



## Singularity and the Open-Ended Crisis

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**Abstract.** The study aims at investigating the phenomenon of crisis in the intersection of three areas: simulation, singularity and temporality. The argument develops a theory of the singular crisis whose instances are demonstrated and proved by the American thriller, *Take Shelter* (2011, Jeff Nichols). The applied concept of crisis is based on the argument that any critical period is treated by models derived from earlier crises. The theoretical background to the simulated operating mechanisms of the crisis is Jean Baudrillard's and Gilles Deleuze's appropriations of simulation and simulacra. In case the simulated problem-solving patterns fail in a critical period, the singular characteristics of the crisis can be observed. Based on examples taken from the film, the article argues that reaction to any given crisis is essentially built up by both hyperreal patterns governed by simulation and singular elements that simulation cannot account for. The description of the temporal nature of crises is heavily dependent on interpretation, thus their temporal span is observed from the vantage point of their singular characteristics. The study argues that crises are characteristically open-ended but their endpoint is predominantly designated in hindsight to render the crisis as a finished time period for the sake of manageability.

**Keywords:** singularity, crisis, simulation, open-endedness, thriller.

The general term of crisis has been characterized as a “vague term” (Moffitt 2015, 189) or an “imprecise” means of scientific investigation (Moffitt 2015, 193). However, crisis seems to be a phenomenon overarching versatile fields of human existence and including a plethora of cultural (Alcoff 1988; Navone 1996; Taggart 2004), economic (Münchau 2009; Turner 2008), political (Weaver 2017; Moffitt 2015), psychological (Horgan 2016; Parker 1989) etc. areas. Although defining the essence of crisis is practically impossible due to the elasticity and ubiquity of the very nature of the phenomenon, crisis can be characterized as a change that upturns or rearranges the traditional ways and means of understanding. This aspect of crisis renders its applicability an extremely fluid concept capable of

finding its way to a vast variety of areas. On a wider scale, crisis is a means of interpretation aiming at the understanding of change of the given state of affairs, thus crisis is seen as a transitory phase between two more or less stable, structured and understood periods, which is formed into a historical narrative by rhetorical means (White 1973, 7). If this historical approach built on the linear succession of events is considered, crisis is a necessary liminal territory between assumingly known time periods, systems or regimes of human history. Reinhart Koselleck narrows down this historical approach to the very concept of modernity and identifies crisis as the “structural signature of modernity” (2006, 358), while Jean Baudrillard sees crisis as the symptom of modernity “linked to a historical and structural crisis” (1987, 63). Both arguments indicate that crisis has a “regulatory cultural function” (Baudrillard 1987, 64) characteristic to any historical period seen as the oppositional traits of tradition and the modern as well as the “supreme concept of modernity” that is “elastic in time” (Koselleck 2006, 376).

The nature of crisis is established by a binary structure inasmuch as it is considered to be a transitory phase between a known traditional past and a commencing new order experienced after the crisis is over. The wide-ranging use of the original Greek root, *krinein*, results in a “relatively broad spectrum of meanings.” The Greek equivalent of crisis amalgamates a variety of meanings: separation, divorce, judging, choice, measuring oneself and quarrel (Koselleck 2006, 358). This broad spectrum emphasizes the exact way crisis is generally understood as having the function of a link between the constituents of the binary structure of old and new, or the known and the hitherto unknown. The transitory phase of crisis marks the beginning of an uncertainty that follows a period associated with certainty, knowledge, routines, models and an overall sense of security that derives from the available models based on which the emerging problems can be handled. This paper argues that the transitory phase of crisis is a singularity that cannot be described by the available models, i.e. by means of simulation, consequently the length of the temporal span of crises depends on interpretation carried out in hindsight; crises are mostly open-ended until their singular nature is discovered, their characteristics understood and until new models of conduct are developed in order to create new simulations that can tackle the problems raised by these. The interdependence of simulation, singularity, crisis and the resulting open-endedness will be demonstrated by the thriller movie, *Take Shelter* (2011) directed by Jeff Nichols.

*Take Shelter* is an American psychological thriller that follows the actions of the protagonist, Curtis LaForche. The construction worker Curtis is haunted by

horrible visions, which lead him to rebuild a shelter in the backyard of his family house to prepare for a menacing natural catastrophe. His efforts gradually distance him from both his family and the community around him: in order to finance the shelter, Curtis raises a loan on the house and gets fired for unauthorized use of heavy machinery. The inhabitants of his home town, LaGrange, Ohio, also conclude that Curtis is psychologically unstable after the man is easily provoked into aggression at a community meeting. After a regular tornado hits the town without much damage, Curtis and his wife, Samantha, are persuaded by a psychiatrist to go on their planned vacation to the seaside, where the expected devastating catastrophe finally finds the family unprepared. The film ends with a cliff-hanger beach scene, when the family sees an enormous set of tornados approaching the land. The narrative and the thematic characteristics of the film make *Take Shelter* ideal for demonstrating the interplay of the simulation-based routine protocols and the singular nature of the crisis, while the portrayal of the extended, never finished climax raises questions about the possibility of properly assessing the time span of a particular crisis.

Both the evaluation of crisis and the assessment of the pre-crisis and post-crisis periods are based on a variety of models. Koselleck's usage of the metaphors of illness and the related concepts of health, death, diagnosis etc. are those basic building blocks or models that help delineating the difference between crisis and non-crisis. This differentiation serves as the basis of interpreting a given state of affairs as a period of crisis distinct from other non-crisis periods: "crisis only becomes a crisis when it is perceived as a crisis" (Moffitt 2015, 189). Even the evaluation of crisis as a critical period is quintessentially based on pre-existent models governing the rhetoric of the argument: "the concept of crisis assumed a double meaning that has been preserved in social and political language. On the one hand, the objective condition, about the origins of which there may be scientific disagreements, depends on the judgmental criteria used to diagnose that condition. On the other hand, the concept of illness itself presupposes a state of health—however conceived—that is either to be restored again or which will, at a specified time, result in death" (Koselleck 2006, 361). Objective conditions stand for models that can be put to motion in order to return to accessible and reliable solutions crystallized by earlier crises. The flawed state of crisis that is labelled as "illness," however, is singular in nature, i.e. it is new, never hitherto seen and thus there is a lack of available models to diagnose or solve the newly emerging set of problems.

Crises pose a threat to the established order of simulation that organizes the world into a comprehensible unit. Simulation is a process through which the

meaningful modern signs that consist of a signifier and a signified collapse into simulacra, which are self-referential signs that have lost their binary structure (Baudrillard 1994, 6). Simulacra are built up by an array of models of reality that precede and form a hyperreality (Baudrillard 1994, 13). Sometimes the models can still be traced back in simulacra, as they produce only a “mirage” or a “double illusion” (Deleuze 2004, 314), e.g. decaf, which is consumed in agreement with the social, cultural and behavioural patterns that also govern the consumption of regular coffee with actual caffeine content; on other occasions, these models are mostly untraceable, e.g. in the case of automatic gear shifting in cars. Regardless of the successful traceability of the vast variety of available models, the attempt of interpreting the simulacra endow them with certain core models that can be identified or traced back, thus the hyperreal images can be interpreted and reverted into a sign consisting of signifier and signified, consequently the modern concept of meaning is restored temporarily. However, the reversion of the simulacrum into signifier and signified is dependent on a subjective point of view that attempts to access the simulacrum and make meaning of it. “Such is the logic of simulacra, it is no longer that of divine predestination, it is that of the precession of models, but it is just as inexorable. And it is because of this that events no longer have meaning: it is not that they are insignificant in themselves, it is that they were preceded by the model, with which their processes only coincided.” (Baudrillard 1994, 38.) Signification is dependent on the interpretational access to simulacra, while the self-referential, third-phase simulacra “have no relation to any reality whatsoever” (Baudrillard 1994, 6), and their operation is based on preliminary models that make signification possible in the case of second-phase simulacra, which “mask the absence of a profound reality” (Baudrillard 1994, 6), inasmuch as the models can be isolated and identified.

The threat that the imminent tornado poses is based on models that necessitate a simulated protocol to be followed in *Take Shelter*. The members of the community are all aware of the general danger of periodically returning natural disasters, thus their behaviour and reactions to the environmental particulars of the region are ruled by models that proved to be effective earlier. The houses have safe places to hide in time of tornados, and the city dwellers routinely follow the protocols that were crystallized during their earlier experiences of hard times with nature. The LaForche family also knows what to do when the blaring sirens wake them up from their sleep. Hearing the sound of the tornado alert, they follow the routines learnt from earlier experiences and immediately rush to the shelter and wait out the storm. When the family resurfaces from the shelter in

the morning, they see that the ongoing outside activities are also governed by models. The neighbours are gathering the debris the storm left behind, and the couple's calm movements show that they are accustomed to the consequences of harsh weather. The LaForche family sees how people are routinely clearing away the broken tree branches, the electricity company workmen are also busy repairing the power lines and the regular road traffic has resumed. These are the models that transmit the message to the family that the storm alert is over and everything is back to normal.

Living in the Tornado Alley, the city-dwellers are aware of the fact that, in case of a storm, their survival is based on how successfully they can simulate the earlier models that helped them stay unharmed. However, the narrative also offers other instances of simulation, which are not related to the weather conditions. Curtis works for a construction company, which is practically based on the setting up and employing models. Keeping the safety instructions, using heavy machinery or drilling are some of the numerous models that govern the company and make up a matrix of simulated behaviour patterns. Curtis and his wife, Samantha, regularly visit sessions with their deaf daughter, and the family members learn how to speak the American Sign Language (ASL) to be able to communicate with Hannah. ASL consists of signs that stand for words or concepts and makes up a hyperreal system of signifiers which is based on either mimetic or metaphoric hand movements that need to be perfectly copied – in other words, simulated – to convey meaning. This simulated means of communication is so pivotal that when Curtis drives his colleague home, the co-worker's wife communicates her annoyance with gestures that Curtis understands as signs of disapproval. In another instance, Samantha chooses the holiday resort for the family from a travel booklet which is a classic example of the “artificial accelerator” that boosts demand (Baudrillard 1998, 72).

The handling of recurring crises is based on models whose simulation offers a way to react according to protocols established earlier. However, crises are notorious for not giving in to already existing solutions, their very nature is rooted in their volatility. They are predominantly informed by change that give their essence: if the available models fully account for the solution of a crisis, the crisis devolves into a quickly passing phase that can successfully be treated by already existing protocols. Thus any crisis contains singular elements which are demarcated by those already familiar areas that simulated protocols or the hyperreal series of applicable models cannot account for. The essential feature of crisis is its singular, unique nature that does not yield to simulation.

Consequently, the singularity of crisis is the most important characteristic that needs to be addressed.

Singularity is a term overarching versatile fields of science. Mathematical singularity marks the point beyond which mathematical objects cannot be defined or they become highly unstable (Kubrusly 2016, 45). In natural sciences, singularity is generally the marker of the end of the known and knowable cause and effect relationships; the gravitational singularity describes an area in space-time where the energy density of the gravitational forces is infinite and does not depend on a coordination system (Weatherall 2014, 1077); the Penrose-Hawking theorem is a generalization of the general theory of relativity attempting to describe the formation of black holes (Kriele 1990, 451). In the area of technology, engineering defines mechanical singularity as a mechanism or the operation of a machine that cannot be predicted (Okada 2008, 1735). The technological singularity constitutes probably the most widespread usage of the term singularity, as it refers to a self-conscious technological advancement when technological innovations take place independent of human control (Vinge 1993; Moravec 1990). The possible emergence and the application of artificial intelligence also have severe effects (Kurzweil 1999), for example in legal singularity, where the outcome of all legal decisions can be predicted (Alarie 2016, 443) because of the interaction of artificial intelligence.

The general features of singularity are based on the unavailability of pre-existent models and the impossibility of simulation. The intensity of the crisis is due to the factor of its resistance to simulation and hyperreality, thus the singular nature of crisis becomes a marker of intensity. The more limited the amount of readily applicable problem solving models is, the more severe a crisis grows. The existing theories on singularity have one common characteristic: human control, which is equal to the manipulation of accessible simulacra and hyperreality, reaches its limits in prescribing the probable outcome of a process, thus any interaction with the critical situation has to be conducted by finding new solutions to the problems faced within the crisis. If the problems are successfully solved, new protocols are formulated and these models will be the bases of simulation in a recurring crisis. However, the types of singularity above show that singularity and crisis complement each other. Singularity is the exact point where the hyperreal ends, as third-order simulacra “are founded on information, the model, the cybernetic game – total operability, hyperreality, aim of total control” (Baudrillard 1994, 81). Since singularity disempowers simulation, control becomes the core of the problem in case of a crisis. Models make control possible, and if they cannot function properly, the state of technological, scientific or cultural crisis sets in.

*Take Shelter* gives account of the analogously developing psychological and environmental crisis the protagonist has to face, and the presented critical period is predominantly singular. There are factors that may help Curtis in tackling the situation, but he has a limited range of available models that could offer solutions to his problems. Although his mother was diagnosed with paranoid schizophrenia in her early thirties, nearly the same age as Curtis is, her position in the family she left behind is entirely different. The woman is also unable to give a precise account of what happened twenty-five years earlier, when her mental state deteriorated overnight to such an extent that it forced her into permanent care at a psychological facility. Curtis wants to protect his wife and daughter and leaving them cannot function as a model solution in his case. Extending the rudimentary, mainly dysfunctional storm shelter in the backyard and building an oversize one equipped with running water, electricity supply, air ventilation and even a sewage system proves that he is determined to save his family members from the looming natural disaster. Similar to the lack of available models in treating the menacing signs of his mental breakdown, Curtis envisions the strike of a huge tornado hitherto unseen, and the scale of the natural disaster urges new, untested ways of treating the crisis.

The delusions of the protagonist serve as a groundwork to the singularity of the crisis. Curtis experiences a series of visions and nightmares that rock the foundations of his belief in his own psychological status and the reliability of the reality around him. In work, he hears a roaring thunder, but there is no sign of rainclouds around, which he cannot interpret due to the lack of available cognitive models. He also has a hallucination in which he sees birds swarming abnormally in the sky. As he knows that birds do not fly in such a formation, he is assured that he sees something exceptional and impossible, or – in other words – singular. The regularly recurring nightmares also ensure him that the reality around is atypically fragile because he is unable to interpret these events. The bad dreams continue: he is bitten by his own dog and experiences a lingering pain throughout the next day. This dream makes him question the ontological boundary between sleeping and being awake to such an extent that he explicitly mentions this singular pain to the doctor whom he visits for sedatives. He is so insecure in his own interpretation of reality that he locks up his dog behind fences in the backyard. In addition, the nightmares continue: he is covered in oily rain that has the colour and the viscosity of motor oil; he and Hannah suffer a car accident ending with strangers breaking the side window of the wreck and kidnapping his daughter; the family home is lifted from the ground to the degree

that the furniture is floating around in the air. When the house crashes down back to its regular place, Curtis wakes up and finds that he involuntarily urinated into the bed. The singular nature of the overly realistic dreams, which are so lifelike that they have an effect on the reality of the awakened state, leave Curtis without any models that could offer a rational explanation for these experiences: "It's hard to explain because it's not just a dream, it's a feeling. I am afraid, something might be coming, something is not right. I cannot describe it." The indescribability of the event and the vague feeling of a menacing threat are responsible for the singularity of the protagonist's anticipation of crisis.

As the metaphysical doubt of his apprehension culminates, Curtis realizes that the present crisis is different from earlier ones and this compels him to take singular measures. The unparalleled nature of the crisis requires Curtis to find new solutions or models which will assist him in coping with the singularity. Ignoring the advice of his acquaintance at the bank, he applies for a home improvement loan despite already having a mortgage on the house and multiple loans on two cars. The money is invested into a storage container and other equipment needed for enlarging the storm shelter and he resorts to the unauthorized use of heavy machinery owned by his employer, Jim. As a result, Curtis is fired with only two weeks' benefits and Samantha moves to his brother with Hannah, but finally the storm shelter is finished. The tornado shelter is as singular as Curtis's dreams and psychological state: it has all the regular necessities and supplies that a shelter usually has, but – among many other uncommon features – it is equipped with running water, a functioning toilet, gas masks, oxygen tanks and a ventilation system. The shelter, which has reinforced metal doors that can also be locked from the inside, slightly reminds of a fallout shelter built to withstand the harsh environmental conditions and the possible breaching attempts for weeks.

Curtis anticipates a crisis that will end at a certain point in time and takes precautions against a tornado of exceptional magnitude, although the narrative suggests an open ending to this crisis with an immense storm that is shown approaching but never hitting inhabited areas. Curtis believes in the rationality of the preparations that might seem exaggerated for the city dwellers. These precautions are simulated, based on models derived from earlier experiences with regular tornados. When he breaks down at a community meeting and starts a fight with his former boss, his words imply a future tornado that is both simulated and singular at the same time: "Listen up! There is a storm coming! Like nothing you have ever seen and not one of you is prepared for it!" The designation classifies the impending natural phenomenon as a storm, consequently the



audience can relate to the model the word implies: residents of the Tornado Alley are familiar with the referent of the expression. However, Curtis's words also propose a singular crisis, threatening the community that employing the usual protocols are going to fail because of the singularity of the event. Although the city trusts the simulated precautions and the people feel secure, they are fearfully and suspiciously listening to Curtis burst out warning them that the impending crisis is open-ended, as it is not going to end according to the earlier models. He threatens people with an apocalyptic event that rejects the models formulated by earlier tornados, whereby the security of the controllable and thus finished crisis generated by models is opened up into a singular crisis beyond simulation.

The closure of the crisis depends on the diagnosis of the critical period offered (Koselleck 2006, 372), in other words, the available models derived from earlier crises help the formation of the definition and characterization of the nature of the given crises. When the diagnosis is clear, the unresolved crisis situation makes it clear what measures to take and which action proves insufficient because of the emergent singular problems. As the temporality of the crisis is due to interpretation, its finished or progressive nature is also dependent on how the temporal span of the crisis is evaluated. In case the new models churn out new solutions to the singular characteristics, the singular nature of the crisis evanesces and the resulting models of crisis management can be used in further crises that are familiar on their next emergence and can be tackled by simulation. If the crisis persistently keeps its singular nature, because, for example, no temporary solutions are found and thus there are not any evolving models that can be used later, the crisis remains open-ended and transitory until solution is found.

The temporality of the crisis depends on the proportion of its simulated and singular elements. First, the crisis has to be identified as a crisis (Moffitt 2015, 189), in other words, its singularity has to be recognized. Second, validity has to be tested, as the mere sense of crisis has to be differentiated from the objective reality of crisis (Taggart 2004, 274), which is carried out by testing the available models in the handling of the crisis and the realization of its singular features. If the crisis is recognized as a simulation "reaching a crucial point that would tip the scales" (Koselleck 2006, 358), it needs to be "conceptualized as chronic" (2006, 358) or singular that can "also indicate a state of greater or lesser permanence, as in a longer or shorter transition towards something better or worse or towards something different" (2006, 358). Crisis can also "announce a recurring event, as in economics" (2006, 358), where the singularity of the ever returning crises is mixed with the already existing models in a "historically immanent transitional

phase” (2006, 372), but their combination finally results in a permanently singular nature, as it can be seen in the case of interacting economic models used in Marxist theory: crisis is “nothing but the forcible assertion of the inner unity of phases of the productive processes that externally have become autonomous from one another” (Marx 1968, 531). The scarcely available models in the handling of the crisis first highlight the reality of the crisis, whose singularity might deepen to the point where the simulated crisis management options entirely fail: “what started as a financial crisis turned into an economic recession, and in some countries even into a full-fledged depression” (Münchau 2009, 6). Karl Marx in the *Theories of Surplus Value* is critical of the models used in the discourse on crisis, which fails when the actual singular crisis strikes: the “constant recurrence of crises has in fact reduced the rigmarole of Say and others to a phraseology which is now only used in times of prosperity but is cast aside in times of crises” (1968, 500). Consequently, the singular nature of crises opens up the assessment of their temporal characteristics, and makes extrapolation impossible: the most essential feature of crisis is singularity, which is beyond comprehension by already existing models.

In *Take Shelter*, the interaction of singularity and simulation make the precise temporal interpretations of the ongoing crisis ambiguous. The tension of the tornado alert makes it clear that Curtis was right about the approaching crisis. He converted the imaginary crisis to a hyperreality based on already existing models and the survival of the family was secured by the simulation of all the necessary protocols or models that “are immanent, and thus leave no room for any kind of imaginary transcendence. The field opened is that of simulation in the cybernetic sense, that is, of the manipulation of these models at every level (scenarios, the setting up of simulated situations, etc.)” (Baudrillard 1994, 82). Curtis successfully manipulates the available models of constructing a protective shelter, so the family survives the storm and Curtis, seemingly, achieves the status of the hero. If the film ended here, the narrative would resort to the repetition of multiply used models and the successful simulation of the lone hero who carries through his will and saves the day. However, when the alert is over, everything is back to normal in the city, and Curtis achieves the anti-hero status as his sanity is questioned by the lack of reality that underlies his delusions. The narrative makes it clear that what was depicted during the tornado shelter scene was simply simulated, and technically it was generated by filmic and narrative models. Nevertheless, Curtis feels that the visions are not in proportion to the scale of the tornado and disbelievingly draws the conclusion

and, at the same time, calls attention to the fact that a singular crisis has an open temporal characteristic: “What if it’s not over?” The film ends with the family traveling to the beach house. The psychological and natural disaster is about to take place, as the psychiatrist’s words diagnose the psychological crisis that, based on the available psychological model of the disorder of Curtis’s mother, will most probably be an unresolved one: Curtis has to leave his family after the holiday and, as the doctor’s words indicate, start the “therapy at a real facility” with “serious commitment to some treatment.” The singularly devastating, long awaited, unrivalled tornado is about to strike down on the beach and find the family away from the shelter, leaving them unprepared for the apocalypse; they see a set of approaching tornados forming a gigantic storm “as an epochal event,” “marking a breakdown in the ‘normal’ course of accumulation” (Clarke 1990, 448). Eventually, the crisis stays unfinished, as the nearing destruction remains hanging in the air.

In sum, *Take Shelter* portrays how the comfortable strategies of simulation are suspended by the singular elements of an impending natural disaster and how the crisis is non-narratively expanded into a menacing and open-ended one. Despite the protagonist’s financially and existentially heroic efforts, the crisis finds him unprepared for the imminent catastrophe, which reveals how all the formerly known solution models fail. Crisis prompts numerous strategies of simulation, which are based on protocols and models that previously proved to be successful coping mechanisms. Simulation – as the organizing principle of a hyperreal, operational world rebuilt by already existing, either retraceable or untraceable building blocks or models – cannot cope with the newly emerging problems of a given crisis. The models mainly synthesized by earlier crises fail to describe the unknown, unexpected and unique factors of a new crisis, thus the singular characteristic and the resulting instability of the crisis, as well as its liminal nature is revealed. Simulation, the process of creating a hyperreal composing and composed of simulacra, might offer temporary or impartial solutions for some factors, but the complexity of any crisis also contains a variety of singular traits that hyperreal solutions cannot tackle. As the duration of the majority of crises is prone to interpretation in hindsight, not only the measures to be taken but the very temporal nature and the resulting inconclusiveness of the ongoing crisis become factors of singularity.

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