational controls, both in terms of structures and routines. As our discussion illuminates, there are two overarching elements in play: an excess of

individual discretion and a lack of proper organizational controls. We go on to consider the significant implications for both theory and practice that flow from our analysis.

Key words: dialectics, high-reliability organizations, managerial control, organizational legitimacy, serendipity, zemblanity.

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The wreck of the gigantic cruise ship Costa Concordia lies on one side as a dramatic, calm dawn breaks. The night before the vessel hit the rocks of the Isola del Giglio, off the Tuscan coast (Italy) and sank. Later, official reports will count 32 deaths.

1. Introduction

While the managerial literature is well accustomed to the concept of serendipity, in this paper we theorize the less well-known and little researched process of zemblanity (e.g. Nicholson, 2007). We do so in order to understand how organization actors sometimes create avoidable disasters in systems that have been designed to afford "high reliability". The extant literature on high-reliability organizations (Roberts & Bea, 2001) argues that in systems that are highly complex and interdependent, accidents will, nonetheless, be normal (Perrow, 1984). In these studies the focus is on organizational design. Much less discussed is the creative social construction of action intended to evade organizational designs for minimizing risk and making accidents abnormal. In the case of Costa Concordia (Italy, 2012) we see not so much an insufficiency of

organization design (Heeks & Bhatnagar, 2001) creating an accident waiting to happen as a catastrophic outcome (organizational performance) resulting from an excess of self-confidence, an absence of generative doubt, the presence of (delusional) managerial control, and a vicious dynamic of organizational legitimacy.

Using the concept of zemblanity we do not refer to accidents caused by sheer complexity (Perrow, 1984; Reason, 1997), defective (maladaptive) routines (Starbuck, 1983), or human neglect (Weick, 2010). Instead in this paper we analyse *how humans construct their own misfortune in systems designed to impede it?* By exploring this question we aim to introduce the topic of organizational zemblanity as the *active* but unintentional construction of misfortune to the field of organization studies. We do so in the case of an event that displays how a lack of wisdom in interpretive frameworks can be combined with an absence of organizational controls to unleash disaster. In practice, events pose a particular problem for interpretive frameworks. As Deroy and Clegg (2011) write, drawing on Deleuze (1968) and Badiou (1993), a theory of events orients one to the significance of the contextual de-structuring/re-structuring of interpretive frameworks as more or less incomplete or contestable. As they put it, an event offers a potential space for action, including inflections of structural rules and design (Linstead & Thanem, 2007). The Costa Concordia event provides a case of organizational zemblanity in which both active and passive behaviours by the Captain created a vicious circle of bad decision outcomes (Masuch, 1985); these were complemented by structural

elements to be found in the individual behaviours of others (mainly, the vessel's first line of command) and the lack of additional effective organizational controls, in terms of structures and routines.

Similarly to other tragic events (e.g. Cornelissen, Mantere & Vaara, 2013; Weick, 1993; Weick, 2010), the sinking of the Costa Concordia has been seen primarily as an effect of the combined effects of human factors and organizational controls (Schröder-Hinrichs, Hollnagel & Baldauf, 2012). To this extent the Costa Concordia unveils another paradoxical case of a high-reliability organization gone bad (e.g. Milosevic, Bass & Combs, 2015).

We begin by introducing the concept of zemblanity; next we present the case data derived from juridical and investigative reports; the incident of the Costa Concordia can be easily substantiated by the reconstruction of events reported in the legal proceedings that occurred subsequent to the disaster. In order to grasp the details of the case the timeline of events critical to the unfolding of zemblanity were analysed. As our discussion illuminates, there are two overarching elements in play: an excess of individual discretion and a lack of organizational controls. We go on to consider the significant implications for both theory and practice that flow from our analysis.

2. Introducing zemblanity

While serendipity has gathered growing attention from the scholarly literature (Bonney, Clark, Collins & Faerle, 2007; Bouncken, 2011; Brown, 2005; Cunha, Clegg & Mendonça, 2010; Cunha et al., 2015; Liyanage, 2006) its lexical qualities, specifically the identity of an antonym, went unexplored for a long time, until William Boyd (1998) coined the term zemblanity. He conceived it as the antonym of serendipity by referring to an imaginary physical space, Zembla. Zembla is the opposite of Serendip[1]. Whilst Serendip was described as a "southern land of spice and warmth, lush greenery and hummingbirds, seawashed, sunbasted", Zembla was "far north, barren, icebound, cold a world of flint stones" (Boyd, 1998, p. 234). For Boyd (1998), "zemblanity, the opposite of serendipity, [is] the faculty of making unhappy, unlucky and expected discoveries by design" (p. 234). Serendipity and zemblanity are the "twin poles of the axis around which we revolve" (p. 235). Hence zemblanity is conceived as the polar opposite of serendipity.

Nicholson (2007) underlines that, at the individual level, "zemblanity counters the idea that we make our own good luck with the equal and opposite notion that we make our own misfortune" (p. 389). Behaviours take place in organizations under the rules and according to the roles expressed by the formal organizational structures and procedures, even when they operate at an extra-organizational level (Burton, 2013; Obel & Snow, 2012). The design side of zemblanity has never been explored. In order to fill this gap, our proposal of organizational zemblanity will consider both the individual and the

intra- and extra-organizational features that might dialectically reinforce each other, eventually escalating to create disasters. While Boyd's specification "by design" can be seen as the semantic opposite of "by chance" we describe how structures and procedures ("organization design") can allow individual behaviours of a specific kind to trigger zemblanity. In doing so we attend to the "migration" of the concept of zemblanity initiated by Nicholson (2007) from being a literary conceit to one that informs the managerial field.

While several fields of study have metaphorically exploited the concept of serendipity since Merton (1949) first introduced the concept into the sociology of science (see also Merton and Barber 2004), the antonym of zemblanity has been quite neglected. A systematic literature review (e.g. Denyer & Tranfield, 2009; Tranfield, Denyer & Smart, 2003) found exceptions only in the field of medical sciences (e.g. Altarescu & Elstein, 2005; Holubar, 2004; Pepys, 2007). Within this field, when science is defined as the practice of gathering knowledge and condensing it into testable laws and theories, serendipity "wonderfully enables and enriches good science" (Pepys, 2007, p. 565). Zemblanity, on the contrary, is associated with fraudulent or deceitful behaviour labelled as "bad science" (e.g. Park, 2001). So, in the medical field, a lack of rigour leads to progressively bad results, escalating from single cases to societal problems (Pepys, 2007). Within the same field, at a more micro-level, a solution/treatment/device that affords "an unpleasant sensory and emotional experience associated with actual or

potential tissue damage … could be zemblaneous for clinical practice, but useful and beneficial for research" (Kontinen, 2007, p. 224). In the medical field serendipity and zemblanity have been constituted in terms of either epistemology and methodology (good/bad science and ways to produce it) or ontology (practice/research).

In management, when serendipity has been used, it is in reference to the accidental discovery of something that, *post hoc,* generates value (Brown, 2005; Cunha, Clegg & Mendonça, 2010; Liyanage, 2006). Cunha et al. (2015) classify managerial serendipity as the state of being *prepared for* and *open to novelty*. Organizations can be open and responsive to serendipity, designed to embrace lucky events and transform them into value, via "structure and coordination mechanisms, and improvised various procedural, cognitive and normative variations" (Orlikowski, 1996, p. 63). The focal mechanism for managerial serendipity is *generative doubt* (Cunha et al., 2015), the motivated and conscious search for understanding stimulated by the experience of not knowing (Locke, Golden-Biddle & Feldman, 2008). Cunha et al. (2015) conclude that the cultivation of generative doubt plays a critical role in stimulating readiness for and responsiveness to serendipity. So, in management in distinction from the medical field, the emphasis, *ceteris paribus*, is placed on how organizations are designed and how the main organizational actors enact such design.

While serendipity can capture fortuitous discovery by design, zemblanity refers to unfortunate outcomes resulting from ill-conceived choices that the extant design allows. Within this framework, zemblanity can be pictured as the opposite of serendipity. The contemporary world offers many instances of zemblanity: pilots who return from the toilet to find themselves locked out of the cabin by a co-pilot inside the cabin, intent on mass murder and self-suicide, secure inside a security system that cannot be overridden from outside the cabin[2]; football fans who flee a fire in a grandstand and are trampled by the press of panic in front of turnstiles that do not reverse[3]. In this instance, the focus is on zemblanity in the context of the Costa Concordia tragedy.

3. Method

Retrospective narrative has guided the whole process of interpretation followed in defining the overarching dimensions of zemblanity. The narrative of the main protagonists has been obtained through juridically enacted accounts of purpose, danger, and roles reported (Weick, 2010) (Appendix A). Therefore, the zemblanity of Costa Concordia can be understood and captured as "an evolving product of conversations" enacted in the course of legal enquiry (Currie & Brown, 2003, p. 565). The capture of these conversations occurred within a legal framework of investigation that formally recorded all such discourse. As such, these conversations constituted an ongoing accomplishment of a social reality that emerged "from efforts to create order and make

retrospective sense" (Weick, 1993, p. 635) of events that indubitably occurred. In this sense, narratives made out of procedural and investigative conversations have a dramatic importance since in such contexts cues are extracted and information selected as well as decisions made about what are acceptable accounts (Brown, Stacey & Nandhakumar, 2007; Diedrich, Walter & Czarniawska, 2011) by actors possessing differentially distributed rights of examination and obligation to respond (Boden and Molotch 1994).

We reconstruct and analyse the events of the Concordia case as well as the behaviours of its protagonists, in light of Tinker's (1986) insight that the introduction of new metaphors (e.g. Morgan, 1980) has to consider the "social processes" embedding them and in which they are generated. Doing so, we acknowledge the power of analogies and metaphors as inductive forms of reasoning (e.g. Balogun et al. 2014; Cornelissen, Holt & Zundel, 2011). In giving substantiation to zemblanity this paper follows the interpretivist approach, as described by Gioia and Pitre (1990) in terms of "connections between human actions … and established organizational structures…" termed *structurationism* (Gioia & Pitre, 1990, p. 592).

The evidence reported in the investigational and judicial documents, including all the prosecutors' analyses, reprimands and closing speeches and the first proceedings of sentencing (with only one completed up to July 2015) provide the data. Hence,

multiple-data sourcing is used (Miles & Huberman, 1994; Remenyi et al., 1998). The main document is represented by the technical report released by the Ministry of Infrastructure soon after the sinking (IMIT, 2012). The understanding of the behaviour of the protagonists has been further analysed by using judicial documents, records of trials, etc. accessed via all the available Electronic Databases (DoGi, ForoItaliano, ItalgiureWeb-RELPEN) (period considered: 23/02/2013-11/07/2015, from the beginning of the proceedings to the publication of the rationale for the verdict).

3.1. Situating the case: The timeline of events

On 13 January 2012 at about 21:45 the cruise ship Costa Concordia (operated by Costa Crociere, a subsidiary of Carnival Corporation) was sailing north in the Tyrrhenian Sea. The cruise liner was heading to Savona (Italy) and had left Civitavecchia, the port city of Rome, about two hours earlier. The ship had a length of more than 290 metres and a beam of 35 meters. The Concordia was outfitted with approximately 1,500 cabins and that night was hosting 3,229 passengers and carried 1,023 crewmembers.

While the vessel was cruising in calm seas and overcast weather (Appendix A, Prologue), Captain Francesco Schettino issued the order to "salute" the Isola del Giglio, an island off the western coast of Italy (Tuscany) (Figure 1, Route of disaster 13 Jan. 2012; Appendix A, Phase 1)[4]. The salute resulted in the Costa Concordia hitting a rock in the proximity of the island (Appendix A, Phase 2). The impact tore a huge gash (50

m) on the port side of the hull, which soon flooded parts of the engine room, causing the critical arrest of the propulsion and the electrical systems. In the phase immediately subsequent to the impact, without sounding the alarm or reporting the incident to the coastal authority, the Captain performed an emergency manoeuvre in order to bring the cruise liner alongside the coast of the island (the appropriateness of such a move is still debated). A detailed storyline is reported in Appendix A.

INSERT FIGURE 1 ABOUT HERE

Despite the ship gradually listing and sinking in shallow water in calm seas, with no possibility of restarting either the engines or the electrical systems, the order to abandon ship was not issued until over an hour after the initial impact. In the meantime, the Captain instructed his crew to tell the passengers that the vessel was simply experiencing a blackout so there was nothing for them to worry about. The same version of events was given to the maritime authorities. Later, Captain Schettino left the ship when it was still sinking, while there were still many passengers on board (Appendix A, Phase 3). The evacuation eventually took over six hours and not all passengers were evacuated (Appendix A, Phase 4 and 5). That night 32 people died: in addition to the

loss of human life there was also the damage created to the economic system and natural environment of the Isola del Giglio (Appendix A, Epilogue).

In the specific case, in the trial that followed the disaster, the most influential members of the crew (the first officer, the second officers, the helmsman, the head of cabin service) and the company (the head of the crisis team) were sentenced to custody for multiple manslaughter, negligence and shipwreck. In fact, they engaged in plea-bargaining in July 2013 in exchange for lenient sentences and in order to avoid jail. By contrast, the Captain did not engage in plea-bargaining. In February 2015 the Concordia's Captain, Francesco Schettino, was sentenced for manslaughter, a sentence that is still appealable to higher courts.[5]

3.2. Applying temporal bracketing to the case

After immersing ourselves in the richness of the available evidences, we identified the investigative report produced by the Italian Ministry of Infrastructures and Transports (IMIT, 2012) as our central data source. Despite its technical origins, we chose this document because of its aseptic nature and neutrality. The other judicial documents have been used as secondary and complementary sources for interpreting the findings. Among them, the official judicial documents (produced from February 2012 to July 2015) embedded and reported all the official statements released by the participants in the trial on all previous occasions. The secondary sources have been substantively

analysed in their original language (Italian) and then exposed to "in-context" validation (terms, words, expressions): facts and declarations are reported in this study as the international press reported them. Every single piece of evidence has been translated into scripts, and each of them has been coded [i.e. Public Prosecutor, 25/01/2015, content n. 13: PP.250115.13].

Available evidence has been analysed in order to uncover successively deeper layers of meaning, within a research design inspired by the process of using data to question theory and theory to interpret data. The evidence has been organized and structured via *temporal bracketing* of the facts (Langley, 1999; Langley & Truax, 1994; Van de Ven, 2007) within a more general framework of *retroductive* reconstruction of events (Poole et al., 2000). The reconstruction of the events, as a combination of facts and protagonists' behaviour, is detailed in Appendix A. Data were organized into a structure with four levels of aggregation (see Figure 2), displaying (from left to right): the actual facts and the main protagonists' behaviours (Figure 2, Events; Appendix A); first-order concepts; second-order themes, and overarching dimensions.

To explore the case of Costa Concordia as a source of theory development informed by the logic of grounded theory, we followed three steps. Starting from the reconstruction of the events (Figure 2, Events; Appendix A), we proceeded to the extraction of the first-order concepts following a process of identification of the patterns that underlay

the donative “in-context” meanings (Figure 2, First-order concepts). The second-order themes were obtained via the aggregation of previous ones into deeper structures of meaning (Figure 2, Second-order themes), in which the first two labels (“smart idiocy” and “reckless optimism”) were inspired by the prosecutor’s analysis of the case [PP.250115.1-43][6].

The derivation of the second-order themes and the resulting overarching dimensions has followed an original, interpretative and non-mechanical process (Langley, 1999). Such a process was based on iterations between data, conceptual explanation and the author’s efforts to make sense of what the data informed or were revealing about the problem being investigated (Clegg, Cunha & Rego, 2012). In order to guarantee reliability and acceptability of the interpretations the study sought emergence of holistic understanding (Garud, Gehman & Kumraswamy, 2011), conducted via a specific protocol. The first author collected and organized the data and was subsequently questioned and interrogated by the co-authors to test the plausibility of the interpretations (Mantere, Schildt & Sillince, 2012) and to identify redundant convergence (Sandberg, 2000) in developing the overarching dimensions (Figure 2, Overarching dimensions). The overall exercise of induction then led to the definition of the first-order concepts, to their aggregation into second-order themes and the two overarching dimensions. Considering the methodology and qualitative nature of the investigation, our account should be

considered as one possible and plausible interpretation, albeit one extremely well grounded in the legally constituted facts of the matter at hand.

INSERT FIGURE 2 ABOUT HERE

3.3. Deriving meanings from dialectics

Similarly to the proposal of Cunha et al. (2015) on serendipity, the zemblanity of Costa Concordia will be illustrated in dialectic terms considering both human/individual and organizational factors (organizational controls) and their mutual interactions. The use of dialectic for analysing real-life phenomena is widely diffused in the organizational literature (e.g. Bartunek, 2006; Costanzo & Di Domenico, 2014; Cunha et al., 2015; Di Domenico, Tracey & Haugh, 2009; Ford & Ford, 1994; Putnam, 2015; Vlaar, Van Den Bosch & Volberda, 2007). In this vein the analysis of Rus (1980) on the dialectics of power provides a useful framework for the investigation of the case. Rus (1980) reminds us that for Hegel the dialectic is a process of realization created by things that contain their own negation; through this realization the parts are transcended into

something greater (positive). While the *positive element* is central to the Hegelian perspective (see also Swingewood, 1970 & Kainz, 1988), Adorno (1966), by proposing negative dialectics, rejected the necessity of such a positive element. In Adorno's *negative dialectics* the result of realization is still something greater than the parts that preceded it but it is something essentially negative (Adorno, 1966). The negative dialectic is functional to the analysis of the case of Costa Concordia in terms of managerial zemblanity. The substantiation of the overarching dimensions and their dialectic interplay is explained in the next paragraphs.

4. Analysis

4.1. Bold leadership and vicious circles

Nurtured by "bold leadership" as defined by Masuch (1985), serendipity offers learning and innovation by virtue of design that exhibits preparedness for chance's offerings; zemblanity, by contrast, is an explicit or implicit organizational design that spawns decisions that turn out to constitute a vicious circle. As we shall see, this is precisely what transpired when the ship hit a submerged reef as it performed a sail-by salute.

The order to perform the "salute" was not the first of this kind, as the Captain announced: "Let's get very close to Giglio, I love doing these «salutes»" [C.081013.3]. Even during the trials, the Captain admitted to having done such sail-by salutes before

without disaster (see also Figure 2, previous cruise 14 Aug. 2011) [C.081013.3], as many other commanders probably had done. In the Costa Concordia case the sail-by salute (incident) → the event of the hull being penetrated → procrastination in sounding the alarm → flooding of the vessel with people still on board → undermining of the reported damages and exigencies (endangering people) → abandoning the ship (no governance of the evolution of the *incident* and its consequences).

4.2. Order created by rules and imperative command

The focus on human factors permits one to analyse the Concordia Captain's behaviour, as well as the behaviour of other protagonists. Responsibility for the sinking and subsequent manslaughter should not be attributed solely to the Captain but should also be attributed to crewmembers and other company managers, in an overall organized system that unpredictably and *ex post* proved to be structurally flawed in its vulnerability to human initiative. Within such a framework, other individuals were seen to have adopted "immoral behaviour [stemming] from a person [the Captain] of little integrity with weak character" (Nohria, Sucher & Gurtler, 2004, p. 1). "The sail-by was planned out by Schettino before departing from Civitavecchia, noted on the chart and recorded on the integrated navigation system. … [The Captain] told the Navigation Officer: «Come here, we plot a course to pass close to the Giglio and make the sail-by»" [TO.280112.4]. The officials in command seemed to suffer from a form of "unreflective

obedience" *à la* Milgram (1974), an attitude of subordination that validated the organizational legitimacy of Captain Schettino in not only detouring from the regular route but also did not resist his behaviour during the most dramatic phases of the sinking. In fact, the Captain and his staff were fully aware that the vessel was seriously compromised twenty minutes after the collision. However neither the Captain nor any of his officers contacted the competent authority (Coastguard Command) for activating the Search and Rescue (SAR) procedures, as the international maritime rules would have demanded (Appendix A, Phase 2).

Around five minutes before the collision the Captain took manual command of the vessel. At this point, "both the First Officer and the helmsman are totally aware of the Captain's intention" [TO.280112.4], as was the Second Officer who was engaged in the manoeuvre as well (IMIT, 2012, p. 28). After the collision, "contacted [by the Coastguard] the [ship's] Safety Trainer reports that the unit is in «black out» and some checks are in progress; does not prompt other assistance" (IMIT, 2012, p. 31).

The evidence demonstrates that the actors were subject to structural over-determination in losing sight of their responsible agency (Lukes, 1974; Rus, 1980) and sense of moral purpose (Weick, 2010). Where the existence of a rigid and strict chain of command, by virtue of position, grants organizational legitimacy, then obedience to superordinate orders is the norm or default position. Such a position accords with Follett's (1924,

1941) discussion of power and control in situations of “power over”, where claims to legitimate authority and obedience to it are contingent on position, rather than being founded on a substantive claim. In such situations it is imperative command that rules.

A situation of imperative command stands in contrast to one of “power with”, where the fact that individuals accept and execute orders within a social process of self-control and exercise of free will, serves as the justification for obedience or not (Follett, 1941). In this situation, an individual entitled to give orders neither “dominates” nor “controls” the receiver(s) but “together” they control themselves (Follet, 1924). Indeed, the intermingling and exchange of views is part of a continuous social process, producing collective thought and collective will (Parker, 1984) in which substantive rationalities are weighed and assessed. In such a case “following orders” constitutes a “circular structure” that regulates the social process of interaction between “givers” and “receivers”. Any order given must be consonant with the individual judgments of those delegated to carry out the order in question. There is scope for reflection, legitimacy attached to reflexivity and questioning that obedience to imperative command renders irrelevant and impossible.

In the specific case of Costa Concordia the crew was subject to two orders: to perform “the sail-by salute” and to delay sounding the alarm after the collision. Although the practice of ‘saluting’ dates back to ancient times (e.g., to salute crewmembers’ family

on land), it is currently used as an occasion to provide tourists with a better view of the places the ship passes by. Within the specific context of cruise ship practice, despite implying a breach of major rules, the practice acquired a degree of legitimate "sense", whereby the notion of being a cruise passenger involved their participating in a spectacular experience economy (e.g. Pine & Gilmore, 1998). The sight of the huge cruise ship close to land affords a spectacle for those on shore and a unique experience for those on board the ship as they look down, literally, on those on the land. Sailing traditions and touristic interest in spectacular experiences do not accord, however, with formal organizational rules. In the specific case of Costa Concordia it was considered by both the maritime rules and the company's internal code of conduct to be an "unsafe practice" to conduct a salute of this nature (ICSS, 1914; SOLAS, 1974; IMO 2010, 2012; CFI, 2012, p. 33).

With regard to the delay in raising the alarm after the collision, international maritime law states that in cases where the hull is breached in a collision of any kind that poses the risk of the ship sinking, the order to abandon ship has to be issued immediately and all passengers must be evacuated within 30 minutes (IMO 2010-2012, under SOLAS Chapter III Regulation 21.1.4). The order to abandon ship was delayed by Captain Schettino for more than one hour, with the evacuation of the vessel taking over six hours, with not all passengers being evacuated and the captain abandoning his post before the security of his passengers and crew was established.

A contradictory element (e.g. Clegg, Cunha & Cunha, 2002; Costanzo & Di Domenico, 2014; Smith & Lewis, 2011) is evident in the relation between the personal authority of imperative command and the legitimacy of impersonal rules, as shown in the case. In high-reliability contexts, such as cruising, a high level of formalization of structural relations in rules is deployed as a device for organizational controls meant to guarantee safety for passengers and crew. While deference to authority is embedded in these structural relations it is embodied in a figure literally in control of the vessel. The combination of impersonal rules with highly personalized control does not always serve formal authority. Embodied control, in the figure of the master and commander, can over-determine the prudence inscribed in rules and constrain the judgments made by those subject to imperative command. Even in highly formalized sectors, individuals in command can easily execute deviations from the rules. Such deviations can also exceed the boundaries of the single organization (meant as the vessel), reaching out to higher levels such as headquarters. As the company crisis manager admitted: "Schettino asked me to tell the maritime authorities that the collision was down to a blackout on the ship. But I strongly objected… That was a different false account compared to what he had said before, namely that he had hit a rock which caused the ship to flood. I remember I got quite angry and I shared that reaction with my colleagues" [CCC.190414.7]. In reality, more than 30 minutes after the collision, "Despite the serious actual situation (at least two compartments flooded, lack of propulsion, lack of power from the emergency

generator and the failure of the bilge pumps) [the Captain] has not yet been given the general emergency and so far the Company has not made direct contact with the national SAR organization" (IMIT, 2012, p. 32).

4.3. Human factors: high discretion

The Costa Concordia case unfolded from the decision made by the Captain when he gave the order to cruise dangerously close to the coast. He admitted in court that he had already performed such "show boating" in the past. He assured the crew on past occasions, as he recently did the court, that he was constantly in control of the situation. Nonetheless, he left the vessel before many of the passengers. In so doing he showed a lack of self-analysis and reflexive questioning of his own behaviour (e.g. Nicholson, 2007). As he clearly put it: "I was number one on the ship after God" [C.031214.31]. Nonetheless, during the trial he constantly blamed somebody else (e.g. the officers, the helmsman, the company) or something else (e.g. the charts – presence of uncharted rocks) for the disaster.[7] Both before and after the crash he exploited his high level of autonomy and discretionary power.

The Captain does not represent the zemblanity of Costa Concordia alone although the organizational process that resulted in zemblanity was triggered by him. In addressing the Captain during the proceedings, the prosecutor combined two existing "cases" in Italian jurisprudence [PP.250115.17-36]: the "smart idiot", meaning somebody feeling

so confident as to generate dangerous situations, which he conjoined with the case of the "reckless optimist", where someone combines optimism with an overvaluing of their actual capacity (Figure 3, a). Building on these two cases, the prosecutors dialectically synthetized the emergent category of the "reckless idiot", in which both the "smart idiot" and the "reckless optimist" "cohabited", as if the Captain was "*two-headed*" (bicephalous) [PP.250115.34]. In this vein, the prosecutor's closing speech at the trial synthetized the Captain's behaviour in terms of negative dialectic (Adorno, 1966), in which the positive forces (smartness, optimism) lost out to the negative ones (idiocy, recklessness) with the result of a lethal combination of the latter (idiocy and recklessness) (Figure 3, a1, a2).

In short, in executing his total discretion, Captain Schettino showed *a lack of doubt* in what he was doing, before the collision (sail-by salute) as well as after the collision (the delay in raising the alarm). In both cases he exploited *an excess of discretion* and acted in violation of maritime norms and safety regulations. He acted as master and commander, making and not making imperative commands, rather than as a bureaucrat, diligently responsible to rules (Figure 3, a3).

The extension of Adorno's negative dialectics to the case of Costa Concordia starts with two "constitutive elements" (second-order themes). The categories of the "smart idiot" and the "reckless optimist" reciprocally contain their own negation; such negations can

be found in the second-order themes (Figure 2). The “smart idiot” captures one who does “show boating” with a cruise vessel with more than 4,000 people on board (first-order concepts: *Excess of self-confidence, Boldness, Managerial illusion*). Being a “reckless optimist” captures the actions of someone who delays evacuation and later abandons the ship (first-order concepts: *Immobilism, Fear, Lack of risk evaluation, Lack of courage – hoping for an act of God to fix the eventful disaster*). The “reckless idiot” (a synthesis of the first order concepts) is a person who creates negative dialectics on a grand scale: 32 deaths, damage to the company’s reputation, and national shame. Despite all that, the Captain defended that had he taken different decisions after the collision “… It would have been carnage. A divine hand surely touched my head. There are those who say the impact with the stern was caused because I was suffering from a hallucination. What hallucination! It was rather my instinct, my skills, the ability to know the sea and suddenly change direction” [C.050712.4]. The further description of how some other individuals contribute to the “creation” or the “destruction” of such self-image is extensively reported in Appendix A.

INSERT FIGURE 3 ABOUT HERE

4.4. Organizational controls: Formalization and lack of tackling mechanisms

Consideration of the organizational setting in which the tragedy of Costa Concordia occurred sheds additional light on its structural features. In fact, further analysis of the *structures* framing the individuals' behaviours unveils a kind of "retrospective prophecy" (e.g. Huxley, 1880) that we label as "designed zemblanity". In this vein, two major considerations arose.

First, despite the high level of formalization and the absolute priority of safety in the sector, the organizations involved (at various levels of aggregation: the vessel, the Company, the Italian coastguard system) did not have any inter- or extra-organizational mechanisms (routines) able to tackle irregular conduct (Figure 2; Appendix A); the crew did not mutiny by questioning the imperative command, to which they were accustomed. The refusal to dispute authority could be seen as an intuitive deference habituated in the crew. In this sense, even when the law allows mutiny, as it would in such a case, defence of hierarchy as a structure was upheld against the perception of danger that many officers experienced during the hazardous manoeuvres and after the crash. In terms of extra-organizational mechanism the vessel's destiny was subject to conflicting hierarchies (e.g. the coastguard and the company crisis managers, respectively, vs. the Captain). From the moment in which the order to "abandon ship" was issued by the Captain, the coastguard commander was formally in charge of the

operations. After about three hours from the collision, the coastguard commander realized that the Captain had left the vessel with passengers and crew still aboard and urged the Captain to "Get back aboard! Damn it!" [CGC.130112.15].[8] The Captain did not execute the order. As a matter of fact, apart from the coastguard officials, both the crew and the rest of the organization (at all levels) displayed an absence of "generative doubt"; they considered the legitimacy of the commander and the existence of emergency procedures (major structures) as sufficient to generate appropriate decisions and actions (Figure 3, b).Further, even when all the available modern technology (e.g. Electronic Chart Display and Information System – ECDIS, Global Positioning System – GPS, Automatic Radar Plotting Aid – ARPA, etc.) works perfectly, the design of commanding roles can inhibit any possible intervention and external recovery. In the case of Costa Concordia, anomalous cruising trajectories are detectable by remote instruments but on-board control cannot be overridden from outside (Figure 1). Once again, an undoubted trust in the interaction between human discretion and the formal structures operating at the organizational level (on board the ship, in this case) was evident.

4.5. Human factors and organizational controls: A synthesis for discussion

Investigation of the behaviours of the agents concerned demonstrates individual causes of the sinking of the Costa Concordia. Additionally, the persistence of some structures

(e.g. hierarchy) and the absence of others (e.g. emergency routines) justified the fact that nobody took action to tackle the Captain's behaviour while the catastrophe was actually unfolding. In short, even if the Captain's actions could be reconstituted as an effect of bounded rationality, consideration of the structural elements reveals a lack of organizational design; indeed, it was a "design for Zembla", hence zemblanity, in Boyd's (1998) terms. In both cases, the absence of generative doubt clearly emerges at both the individual and the collective level.

In a Weberian fashion, the possession by actors of rational competence represents one of the grounds for the existence of legitimate rules that constitute the formalized side of the organization (Weber, 1947). It is these rules that enable the imperative command of a hierarchical organization such as the crew of a cruise ship. Consequently, seen as a dialectical relation, "high discretion" and "organizational controls" may be antithetical elements mutually sustaining thesis and antithesis (Figure 3, c). The interactive contamination of the two (the Hegelian sublation) seemingly guarantees organizational effectiveness, with human discretion complementing the lack of rules, governing their interpretation, while the formalized roles define the perimeter of the decision maker's autonomy (discretion). The dialectical combination of human factors and the enacted dynamics of organizational controls are pictured by the First Officer in the following quotes: "The captain was distracted [also by the guests on the bridge]. [Later,] he was on the telephone with [a retired Costa Captain] … Even though I had finished my shift,

I felt I had to retake command in order to give orders to the helmsman to start our approach to Giglio Island, which was getting closer" [FO.171213.4]; "[The Captain] arrived in the command centre accompanied by a woman, then gave an order to switch to manual control of the helm" [FO.171213.7]. (The woman was later identified as an unregistered female guest, who was posited to be having an affair with the Captain).

The case of Costa Concordia shows how the absence of generative doubt triggered a negative dialectical process (Adorno, 1966), in which high discretion, combined with an event (e.g. the crash), generated a sequence of bad choices (e.g. delayed evacuation) that turned into manslaughter (negative dialectical synthesis: an even greater negative event). In such a spiral of zemblanity, both formalization and discretion appear to be highly vulnerable. Symmetrically with Cunha et al. (2015), the absence of generative doubt can be seen to transform a single event into an escalating spiral, as a case of negative dialectics (Figure 3).

5. Discussion

The facts of events occurring in the case of Costa Concordia, as constituted during the investigation and the trial (Figure 2; Appendix A), combined with the analysis of the human factors and organizational controls and their interaction, allow us to identify some characteristics of the process of zemblanity. The overarching elements seem to be twofold: an excess of individual discretion and an excess of organizational

formalization. In the case of Costa Concordia, the latter paradoxically resulted in a lack of organizational controls, at both the organizational (vessel) and supra-organizational levels (company, maritime control and governance systems).

In the case of the Costa Concordia the process of organizational zemblanity was not contained by the formal organization (Figure 4, a) “expected by design” of the frame of laws, rules, and organizational roles. Organizational systems (companies and their surrounding environments) try to prevent the occurrence of untoward events via both human factors (e.g. prudence, interpretation of rules in favour of major goals like safety) and organizational controls (e.g. supportive technology, the possibility of mutiny in the face of illogical orders). In this vein, adherence to the “normal” route and the non-deactivation of the cruising monitoring system could have prevented the “salute” and the endangering of the vessel. The activation of the emergency procedures and compliance with them would have reduced the actual damage (Figure 4, a): in the case of Concordia, an immediate alarm would have saved more lives [J1.020613.27; J2.130715.13].

The fact that human factors can overtake organizational controls can be a trigger for zemblanity (Figure 4, b). The element of organizational formalization was expressed in obedience to the substantive demands of imperative command rather than following abstract rules, which combined with a lack of back-up organizational routines able to

tackle irregular conduct. In this case, imperative command had expanded to such an extent that there was an excess of discretion ("reckless idiocy") on the part of the subject in charge of decision and actions. Imperative command became extreme boldness and self-confidence on the part of the organization's chief decision-maker (the Captain of the cruise ship). In combination with a lack of risk evaluation, even where the organization had the most modern technology at its disposal (radars, scanners, etc.), human action overcame the constitutive entanglement of social and material objects and the powers residing in them (Orlikowski, 2007). Under the mandate of imperative command, a managerial illusion of control (Ciborra & Lanzara, 1994) was fostered that led to a vicious circle of incorrect decisions (e.g. Cunha & Tsoukas, 2015), eventually generating a dramatic drift of the organization (Ciborra & Hanseth, 2000). In the specific case, incorrect judgment was complemented by a persistently bold attitude, maintained even during the trial, revealing a refusal of self-criticism or doubt.

If serendipity is a synthesis of *preparation* and *openness to novelty* augmented by *generative doubt* (Cunha et al. 2015), the previous discussion shows a case expressing a *lack of cognitive, behavioural and organizational preparation* as well as an *uncritical evaluation of risks*. The event of colliding with the reef demonstrated such deficiencies, as did the dramatic phases of the sinking. In addition, there was *an absence of openness* towards changing actions already taken as events unfolded (e.g. non-response to

external advices) and, last but not least, there was *an absence of generative doubt*, both at the organizational and the individual levels (Figure 4, b).

In summary, the case displays managerial zemblanity as a combination of excesses and absences that ended up producing an unusual destiny. The sequence of events shows that an excess of discretion and an excess of standardization co-occurred with an absence of any tendencies necessary to counter such excesses. Among these tendencies, internal hierarchies that accepted direction from the top as imperative command, irrespective of substantive content, together with external assumptions on the part of company and regulatory authorities that "due diligence" in terms of compliance with abstract rules was to be expected by all the actors involved, escalated the catastrophe. The case also reveals that, under these circumstances, an excess of standardization might not actually prevent an excess of discretion so much as present a *façade* of formal compliance. In this vein, formal rigour is a distant proxy of actual behaviour. The case shows that standardization, rules and professional socialization might secure formal control but that they can also override the display of positive qualities from those subject to imperative command at the frontline. Leadership requires enacted, active constraints, prescribed and enforced under the regime of organization design. No form of organizational and supra-organizational design is sufficient to substitute for good judgment and professionalism, even in cases in which the importance of superior values (e.g. safety of human lives) is evident. Comfort with imperatively commanded but

informal routines, coupled with unbridled optimism and a desire to stand out and show off, may precipitate processes that are impossible to contain.

In synthesis, the combination of an excess of discretion and high formalization of organizational controls may, through expansion of the consequences of a single event through subsequent collateral events, generate a vicious circle escalating disaster (Figure 4, b). In the case of Costa Concordia the core of the events begins with the Captain ordering the "salute", switching to manual mode and taking command of the vessel, and ended with him leaving the sinking ship with endangered people still on board. In a space of about 185 minutes only, Captain Schettino practically, experimentally, demonstrated the existence of organizational zemblanity.

INSERT FIGURE 4 ABOUT HERE

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6. Opportunities for future research

The unveiling of zemblanity as dialectics fits with a wider discourse that could be explored in future research. First, the proposed concept of zemblanity partially overlaps with the idea of "functional stupidity", as proposed by Alvesson and Spicer (2012). In

particular, both zemblanity and stupidity deviate from the dominant route of embedding "smartness" in abstracted frameworks; further, zemblanity reflects the characteristics of a lack of *reflexivity* (inability or unwillingness to question knowledge). What separates zemblanity from functional stupidity is a wider consideration of the effects of generative doubt on organizational dynamics. In fact, while functional stupidity relies on a lack of both *substantive reasoning* and *justification* (actors not demanding or providing reasons for explanation), the case of Costa Concordia shows that actors could also intentionally comply with something that they might consider "stupid" as long as their behaviour is consistent with their own agendas (e.g. concerns about career, penalties for insubordination, etc.). The concepts of "relational power" (Follet, 1924, 1941) and "unreflective obedience" (Milgram, 1974) easily coexist in zemblanity, as in other phenomena that could be observed at different levels of aggregation (e.g. Willmott, 1993).

Second, the case and its conceptualization show that in very formalized systems human discretion can neutralize organizational (or wider, societal) goals. In this vein, uncertainty remains the nemesis of modern management (Tsoukas, 2005), as organizations tend to reinforce formal procedures and structures as the risk of (unexpected) events increase (e.g. terrorist attacks). Third, people use their discretion with discretion: they do not expose themselves to adverse judgments by breaking a major substantive rule, such as the power of imperative command and the hierarchy in

which it is embodied while choosing to resist other formal rules through following orders and not mutinying. Fourth, Captain Schettino deliberately showed off, acting as a leader, as a charismatic master and commander, against the rules, in order to "be different", to demonstrate his seafaring skills and, ultimately, express his ego. In this vein, formalization can be seen as an "equalizing structure" that individual discretion can contradict. In the absence of self-criticism or generative doubt this can lead to zemblanity.

There is a disturbing opportunity to explore, however: when highly formalized systems reduce individual discretion and empowerment, displays of prowess can offer a form of "resistance against the system", an adequate vehicle for expressing one's "rage against the machine" of bureaucracy. In this regard, the cases of aircraft pilots that use security rules with destructive purposes or security agents that express their individuality by countering their security obligations, open important cues in the study of high reliability systems and how these may be insufficient to control human discretion. Existing studies, despite recognizing the relevance of human factors, have not sufficiently investigated their interaction with organizational controls (e.g. Schröder-Hinrichs, Hollnagel & Baldauf, 2012).

7. Boundary conditions

The case has a number of characteristics that define its boundary conditions. It refers to a single event with unique features, one that offers extreme theoretical clarity. The lack of concordance with the formal rules of maritime activity on the part of the captain can be viewed as exceptional and therefore not relevant for most organizational events. However, there is the matter of the experience economy in which cruise ships play an increasing role. Experiencing nature close up, whether in Antarctica or the Tyrrhenian Sea, is inherently dangerous[9]. In more "normal" conditions the risks may be much less but so will be the experiential rewards to the passengers. The case's exceptional qualities may also not apply in situations where singular authority is mediated by other hierarchical mechanisms. Correspondence between this industry and crew resource management in aviation offers promising equivalences in terms of creating more alert systems immune to the dysfunctional aspects of hierarchy (Heeks & Bhatnagar, 2001).

8. Implications for practice

To the extent that zemblanity embeds a "set of mechanisms for making sense of social processes" (Davis, 2015, p. 314) the case has important implications for practice. The first is that organizations should not assume that prudence and professionalism are embrained, habitually ingrained and normally embodied in highly trained professionals. Professionalism can be intermittent and vulnerable to human expressions of vanity, for which leadership provides ample opportunities, as this case indicates.

The case also contributes to the exploration of the symptoms of disaster making as a process that evolves in stages. Identifying the symptoms of disaster and countering them through distributed forms of leadership can constitute a form of prevention that also involves its own risks (e.g. Diedrich, Walter & Czarniawska, 2011). For example, distributing leadership may create confusion that is problematic. In other words, in solving one specific problem, organizations may actually create another problem, suggesting that security issues may have the qualities of being wicked problems (Churchman, 1967; Head & Alford, 2013). In this sense, a critical question for practice is how to combine standardization and empowerment, hierarchical clarity and distributed cognition, formalization and discretion, and so on. Recent examples, such as this case and the Germanwings disaster, suggest that the wicked problems associated with directing high risk systems requires more attention to be paid to how people actively construct zemblanity in their organizational systems.

9. Conclusion

The disaster of the Costa Concordia cruise ship was neither just an unfortunate event nor just a case of bad leadership. Leadership requires structured constraint and in this case there was none that was effective; leadership without constraint creates a tyranny of judgment; in this case, a context of designed zemblanity produced a lack of generative doubt, which, combining with an unnecessary and unfortunate event,

dialectically amplified negativity. Zemblanity, occasioning negative dialectics, created a fatal combination. A sequence of bad choices resulted from a lack of organizational controls able to moderate the effects of a leader's illusions about the scope of his powers. Even in a sector characterized by high reliability (cruising) and high levels of formalization of standards and procedures, managerial dynamics (as a corruption of technique) can allow the organization to drift dramatically (transformation of the organization; Lozeau, Langley & Denis, 2002). To add a touch of humaneness, we can also consider the fact that, when issuing the order for the "salute", Captain Schettino was romancing and entertaining an unregistered female passenger.

The article explored how organizations, even those designed to be highly reliable, can end up being vulnerable to human decisions that are not predicted by the system and that produce vicious circles that lead to disaster. The article's central proposition is that the notion of zemblanity, thus far unincorporated by the scholarly literature, can help to illuminate the reason why organizations sometimes create inflections of events that ultimately surprise and end badly: "bad luck" is socially constructed and organizationally framed, not something that just happens.

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[1] Serendip refers to the Persian and Urdu name of Sri Lanka, but the actual origins of the term serendipity are contested amongst scholars. In fact, it is still debated whether the book "The Three Princes of Serendip" has to be attributed to the Venetian Michele Tramezzino (1557) or to the English Horace Walpole (1754) (e.g. Boyd, 1998; Hodges, 1964; Remer, 1965).

[2] http://en.wikipedia.org/wiki/Germanwings_Flight_9525 (accessed 16 September 2015).

[3] http://en.wikipedia.org/wiki/Bradford_City_stadium_fire (accessed 16 September 2015).

[4] A salute comprises a close 'sail-by' of a landform by a large vessel, affording a spectacle for those on land as a giant vessel hoves close by; hence, a "sail-by salute" is an out-of-route manoeuvre that brings a ship close to shore to "salute" those on land.

[5] The paper cannot deliver a definitive account of the Costa Concordia affair because, to date, legal process has not been wholly elaborated. However, we can elaborate on the facts as the prosecutors reconstructed these during the first proceedings. Having the other persons in charge admit their guilt without further investigations, the main focus will be on Captain Schettino's conduct and defence.

[6] It is important to remark that the aggregation of the first-level concepts into the second-order themes has not followed the way in which the prosecutor has categorized facts and events. Our method uses not reportage but analytics.

[7] Such an attitude was already detected by Captain Schettino former commander who noted: "I made a negative report on him with a note about his behaviour. Schettino was respectful but frequently tended to offload responsibility onto others when there was a discipline problem or some other issues" [RCC.301013.7].

[8] The dramatic conversation, with English subtitles can be retrieved here:

https://www.youtube.com/watch?v=WX_08zcCmx8 (accessed on 18 Sept 2015).

[9] http://www.seattletimes.com/life/travel//are-polar-cruises-safe-not-all-ships-are-equal/ (accessed 16 September 2015).