# Unbearable lightness of uncertainty

**Murat Germen**

**Abstract:** Forecasting, if misused and distorted, can turn into an apparatus of prophecy and exploited to misguide, convince, daze, hypnotize people. Some studies in data visualization, for instance, carries this potential. In order to make complex data more understandable, InfoVis projects tend to exclude marginalities and focus on mainstream data to make it more visible, legible, understandable. As a result, mainstream becomes majority, minority disappears since it does not find the opportunity to be visually represented. On the other hand, studies conducted on network behaviours reveal the fundamentally private ways people surf, live, shop, behave, consume and this fact pave the way for manipulation of apparently personal preferences. Commercial corporations die to get access to such info and they pay millions of dollars to academicians who are involved in such analysis, since they acquire the possibility of manoeuvring how people will consume. The disguisedly named "trend research" irrevocably evolves into "trendsetting", and the commercial firms do not follow people anymore, instead they make people follow their firms' trends devised after forecasting. Being able to forecast weather, natural disasters, health problems and so on is necessary, indispensable; but, when forecasting is (ab)used to control the way people live, it becomes latently oppressive, dictatorial and exploitive.

This paper will focus on the positive dimensions of the conceptions of serendipity, surprise, accident (especially in the field of visual arts) and on the negative aspects of systemic determinism where technology is ill-used to make people's brains dull, submissive by providing "services" for daily routines that are supposed to be carried out by people themselves, and not machines.

**Keywords:** Change, determinism, forecasting, mysticism, polysemy, serendipity, trendsetting, unexpected.

## Introduction

Technology is usually designed to make various essential processes easier to use, convey, share, perform and so on. Once a particular technology is invented and starts to be deployed, people discover a latent power in it, that is not originally meant for malicious use. Alfred Bernhard Nobel; a Swedish chemist, engineer, innovator, and armaments manufacturer who instituted the Nobel Prizes, is also known as the inventor of dynamite. Dynamite was originally intended as a tool to introduce power that humans could not exert to, for instance, move large amounts of earth for mining purposes, and not to kill people. But, later it was also used as a weapon to destroy strategically significant bridges, buildings, arsenals and so on during the never-ending wars and caused human losses. Due to humankind's unending interest in power, post, money, various technological tools regularly end up being abused by malevolent individuals, institutions, agencies. For instance, some technological tools are conceived to make certain processes proceed more smoothly, by predicting unique behaviours that are at the key phases of these processes and by changing the linear flow of a possibly flawed process. Though the initial intention in foreknowing is to make courses of action more sound, error-free, healthy, easy, secure; the ability to forecast is, at the same time, a substantial instrument to control people, flow, actions, etc.

It is possible to assert that uncertainty, a notion directly related to forecasting, is heightened by irregularity. This assertion can be explained by the difference between the contemporary

terms of linearity vs. non-linearity. Linearity accommodates a foreseeable structure since it proceeds in pre-planned subsequent phases of flow that are articulated to work together. On the other hand, non-linearity, a structure that is best explained by the typical browsing / surfing patterns on the internet or zapping with the remote control while watching TV; enables one to make new context-compliant decisions at every single stage of usually non-continuous course of action. This is partially why non-linear systems carry the potential of leading to ever-increasing uncertainty about the future, since you are not expected to know what the next step will be. Uncertainty is an anti-deterministic climate and climate suggests perpetual change, just like weather fluctuating every day to provide us with one of the most enjoyable rhythms of life.

During most of the month of July 2012, my family and I were in London and, at one point, we decided to plan a trip to the amazing Fingal's Cave in Scotland (that made Felix Mendelssohn and Pink Floyd write musical pieces on). I checked BBC's online weather report page, a resource that I trust much, and I did the plan accordingly for the seemingly sunny days at our destination, bought train tickets and reserved a hotel. When the time came to depart for Scotland and we reached the town of Oban, where the ferry was supposed to leave for the Island of Staffa sheltering Fingal's Cave, it started to rain heavily. The boat trip was cancelled and we could never see the cave. Though this sounds and felt frustrating, I was personally trying to relieve myself, thinking "it is really great to still experience incidents that mankind cannot totally foresee!" Same sort of unpredictability also exists in yet another natural phenomenon that Turkey (where I live) is susceptible to: Earthquake. A quite strong seismic activity is expected in the relatively near future of Istanbul and nobody is capable of determining when this will exactly take place. Forget days, weeks, months; specialists cannot even give us a specific year when it will happen.

In a system where every single phase of life can be predicted and therefore planned by a particular system (and not individuals), people's minds get lazy since they get accustomed to expecting the system to bring a resolution to any problem they face. A great ironic video clip will help in understanding this syndrome: Two individuals get on an escalator in an office building and the escalator stops suddenly as they "get trapped" between two floors. "Whoa, that's not good!" says one. "Oh, I don't need this!" says the other. "Somebody will come," the first replies. When nobody comes to help after waiting for some time, he yells out, "There are two people stuck on an escalator, and we need help!" This is one exaggerated example of how people can get extremely passive (remember the inert obese people provided with full-automation in the great "Wall-E" movie), when they are always cared for and never let to generate their own experiences and find their own solutions. On the other hand, unpredictability makes one ready to find solutions to unexpected problems. The reason is that volatility causes elevated consciousness and this is turn, enables an individual to generate a self "modus operandi" that is not fully dictated, controlled by others. After all, "necessity is the mother of invention…"

**Figure 1. Still from the movie "Wall-E", showing the people who became obese due to extreme physical passivity.**
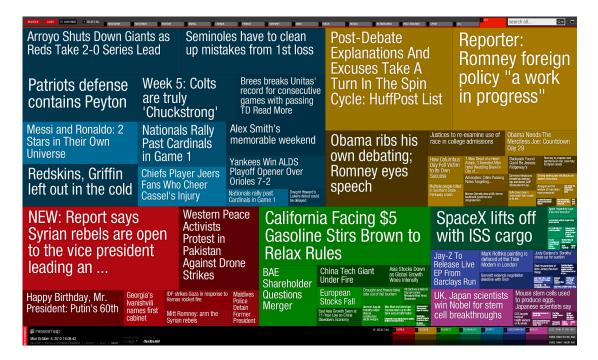
**Figure 2. Newsmap ([http://newsmap.jp](http://newsmap.jp)) - Newsmap is an application that visually reflects the constantly changing landscape of the Google News news aggregator. News that get the highest rating are represented with larger boxes.**

## Conceptual framework

Uncertainty is compatible with the concept of infinity, which is directly related to the universe. The formation of the universe, its physical limits, extra-terrestrial life / intelligence are all topics that we are uncertain about. We can only speculate, imagine concerning these issues. Such issues that are not thoroughly explicable by scientific evidence are to be interpreted differently by different people, nations, cultures and religious practices. At this point, significance of the experience of the self emerges, in addition to the collective viewpoints created by cultures and turned into traditional heritage. Existentialism is the philosophical and cultural approach which proclaims that the starting point of philosophical thinking must be the experiences of the individual. Following this, it is possible to say that existentialism is not deeply concerned with objectivities; in other words, a posteriori knowledge which is dependent on experience is preferred to a priori knowledge. This can later be linked to the notion of "fragility of the truth", where individuals avoid the conception of a single dictated Truth, written with capital T, and rather look for their own experienced smaller realities. This is usually possible by possessing or aiming for the ability to stay away from the mainstream, avoiding rhetoric that attempts to persuade particular audiences in specific situations. The inquisitive attitude towards knowledge and facts that leads to scepticism, agnosticism is of major importance here, temporalization instead of absolutization is a key approach. Another parallel concept is relativism, which is a theory that attracts attention to the claim that points of view have no absolute truth or validity, having only relative, subjective value according to differences in perception and consideration. This stance can be attached to uncertainty through R.M. Cooke's statement that goes as follows: "uncertainty is represented by subjective probability." (Cooke, 1991, p. 62)

Uncertainty carries the potential of creating suspense in the positive term, in order to render narratives intriguing. Movies, tales, anecdotes need to be based on uncertainties. Almost everybody would despise a movie with an easily anticipated end. A tale, would stop being a tale if its mystery would be decipherable beforehand. An Agatha Christie novel would not intrigue readers if the killer(s) would be identifiable in advance. Yet; ideologies, dogmatic teachings, religions, institutional history making, politicians, governments all conceal uncertainty on purpose. Followers, voters, devotees, feudal society members, disciples, fans, idolaters, desperate consumers etc. do not appreciate uncertainty; they would rather be convinced by their leaders, chiefs, gurus, superiors, guides, bosses, coaches etc. that things are going to be fine and all problems will be solved. This latter method is highly incompatible with creativity. Creativity is stochastic and casual, conjectural in nature. The significance of arbitrariness in the creative process must not be overlooked, misjudged or intentionally ignored. Notions of chance, randomness, or unpredictability are very valuable, especially when it comes to artistic creation.

In addition, serendipity can be regarded as the awaited input for making beneficial discoveries by coincidence, by chance. To make serendipity be part of the creative process, there is need to gather a list of problems that need answering, familiarity with previously given answers, and their application in daily life. Only when this acquaintance is present, 'chance' can take its part in founding the accurate environment for the 'problem' and the 'solution' to match. If there is already a certain level of wisdom accumulated in our minds about the puzzle and the fundamentals needed for the resolution, chance completes the final piece of the puzzle. It is when we can start to point out to the major difference between a traditional 'prescriptive, authoritarian and rather conventional' aesthetics vs. a new 'generative, irregular, unprescribed' aesthetics. Author's artworks series titled "Ars Accidentalis" and its concept text will help in bringing extra dimension to the conceptual framework.

**Inadvertent Art: "Ars Accidentalis"**

> Even though art is the product of an intentional act of fabrication, the serendipitous spill of an ink or paint, the unforeseen slip of a pen or brush, sudden shake of a camera in the analogue realm have the potential of generating an unconscious lead in the planned course of action. The consequential shift in direction may completely change the aesthetics and content of an artwork. An artist should always be open to such 'accidental' dimension which will help him / her to take the original idea out of its initial framework and recontextualize it for a new conception.
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> The outcomes of software 'failures' in digital technology made a similar type of aesthetics emerge: Glitch aesthetics. The 'dirty' and sometimes 'chaotic' nature of glitches made things look much more organic and human, as opposed to mechanically computerized. This unrefined aesthetics has recently become so popular among designers that some of them have made specific websites as tributes to the process.
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> Though the accidental dimension in art looks more compatible with analogue practices, there are various instances it finds its niche in the digital world as well. Mystifying benefits like freedom from preconceptions, momentary scepticism about planned course of action, avoiding mechanical thinking / prejudices, reaching a more natural / authentic result, discovering unusual and unique aesthetical domains, etc. will always make 'ars accidentalis' an indispensable part of art practice. (Germen, 2008, p. 1)

**Figure 3. "Ars Accidentalis #2", 2008, Murat Germen.**

Presence of uncertainty, especially in the realm of artistic creation, helps an artist in developing intuition. An artist is ideally not a careerist, s/he does walk on a path with precisely defined start and end points. This unsure stance can be described as an "in limbo" state and the following artworks series (which was on display as a solo exhibit in Istanbul Modern), combined with its concept text, will provide a sound base for the clarification of this particular state.

**"Way" series**

I like to be on the way; just because it frees you, takes you away from the routine of daily life, makes you reach facts that breaks prejudices, helps you in turning your subjective viewpoint into neutrality, serves as a tool of developing conscious response to global approaches dictated by hegemonic cultures, keeps you away from the local strives in vain… Being on the way is a process and I personally value the process more than the final product; in other words, I respect the means one uses more than the end. Way is equally (or more) important as opposed to the final destination. Things you experience on the way shape your life at the destination; so one should take the way seriously, be patient and not take it as a temporal realm.

One of the things that disturbed me so far in my life, is the fact that mankind usually took advantage of his/her present stance, way of living, political opinion, groups that s/he belongs to as means of gaining post and dominance. I often saw that even the minorities, after they possess a certain power following a legitimate struggle, aimed for being the dominant majority instead of remaining contented, self-confident and independent. It was frustrating to see, read and witness that the only reason for people to demolish orders was to build their own. I observed that nearly all preferred to be dependent on a group in order to survive and glorify this group ignoring the connected negative aspects. I felt people generally did not have the courage of staying neutral to opposing sides and they instead chose one side in order to feel owned. I experienced that individuals who preferred to remain independent were taken as rebellious, bad tempered, bull-headed and the desire for independence was perceived as aggression to a particular group of people. I astoundedly monitored that people who were never able to take others as free minds, always pigeon-holed them in one group or another. Being on the way always liberates me from this weight, discomfort, pressure, categorization; it is the most efficient, thrilling, pleasant and dynamic way of feeling independent…

Ways teach us how to find, or how to get rid of what we think we found. There is less chance of finding, or disposing if we are not on the way; the encounters that carry the potential of changing our lives always take place on the way. Plans before departure can alter according to

what we find on the way, this is why the way takes its shape while you walk. In short, the way to find the way out is to get on the way… Way is the neutral zone in between two sides; I dream of a constant state of being on the way and resulting enlightenment…



**Figure 4. "Way #39, Flying fortress", 2009, Murat Germen.**

## Methodology

I have been doing digital panoramic stitching for more than ten years and I have ended up with many failed stitches that usually looked 'uninterestingly' erratic. After I obtained these defective results, some of them seemed to have enough aesthetic potential and I decided to take advantage of them, as seen above in the "Ars accidentalis" series. In later experimentations, I wanted to resolve the logic behind these mistakes in order to be able to repeat them in the future. Considering the 'accidental' nature of digital processes, the outcomes of 'failures' in digital technology made a new type of aesthetics emerge: Glitch aesthetics. The 'dirty' and sometimes 'chaotic' nature of glitches made things look much more organic and human, as opposed to mechanically computerized.

> Tossing coins, picking numbers from a hat, throwing dice, exploiting gravity, wind, magnetism, etc., are just a few of the ways in which artists have been able to step outside of themselves and dilute subjective control by a measure of indeterminacy. But always this indeterminacy must apply within certain prescribed limits. No art can be entirely objective or indeterminate - an artist's choice of materials, the scale and duration of the work, the type of variables selected - these tend to be subjective and therefore aesthetic decisions. By the same token, no art can be entirely subjective or controlled. Wear and tear on the bristles of a brush, irregularities in the artist's canvas or paper, varying consistencies of paint, impurities, etc., make it impossible for the artist to predict exactly what sort of mark he or she will make. (Bogle, 1981)

So far, I have concentrated on the positive aspect of uncertainty, through its serendipitous dimension that brings the possibility of forming the necessary foundation on which creativity can settle. However, uncertainty cannot only be interpreted optimistically as a constructive, progressive and positive idea. There are many rather negative connotations that can be associated with the state of uncertainty. There can sometimes be serious risks involved in cases of uncertainty; when economy is unstable, for instance. When you walk alone on a deserted street in a pitch-dark night, uncertainty makes you feel in danger. When you are about the make an important decision concerning your future life, at the crossroads of a few options, uncertainty causes dilemma and hesitation. When you reside temporarily at a destination where you feel unaccustomed to local traditions, uncertain expressions of local citizens can trigger uncanny, creepy feelings of distrust, and therefore unintended judgment, bias or prejudice.

Above correlations of uncertainty may lead one to feel in the minority, even when the individual still lives in her/his native city. As a first reaction, being part of minority sounds disadvantageous. Being from a minority is tough, you always feel on a knife's edge, it requires courage to continue to survive in this mental state. Though this cumbersome condition does not seem to be desirable for most people, staying constantly in minority offers advantages for creative minds. A marginal mind keeps itself alive by continuous questioning of the status quo. Constancy, blind devotion, excessive loyalty, rigid certainties are not modes that a marginal member of a minority will embrace. If one feels fairly certain about the many steps of life, it may mean most of her/his life is planned. The professional life runs on routine, you know exactly when and what you will be eating, which political party/tendency you will vote for ceaselessly, which type of music you will listen to repeatedly, what sort of people you will hang out with, how much money you will have to pay for the mortgage in how many instalments… If there is anything certain about this way of living, it must be the fact that it is horrifying to continue to live like this forever.

If we take the present day occurrences of virtual worlds into account, we can easily find uncertain grounds there. Metaverse and similar are not the typical environments for humans. There are no peculiar rules that are filtered results of centuries of experience and you discover things as you proceed, which obviously founds the ground for uncertainty. This makes the new citizen of the world more interactive with the surrounding space and people, more open-minded to new and unexpected encounters, more respectful to what is there originally. This is like visiting a foreign country, the Turkish saying that goes "eat what you find, not what you expect" will clarify this frame of mind; diminish egoistic expectations and respect what is not yours. If this makes any sense, the following text which happens to be my artist statement, will hopefully tie ideas mentioned so far to the methodology I strive to use.

Photography is an opportunity for me to find things people ignore and bring them forward to make people reconsider. I am not interested in extraordinary things since they are always covered and receive more attention due to mankind's unending interest in celebrities, fame, sensation… I try to concentrate more on ordinary things and catch possible latent extraordinariness in regularity. It is easy to take ordinary photos of extraordinary things but more challenging to take extraordinary photos of ordinary things. It is possible to say I tend to concentrate on extracting some peculiarity out of the ordinary. I attempt to defamiliarize ordinariness, render it ambiguous by alienating it from its familiar context and finally make people to 'see it afresh.'

Photography records the surface information, where one can only depict the exterior features of objects (colour, texture, shape, etc.) and the resulting visual representation cannot incorporate the internal condition / content / soul. I also aim to make photos that carry the many traces of time, multiple dimensions of space and finally create photos usually invisible to the naked eye. The basic idea is to form a personal visual accumulation through time and space that supposedly give us more insight / clues than a single photograph. I see multi-layered photography / chronophotography as gates to augmented perception, surreal encounters, creation of new worlds and self appropriation; since I do not believe in ultimate objectivity in photography and "Truth" with the capital T. Personal delineations of temporary yet experienced smaller realities are truer than imposed institutional "realities." The key is reflecting the inner world with a genuine, idiosyncratic way: "Do not follow the suggested agenda / trend, do your own thing..."

## Findings

In his seminal book titled "The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism", Fritjof Capra assesses the deterministic approach of the Western science world and talks about the positive notion of uncertainty inherently

present in the Eastern mysticism. In another inspirational book titled "Surely You're Joking, Mr. Feynman! - Adventures of a Curious Character", physicist Richard P. Feynman complains about the rigid, cramped, dead-ended, clerk-like, bureaucratic behaviours of some of his fellow scientists. He further maintains that deterministic approaches in science can somehow be balanced with creative areas like music, where one can talk about momentary improvisation that breaks the linear continuity of the pre-planned path of musical notation system. The denial of a dictating calculated course of action should not immediately be related to the concepts of fate, destiny or the Turkish concept of "kismet" which refers to a course of events sacredly predetermined by divine spirits. It should rather point to the much prolific notion of serendipity which means "a 'happy accident' or 'pleasant surprise'; specifically, the accident of finding something good or useful without looking for it" (after Wikipedia definition). Serendipity is a happening that one can experience in nature. We are almost completely detached from nature and do not listen to it anymore. We used to be part of it but now we see it as a nostalgic pastime environment during weekends or holidays. Nature offers an amazingly large variety of lives that coexist with each other in a harmonious cyclic pattern. This remarkable richness is what forms the necessary basis to enjoy serendipity; you cannot teach nature, it will always teach you… It seems the humankind does not want to accept this and insists on deterministic, stiff and consequently restrictive definitions of events on earth, leaving no chance for surprise. Fritjof Capra explains this human tendency towards determinism in a very efficient way:

> The mechanistic view of nature is thus closely related to a rigorous determinism. The giant cosmic machine was seen as being completely causal and determinate. All that happened had a definite cause and gave rise to a definite effect, and the future of any part of the system could-in principle-be predicted with absolute certainty if its state at any time was known in all details. (Capra, 1975, p. 56)

> The philosophical basis of this rigorous determinism was the fundamental division between the I and the world introduced by Descartes. As a consequence of this division, it was believed that the world could be described objectively, i.e. without ever mentioning the human observer, and such an objective description of nature became the ideal of all science. (Capra, 1975, p. 57)

> In quantum theory, tendencies are expressed as probabilities and are associated with mathematical quantities which take the form of waves. They are 'probability waves', abstract mathematical quantities with all the characteristic properties of waves which are related to the probabilities of finding the particles at particular points in space and at particular times. All the laws of atomic physics are expressed in terms of these probabilities. We can never predict an atomic event with certainty; we can only say how likely it is to happen. Quantum theory has demolished the classical concepts of solid objects and of strictly deterministic laws of nature. A careful analysis of the process of observation in atomic physics has shown that the subatomic particles have no meaning as isolated entities, but can only be understood as interconnections between the preparation of an experiment and the subsequent measurement. Quantum theory thus reveals a basic oneness of the universe. It shows that we cannot decompose the world into independently existing smallest units. As we penetrate into matter, nature does not show us any isolated 'basic building blocks', but rather appears as a complicated web of relations between the various parts of the whole. These relations always include the observer in an essential way. The human observer constitutes the final link in the chain of observational processes, and the properties of any atomic object can only be understood in terms of the object's interaction with the observer. This means that the classical ideal of an objective description of nature is no longer valid. The Cartesian partition between the I and the world, between the observer and the observed, cannot be made when dealing with atomic matter. In

atomic physics, we can never speak about nature without, at the same time, speaking about ourselves. (Capra, 1975, pp. 68-9)

In modern physics, the universe is experienced as a dynamic, inseparable whole which always includes the observer in an essential way. In this experience, traditional concepts of space and time, of isolated objects, and of cause and effect, lose their meaning. Such an experience, however, is very similar to that of the Eastern mystics. The similarity becomes apparent in quantum and relativity theory, and becomes even stronger in the 'quantum-relativistic' models of subatomic physics where both these theories combine to produce the most striking parallels to Eastern mysticism. (Capra, 1975, p. 81)

In Eastern mysticism, this universal interwovenness always includes the human observer and his or her consciousness, and this is also true in atomic physics. At the atomic level, 'objects' can only be understood in terms of the interaction between the processes of preparation and measurement. The end of this chain of processes lies always in the consciousness of the human observer. The crucial feature of atomic physics is that the human observer is not only necessary to observe the properties of an object, but is necessary even to define these properties. In atomic physics, we cannot talk about the properties of an object as such. They are only meaningful in the context of the object's interaction with the observer. In the words of Heisenberg, 'What we observe is not nature itself, but nature exposed to our method of questioning.' The observer decides how he is going to set up the measurement and this arrangement will determine, to some extent, the properties of the observed object. If the experimental arrangement is modified, the properties of the observed object will change in turn. (Capra, 1975, p. 140)

The indispensable role of the observer is further emphasized by Norsen:
The Uncertainty Principle states that it is impossible to determine simultaneously both the position and the momentum of an electron or any other particle with any great degree of accuracy or certainty. This is not a statement about the scientist's ability to measure the quantities, but rather, it is a statement about the system itself, giving rise to an acknowledgment of the "observer effect" and indeed a query into the nature of "local realism" itself in theoretical physics (Norsen, 2007).

Deterministic approaches, disregard of the individual's role, ambitions of defining rigid certainties presented as "objectivities" are typically crafted by hegemonic institutions, states, governments, religions and so on. The motive behind this is to design a "doxa", a common belief or popular opinion often manipulated by sovereigns to persuade people into what they think appropriate and to prevent the consciousness of individuals. Same thing can be found in Adorno's conception of group spirit (gruppengeist) and domination:
Group opinion dominates; through adjustment to the majority of the group, or its most influential members, more often by virtue of the more encompassing and authoritative opinion beyond the group, especially one approved by the members of the committee. The objective Spirit of the class reaches deep into the participants far beyond their individual intelligence. (Adorno, 1970, p. 302)

Fortunately, even the supposedly most deterministic area of human thinking, i.e. science, is becoming less and less rigid by taking pragmatist steps and leaving margins for uncertainties, temporal improvisations, spontaneities. Maybe the reason why artificial intelligence studies make some people feel like they ran towards a dead-end, is because intelligence was solely defined by numerical certainties in order to be compatible with the computer logic, which excludes grey areas of "maybe" by accommodating only "yes" and "no"s (on-off / 0-1 / true-false), or "if" which only helps to multiply hierarchies of yes / no. This stage of the text is a great context to introduce the concept of fuzzy logic:

Fuzzy logic, which is a form of many-valued logic or probabilistic logic; deals with reasoning that is approximate rather than fixed and exact. In contrast with traditional logic they can have varying values, where binary sets have two-valued logic, true or false, fuzzy logic variables may have a truth value that ranges in degree between 0 and 1. Fuzzy logic has been extended to handle the concept of partial truth, where the truth value may range between completely true and completely false. (Wikipedia)

Richard Feynman, American theoretical physicist known for his work in quantum mechanics, quantum electrodynamics, the physics of the superfluidity, and particle physics, is another inspiring scientist who wrote about inflexible attitudes in science. The below quote from his book introduces the concept of play, which points at the pleasure of personal experience with a particular topic dealt with in a given single moment:

Physics disgusts me a little bit now, but I used to enjoy doing physics. Why did I enjoy it? I used to play with it. I used to do whatever I felt like doing -- it didn't have to do with whether it was important for the development of nuclear physics, but whether it was interesting and amusing for me to play with. When I was in high school, I'd see water running out of a faucet growing narrower, and wonder if I could figure out what determines that curve. I found it was rather easy to do. I didn't have to do it; it wasn't important for the future of science; somebody else had already done it. That didn't make any difference: I'd invent things and play with things for my own entertainment. So I got this new attitude. Now that I am burned out and I'll never accomplish anything, I've got this nice position at the university teaching classes which I rather enjoy, and just like I read the Arabian Nights for pleasure, I'm going to play with physics, whenever I want to, without worrying about any importance whatsoever. (Feynman, 1985, p. 15)

The particularity of the personal experience while playing reminds the Eastern mysticists belief in "suchness" (Tathata) which elucidates the appreciation of reality in a given single moment and context. As no moment never represents similarity with the other, each one can be appreciated for what passes during that given moment. As Molloy states, "We know we are experiencing the 'thatness' of reality when we experience something and say to ourselves, 'Yes, that's it; that is the way things are.' In the moment, we recognize that reality is wondrously beautiful but also that its patterns are fragile and passing." (Molloy, 1999, p. 130) Appreciation of specific reality in a given single moment help individuals in multiplying the unforeseeable possibilities of various realities that are to be faced in the following slices of time. It is uncertain how much time slices we have left. Therefore it may make more sense to try to perceive, experience and think on how momentary instances of being at various time segments relate to each other. This will, in turn, take us to the realm of ontology, which is a central branch of metaphysics and can be described as the investigation into the basic categories of being and how they relate to each other. Researchers Yang and Calmet, who conduct studies on decision making under uncertain knowledge, set a valuable connection between ontology and uncertainty:

Uncertainty is an inevitable feature in most environments. Agents do not act within a static and close environment but within a dynamic and open one. The available information is mostly incomplete and often imprecise, because agents almost never have access to the whole truth implied by their environment. Agents must, therefore act under uncertainty. In order to allow agents to work under uncertainty, an extension of ontologies, which has the capability of capturing uncertainty knowledge about concepts, properties and relations in domains and of supporting reasoning with inaccurate information, is mandatory. Along this direction, researchers have attempted in the past to use different non-probabilistic and probabilistic methodologies for ontology definition and reasoning. (Yang, Calmet, 2005)

## Conclusion

Technology must not complicate things and alienate people from their daily processes; on the contrary, it must simplify procedures, set a decipherable relationship with its user and leave leeway for relatively chaotic structures where vibrancy of life comes from the unexpected. Uncertainty, deployed by conscious / creative minds, is progressive, provocative and makes people alert, ready to react, struggle with crises. Uncertainty makes an individual belong to a minority of people who question things, while people belonging to majorities accept the status quo and stay obedient, passive without being agnostic.

The saying, widely attributed to Plato's Socrates "I know one thing, that I know nothing", supports the above mentioned perception of uncertainty by suggesting open-mindedness to various interpretations, which sequentially leads to polysemy where it is possible to generate various definitions of one word, conception or expression. I personally see the idea of uncertainty as being more "universal" and certainty as more "local", i.e. much smaller in scale. When there are more people contributing to various definitions of life and its many abstract / concrete manifestations, polysemy increases just like it does now with the collective non-institutional world history that is being written by members of social media from all cultures, replacing all countries' official histories that are full of misinformation. This way, certainties get more quickly, easily and naturally broken into indeterminate pieces that enrich experience of life. Uncertain are boundaries of the universe, uncertain should life be able to proceed every so often…

A culture needs to generate metaphors and allegories to sustain its identity, idiosyncrasy and uniqueness. In order to produce metaphors some certainties need to turn into uncertainties so that there are enough voids, gaps, lapses, intervals, delays, pauses, slips, failures where you can fit your own annex, humble contribution, solution, suggestion, cure, aid… When some occurrences are exemplified by metaphors, there is not always need to bring constant causal explanations why things occurred. Causality frequently tries to link the present to the past and sometimes to the future, bypassing the pleasures of "carpe diem" attitude. If we occasionally try to convert "causal" into "casual", we will be able to find the opportunity let life flow and seize the moment. If it is possible to adopt this viewpoint, it may become easier to look toward the future with more hope and be able to say "The Best is Yet to Come", as in a 1959 song composed by Cy Coleman. Same optimistic, promising, encouraging and aspiring mind-set can also be found in a short and evocative poem titled "September 24th, 1945" written by Nazim Hikmet, who is a Turkish poet, playwright, novelist and memoirist:

> The most beautiful sea hasn't been crossed yet.
> The most beautiful child hasn't grown up yet.
> The most beautiful days we haven't seen yet.
> And the most beautiful words I wanted to tell you
> I haven't said yet…

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