

Speculation on 9/11 WTC collapse

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Abstract

There have been numerous questions and suspicions against the 9/11 Commission Report, which seems to encourage people to find a possible explanation for the collapse of WTC buildings. The most appallingly perplexing question is how the collapse of 7 WTC building was possible, which was almost like a free falling and also looked like drowning smoothly into a uniform medium like water. Also, with the collapse of WTC buildings many unusual inexplicable phenomena were accompanied at the site of WTC, nearby the WTC, and even at remote area in Alaska. Based on phenomenological facts and in the domain of conventional science, any reasonable explanation for the collapse of WTC buildings cannot be found. However, if the electric interaction is considered below the ground surface, which is accompanied in phenomena as always but ignored in usual, the collapse of WTC buildings can be explained with the interpretation of Hutchison effect in 4-D complex space.

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WTC Collapse

The twin towers of World Trade Center (WTC) in New York were collapsed on September 11, 2001: Two hijacked commercial aircrafts crashed into floor 93-99 of the North Tower (WTC 1) at 8:46 am and into floor 78-85 of the South Tower (WTC 2) at 9:03 am; the South Tower was collapsed at 9:59 am and the North Tower was collapsed at 10:28 am. In addition, at 5:20 pm on same day, the 47-story building 7 (WTC 7) was collapsed after burning hours. (history.com, WTC-Collapse) Anyhow, there have been numerous questions and evidences against the 9/11 Commission Report saying that the collapses of WTC buildings were just natural processes induced by fire.

If the collapses of twin towers were due to the fire caused by the crashes into the buildings (WTC 1 and WTC 2), it should be unique case in the history of hi-rising building collapses, which has never happened before and after the WTC collapses. Besides, the collapse of WTC 7 was almost like a free falling as if there was nothing to resist against the collapse; therefore, the collapse of WTC 7 building became the smoking gun for people thinking 9/11 conspiracy theories. The building collapses (WTC 1, WTC 2, or WTC 7) have been enigmatic because it seems to be impossible in the respect of Newton's law in physics. (Wood, A Refutation of the Official Collapse Theory 2005) (Chandler, Freefall and Building 7 on 9/11) (9-11-Research, Speed of Fall) (Kosciuk and Robbin 2006) (911Myths, 911Myths... Reading between the lies) Yet, there is no plausible or even acceptable theory for these puzzling phenomena.

First of all, let's review the known facts in the collapse of WTC buildings. The collapse of WTC 1 or WTC 2 (Twin Towers) was initiated from below the impact zone, such as floor 93-99 of WTC 1, or floor 78-85 of WTC 2. In the process of collapse, the concrete of twin towers was literally pulverized², which should be related to the mechanical force against the collapsing of building; minutes before the collapse of WTC 2, some molten metal pouring out was observed; moreover, ground zero workers had reported molten metals in the foundations of three WTC buildings for some time. (9-11-Research, Molten Metal) Here, the first question is what happened on the intact steel frames of building below the impact zone, which made the collapse of buildings. The second question is how it could be uniform, in other words, how the intact steel frames of all floors below the impact zone were sagged or got weak uniformly, which probably made the buildings collapse on their own footprints. In addition, although it is still disputable (911Myths, WTC Demolition), it seems that the collapse of WTC buildings took less than any expected time estimated with all possible conditions that can be made during the collapse. (Kosciuk and Robbin 2006) (9-11-Research, Speed of Fall, Simulation Modeling Aspects of the Twin Towers' Collapse) The most

² A considerable amount, but not all, of the concrete in the building was pulverized.

perplexing one was the collapse of WTC 7 building because it collapsed like a free falling body in the air (Chandler, Freefall and Building 7 on 9/11) and also kept crashing onto the ground, which seems that fundamental physical laws -- Newton's laws of motion -- is violated and seems to be different from any natural phenomena we have known.

If the collapse of WTC 7 building was almost like a free falling event as $a \approx 9.8 (m/s^2)$ in Fig. (1) and if the gravitational acceleration $g = 9.8 (m/s^2)$ as in usual³; then, $F_N \approx 0$, which should be impossible in that the building itself is being crushed down to the ground. Then, what if $g > 9.8 (m/s^2)$? It seems to be so surreal; however, at least, the Newton's law itself makes sense in Fig. (1).

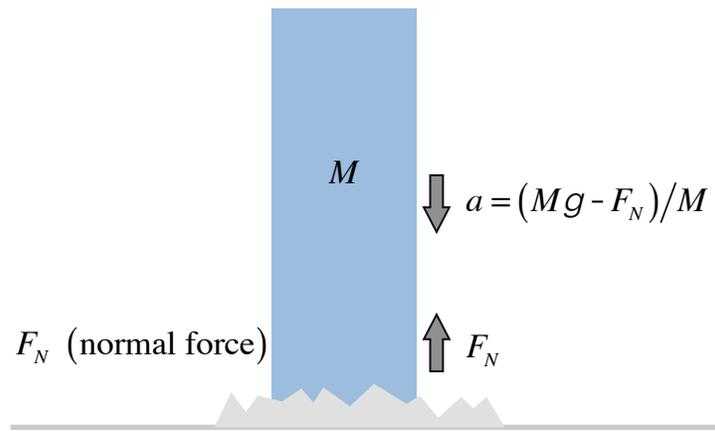


Fig. 1

In addition, it can explain how the pulverization could be possible in the collapse of building WTC 1 and WTC 2 because the phenomenon, pulverization, during the collapse of buildings cannot be possible as long as we assume that the building structure below the impact point was not changed and that gravitational acceleration, g is given as $g = 9.8m/s^2$ as in natural phenomena we have seen. For example, the collapse of building WTC 1 started by the gravitational weight of upper part of the building from the impact point, in which the upper part was crashing down the building with acceleration $a \approx 6.31m/s^2$ and the acceleration was almost uniform during the collapse; that

³ In approximation $g \doteq 9.8 (m/s^2)$, which is supposed to be constant near the earth surface.

means, the lower part of building, which used to support whole gravitational weight of the upper part, could not support only 36% of gravitational weight of the upper part (Chandler, Destruction of the World Trade Center), and even more surprisingly it was being pulverized during the collapse. However, by some reason if the structural steel frames of building got weak like rubber bands, the pulverization itself is not so surprising; then, another question arises as where the thermal energy had come from to make the steel frames weak and even melted.

If we cannot find any reasonable explanation for the collapse of WTC buildings, we need to look around and search any additional information that might be a clue to understand why the WTC buildings were collapsed and why the process of collapse is not understandable in common sense or different from any natural phenomenon we can understand with fundamental laws in physics.

Coincident Natural Phenomena

The seismic data of 9/11 WTC disaster was also reviewed, especially investigated how the seismic signals were matched or corresponded when the Twin Towers of WTC were struck by jetliners and when the WTC buildings were collapsed. (Kim and Others 2001, MacQueen 2009, Rousseau 2012) Although it is still debatable⁴, the seismic data seems to be not related to the impacts by jetliners and the collapse of WTC buildings; that is to say, the source of seismic data is not the jetliner impacts or the collapse of buildings but something unknown yet; probably, it might also caused the collapse of WTC buildings. In addition, explosions, ground shakings, tremendous roar (9-11-Research, Oral Histories) (Bollyn 2009), and other strange phenomena (Wood, Dr Judy Wood, Wood and Larsen, WHERE THE TOWERS GO? 2010), those of which were occurred with the collapse of WTC buildings, should be related with the unknown source of seismic phenomena.

WTC 7 building fell down such smoothly, uniformly, and almost like a free falling, which cannot be made by using explosives. For an explosion sound it seems to be natural to think an explosive; however, like the hand-waving in a debate, it is not agreeable to suppose that the collapse of building was made by explosives. Then, what can make the explosion sounds or simply explosion?

Dr. Judy Wood pointed out that the strange phenomena, those of which occurred with the collapse of WTC buildings, were similar to the phenomena in Hutchison Effect (Hutchison 2006, Wood, Anomalies at the WTC 2008), and mentioned that the accompanied weather anomaly (Wood, 9/11 Weather Anomalies and Field Effects) and earthquakes were possibly correlated to all those

⁴ The seismic data analysis by Dr. André Rousseau seems to be more persuasive and credible.

strange phenomena including the collapse of WTC buildings. Now, it is natural to speculate whether the phenomena, the collapse of WTC buildings and Hutchison Effect (anomalous electromagnetic effect), both are fundamentally same physical phenomena and, if then, how all those accompanied strange phenomena such as weather anomaly, geomagnetic field variations, and earthquakes are correlated to the collapse of WTC buildings.

As a jigsaw puzzle, for example, in which we cannot see the whole picture until all pieces of the puzzle are combined together, each individual strange phenomenon accompanied with the collapse of WTC buildings doesn't seem to supply any clue to understand the mysterious collapse of WTC buildings; however, if all the strange phenomena are considered together, they might appear to be similar to the phenomena in Hutchison Effect. (Wood, Anomalies at the WTC 2008) It should be considered seriously because, as we know, first time coincidence might be just by chance, but if repeated second time, third time, and more, the coincidences should not be contingent results but necessary consequences made by cause and effect. However, the question is how the collapse of WTC buildings can be related to the anomalous electromagnetic effect, so-called Hutchison effect.

First of all, we need to review the global electric circuit that is connected from inside the earth to outer space and the electric interactions involved in natural phenomena that we haven't considered in-depth. Here, the earth's global electric circuit is extended from the conventional model (Roble and Tzur 1986, Price 2013, UCAR 2013); the extended one includes inside the earth with new model of geomagnetic field (K. Kim 2008) that consists of two magnetic dipole moments, one of which is generated from positive charge distribution at outer core with the earth's rotation; and the other one, from negative charge distribution at Moho area⁵ that is supposed to be between the crust and the mantle in the earth; however, inner magnetic dipole moment is much weaker than outer one.

Earth's Electric Field and Global Electric Circuit

The earth is in an electric equilibrium state; that is to say, a global electric circuit is being connected from inside the earth up to outer space through the earth's crust, atmosphere, and ionosphere; moreover, the electric equilibrium is not independent of the gravitational force and the magnetic pressure inside the earth because of the mass-charge interaction in 4-D complex space (K. Kim 1997, 2008, 2019), in which the electric equilibrium is maintained slowly through the atmosphere and the earth's surface or abruptly through sudden activities on the earth's

⁵ Moho is the boundary between the earth's crust and the mantle. (King 2019)

surface such as earthquakes, volcano eruptions, etc. and through meteorological phenomena such as severe thunderstorms, tornadoes, etc.

Then, it is natural to suppose that natural phenomena in atmosphere and inside the earth should have relations with the variations of electric field and/or magnetic field on the earth (Sarlis 2018); in most cases, electromagnetic interaction appears as a minor phenomenon accompanied with the natural phenomena; however, it can be the direct cause of a natural phenomenon. For example, inside the earth, the mechanical force balance is maintained by gravitational force, thermal pressure, and magnetic pressure in the new model of the earth's magnetic field (K. Kim 2008). If solar wind, stream of charged particles, hits the earth magnetosphere like a shock wave, it makes the magnetic fields unstable in the atmosphere and inside the earth, too; thus, gravitational force gets unbalanced with the unstable magnetic pressure inside the earth. Then, the spontaneous reaction follows inside the earth to get stabilized again; electric charge distribution is changed in Moho layer; also, telluric current is generated in the earth's crust and mantle. Therefore, this acute local unbalance across the crust between gravitational force and magnetic pressure from inside the earth can be a direct cause for earthquakes. To find the causal relation (if any) of earthquakes to the source of stream of charged particles plunging into the earth atmosphere, it is natural to consider solar activities, such as sunspots, solar flare, CME (coronal mass ejection), and solar cycle, etc. although it is still disputable. (Ben DAVIDSON 2015, Gulyaeva 2014, Nikouravan 2013, Marilia Tavares 2011, Love and Thomas 2013) From the sun, for instance, the stream of charged particles not only affects on geomagnetic field inside and outside the earth, but also disturbs electric charge distribution in the earth's crust through the earth's ionosphere that reduces the effect of the disturbance, though. If the disturbance is significant, it can also cause earthquakes on the earth.

For natural phenomena such as earthquakes on the earth and solar wind coming into the earth's magnetosphere, it is not easy to think that they have a causal relation in physical interactions because there is no theoretical common base for gravitational interaction and electromagnetic interaction in conventional paradigm of physics until now. However, with the concept of mass-charge interaction in 4-D complex space and the new model of geomagnetic field, these seemingly different phenomena can have the causal relation as above.

In the meanwhile, apparently atmospheric phenomena in meteorology, tornado and firenado⁶ are also a part of process in global electric circuit because tornado is supposed to be initiated and

⁶ the name is given for a fire whirl that forms a tornado-like vortex of flames and/or makes the damage like from a tornado.

maintained by the electric interaction between a storm cloud and a crustal conducting body⁷ underground (K. Kim, Tornado Genesis 2010), and firenado is also supposed to be formed by the electric interaction of electric charges in the flame of vortex with the induced electric charges at a crustal conducting body underground. (K. Kim, The Impetus of Firenado 2018)

In wildfires, such as bush fires, forest fires, grassland fires, etc., or conflagrations, fire whirls and/or firenados can be observed above the ground; however, below the ground there should be a change accompanied because phenomena above the ground, such as firenados, fire whirls, fires, etc., interact with electric charges below the ground. Recently, in California (USA), some weird phenomena that manifest electric interactions from underground in wildfires has been reported in YouTube website (mental_boost 2018, Philly 2017), which should be the electric interaction in the vortex of firenado with a crustal conducting body underground.

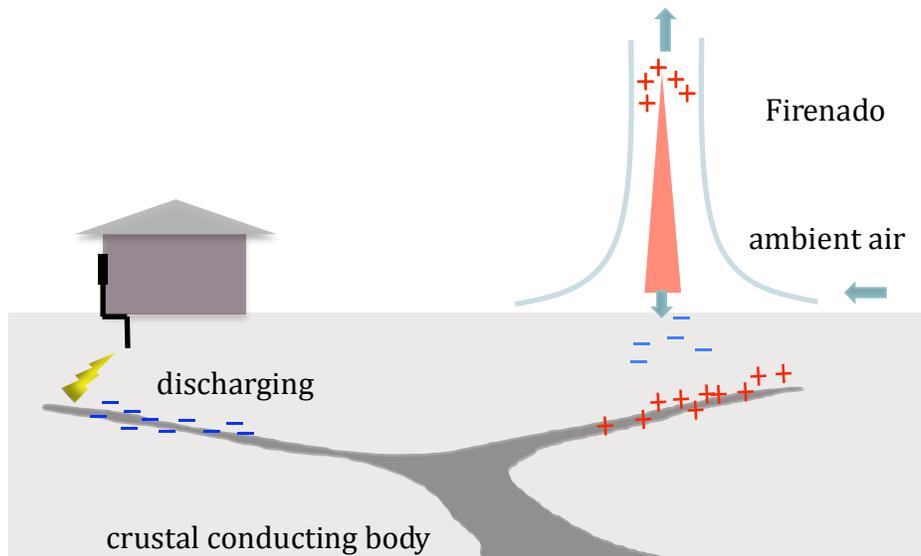


Fig. 2

Based on phenomenological facts, the electric interaction can be inferred as shown in Fig. (2), which is an electrostatic discharging from underground as the lightning strikes in the atmosphere although the discharging should be much slower than in the air.

⁷ It is supposed to be one of electrical conducting passages distributed in the earth's crust like branches or twigs of a tree. (K. Kim, Tornado Genesis 2010)

Anomalous Electromagnetic Interaction

If an electric power had been used to heat up the structural iron beams in WTC buildings, it would have been easy and fast to make the iron beams weak like rubber bands and even to melt them although it might have taken incalculably huge amount of energy. Moreover, once the structural iron beams became useless for structural support of the building, the concrete pulverization in the collapse of WTC buildings could be expected naturally because the pulverization happens more easily from crushing than explosion or any other way. For the collapse of Twin Towers and WTC 7 building, we can make a speculation; however, assuredly it should be scientific.

Now, let's start the speculation on the collapse of WTC buildings: Let's assume electric interactions with a crustal conducting body underground as shown in Fig. (3), in which the electric interaction was initiated by the collision of jetliner on the North Tower of WTC (WTC 1), the fireball punching-down through the elevator shaft, and the followed fire on the building.

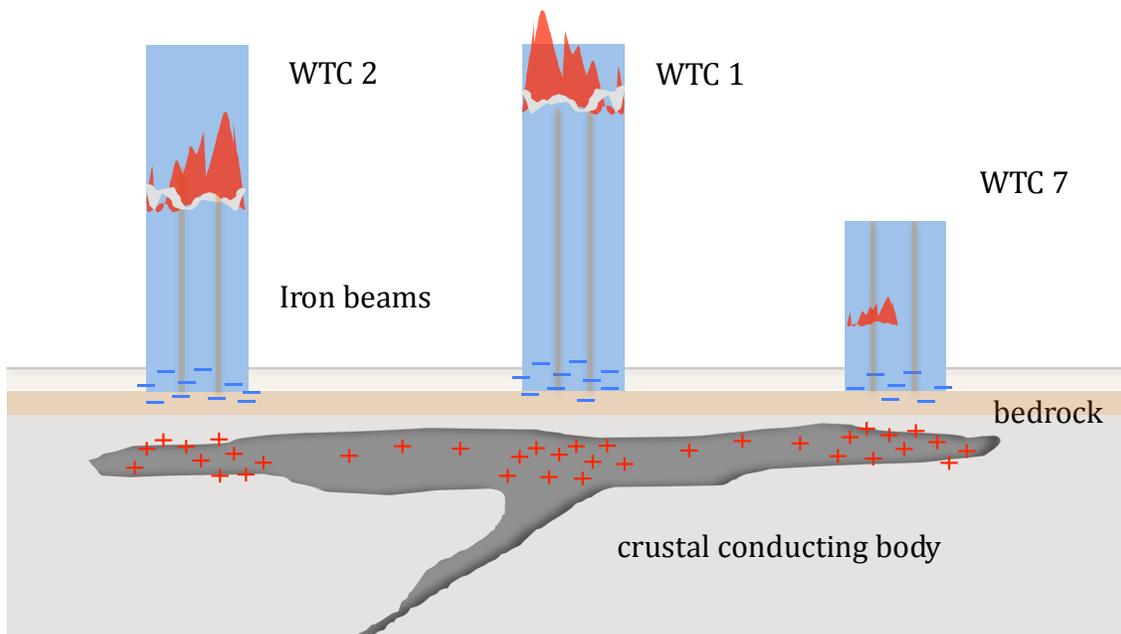


Fig. 3

As in the formation mechanism of firenado (K. Kim, The Impetus of Firenado 2018), negative charges in the fire, mainly electrons, moved down through the structural iron beams in the North Tower of WTC (WTC 1) and the induction of positive charges was followed at the crustal conducting body; thus, a high electric potential difference was formed across the bedrock under the North Tower of WTC. Although not so strong yet, the electric potential differences were being formed across the bedrock under the South Tower of WTC and WTC 7 building.

About 17 minutes later another jetliner clashed into the South Tower (WTC 2); the electric potential across the bedrock under the buildings got stronger as shown in the figure; maybe, this second clash into the WTC 2 building triggered the Hutchison effect.

Not only did some electric currents (leakage current through dielectric medium) flow in the structural iron beams, which makes the iron beams weak and nonfunctional as for structural support, but also electrostatic discharges (dielectric breakdown) happened a couple of times or more, which made the explosion sounds and also generated the earthquakes signals. Besides, if the earth's global electric circuit is considered, the electric interaction with the underground conducting body should be related to the geomagnetic field variations somehow, which might be the geomagnetic field variations in Alaska.

Once the electric interaction is introduced as above, it seems that a picture puzzle is about to be completed; however, there still remains one more piece in the puzzle. The estimated acceleration in the collapse of WTC 7 building was almost equal to the acceleration of gravity as $a \approx g$, in which g is supposed to be the acceleration for a free falling object near the earth surface and should be constant as $g \doteq 9.8 (m/s^2)$. However, as shown in Fig. (1), the building itself was being crushed down to the ground; then, $F_N > 0$ in the figure, which means that it couldn't be the free falling we have known in natural phenomena.

For some reason, anyhow, if the value of gravitational acceleration (g) was greater than the conventional one as $g > 9.8 (m/s^2)$, the Newton's laws of motion, at least, can be saved although it seems to be unrealistic and not even scientific thinking just because we cannot find any reason in the domain of conventional science. However, there is a similar case that is the levitation or antigravity in Hutchison effect which has been known as anomalous electromagnetic effect. (Hutchison 2006) Also, it is interesting to compare the direction of electric field in Van de Graaff generator used in Hutchison experiments for antigravity effect with the direction of electric field shown in Fig. (3) for the increased gravity if $g > 9.8 (m/s^2)$.

If the Hutchison effect happened in the collapse of WTC buildings such as Twin Towers and WTC 7 building, the question is how it was triggered. Then, we need to understand Hutchison effect not just phenomenological descriptions but the physical mechanism that explains why and how it happens. According to the interpretation of Hutchison effect in 4-D complex space (Appendix A), the Hutchison effect is interpreted as unusual phenomena being occurred from spontaneous energy accumulation through the process of vacuum resonance in 4-D complex space. The radio frequency wave interferences, which is known to trigger the Hutchison effect, should be coherent; besides, if considering that John Hutchison himself cannot reproduce the phenomena on his will, it is hard to believe that the Hutchison effect happened in nature by itself.

Then, what about the mass-charge interaction? In Fig. (3), if the positive charge distribution underground is much dominant over the negative charge distribution, the dominant positive charge distribution can make an additional pulling down force for mass of the building above the ground. If the acceleration of gravity was as $g > 9.8 (m/s^2)$ in the collapse of WTC 7 building, it can explain the free falling and the crushing, both in the process of collapse.

Summary and Discussion

It is a hypothetical explanation based on the electric interaction with underground crustal conducting body, in which anomalous electromagnetic phenomena so-called Hutchison effect might be involved.

For the question what made the WTC buildings collapse, it should not be the fire on the buildings but the electric interactions from underground. Although geomagnetic field variations in Alaska and the unexpected path change of hurricane Erin on that day, if it was not coincident, can be thought as possible cases in the respect of the earth's global electric circuit, still it is surreal and more research should be followed.

The Hutchison effect, which has been known to need radio frequency interferences, is not easy to be triggered, especially, in natural phenomena because the radio frequency interferences should be coherent (Appendix A). Nevertheless, if the Hutchison effect was involved in the collapse of WTC buildings, a possible mechanism is speculated as following: the second jetliner hit the South Tower of WTC; like a turning fork generating unique frequency of sound, the vibration of building due to the collision by the jetliner was transferred through the structural iron beams, and it generated a vacuum-string-wave motion in 4-D complex space with a unique frequency, which triggered the vacuum resonance for the anomalous electromagnetic interaction - Hutchison phenomena.

Ever since the day of 9/11 attacks on WTC (World Trade Center) in 2001, it has been still in a puzzle why and how the WTC buildings collapsed. Unsatisfied with the final report from the NIST investigation, which was supposed to be authentic though, saying that the cause of collapses was the fire on the buildings, some groups of people keep insisting that explosives were used, which leads naturally to another conspiracy theory. However, the idea of explosive, which can make an explanation for the collapse of WTC buildings, is not feasible, if considering how much amount of explosive should be needed, and not realistic either because the collapses of Twin Towers and building 7 in WTC, all three collapses were too perfect aligned, straight down, and top down movements with nearly uniform acceleration to be realistic in natural phenomena. Above all, the explosive theory cannot explain for the fact that the collapse of WTC building 7 was almost like a free falling, which is apparently violating fundamental laws of physics (Newton's laws of motion).

At this point, at least there is one thing clear that the collapse of WTC buildings was not an ordinary event we have known in natural phenomena. If there is a God, only the omnipotent God could manage the perfectness like that. Then, for an atheist what might be an alternative choice? It is nature itself although we haven't confirmed yet in a scientific way. Even among people those who planned for the 9/11 attacks and who were deliberately ignorant, if any, none of them could have expected the collapse of WTC buildings.

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Appendix A

Hutchison effect

John Hutchison, who has been known as Canadian inventor and scientist attempting to recreate the experiments of Nikola Tesla in late 1970s, has claimed to discover many new phenomena – Hutchison effect; such as jellification and transmutation of metal, levitation, fusion with other object, etc. (Hutchison)

For those paranormal phenomena, however, any reasonable explanation has been absent in the domain of conventional science and even he cannot reproduce the phenomena on his will. Hence, the Hutchison effect has not been proved objectively. Nevertheless, just because the experiment is not replicable; any reasonable explanation, not present; and the phenomenon, not acceptable in contemporary paradigm of physics in which the law of conservation of energy cannot be violated, it cannot be simply treated as hoaxing or fraud because many people seem to have observed the phenomena. (Calante and Michrowski 1996) (Hathaway and E. 2014)

“The Hutchison effect occurs as the result of radio wave interferences in a zone of spatial volume encompassed by high voltage sources, usually a Van de Graaff generator, and two or more Tesla coils.” (Wood, Anomalies at the WTC) (Solis) (tesla_coil) Also, it has been known that output energy in the phenomena of Hutchison effect is much bigger than input energy. If then, the experimental setup for the Hutchison effect should be to initiate vacuum resonance in physical space as in following hypothesis, of course, which is one of brainstorming ideas at this time, though.

If electric and/or magnetic energy can be accumulated in a confined or localized physical space through a process of vacuum resonance that is supposed to be initiated with radio frequency wave interference; then, the accumulated energy can be taken by a physical object inside the physical space because each physical interaction, such as electric interaction, magnetic interaction, or gravitational interaction, is not independent from others in 4-D complex space. (K. Kim, Primitive Virtual Negative Charge 2008) It can turn out to be mechanical kinetic energy for the physical object in phenomena – **teleportation**⁸; also, it can be emerged as thermal energy on the physical object -- **thermal effect** mentioned in the phenomena. Similarly, non-uniform state of vacuum particle distribution, which is made by electric field in physical vacuum space, can bring about a gravity effect to the physical object -- **antigravity** or **enhanced gravity effect**.

The extra energy is supposed to be coming from physical vacuum space, which should be reasonable interpretation. Then, first of all, there should be a distinguishable environment in the phenomena or a condition in the physical space with which vacuum energy can be accumulated – **confined physical space**. For example, in the respect of magnetic field energy and/or electric field energy, a physical space can be confined or separated from surrounding space, such as inside and outside magnetic fields of an electromagnet with direct current (DC) or inside and outside electric fields of a charged capacitor. If a physical space is separated from surrounding space as

⁸ It should be an unexpected sudden movement; however, the possibility of teleportation – instant transportation – is not excluded.

above, it can be shielded from electric and magnetic fields both or just one of them, not from both fields. Hence, if energy is coming into the confined physical space in a form of energy, such as electric energy or magnetic energy, and being converted to the other form of energy that is being shielded in the confined physical space, the energy keeps being accumulated in the physical space – **energy accumulation**.

In the Hutchison effect, the Van de Graaff generator should be making the confined physical space separated from surrounding because the generator produces static high electric field; then, the radio wave interference should be initiated by the two or more Tesla coils, those of which are producing high voltage AC signals with radio frequency. (tesla_coil) Now, next question is how the radio frequency wave interference initiates the vacuum resonance in the physical space.

Being considered of the first principle in 4-D complex space that is the spontaneous reaction of vacuum particles against any disturbance in the physical space, the reaction of vacuum particles might be a crucial clue for the vacuum resonance. Hence, in the radio frequency wave interference with AC signals from two or more Tesla coils, the interference should be constructive, that means, it should not be transient to get or initiate the reaction of vacuum particles.

If a stationary interference⁹ is occurred, which is like generating a standing wave with boundaries in the confined physical space, vacuum particles nearby the interference react spontaneously and generate a vacuum-string-wave motion to minimize the effect of the stationary interference. This means that extra energy comes into the confined physical space; then, the stationary interference is dissipated through the boundaries and dissolved into the confined physical space; now, against the first vacuum-string-wave motion another reaction of vacuum particles generates another vacuum-string-wave motion; the first one is dissipated in the confined physical space; the third one is generated; the second one is dissipated; and so on. From physical vacuum space, vacuum energy keeps coming into the confined physical space. Here, the radio frequency wave signals from Tesla coils initiates or triggers the vacuum resonance.

The vacuum resonance might be come from the concatenating process as above or an avalanche process of spontaneous reaction of vacuum particles in physical space. Furthermore, because it is not easy to get the stationary interference in reality, it can be understood why the replication of John Hutchison experiments is difficult.

⁹ coherence condition is needed.