



The Gravity of Consciousness Force Fields in Nishida and Einstein

Felipe Ferrari Gonçalves¹
ferraricontato@yahoo.com.br

Resumo: Um observador externo tende a compreender a relação de “atração gravitacional” que ocorre entre dois objetos localizados no espaço como sendo constituída de um corpo atraente e um corpo atraído, no entanto, de acordo a ideia de *Gravitationsfeld* de Albert Einstein, corpos de massas distintas geram campos de intensidades distintas no espaço que os circunda de forma a que todos os corpos localizados no universo estejam constantemente atraindo uns aos outros com diferentes intensidades. O mesmo pode ser dito acerca da concepção de *basho* de Kitarō Nishida, de acordo com a qual, todo fenômeno alocado na consciência possui um *basho* de uma intensidade específica de forma que, para o “eu” que experiencia tais fenômenos, eles passam a ser percebidos como sendo ativos ou passivos uns em relação aos outros embora estejam, de fato, relacionando-se mutuamente através de seus *basho*. Em suma, da mesma forma em que todas as coisas são conectadas, no espaço, pela gravidade, topos os fenômenos são conectados, na consciência, pelo *basho*.

Palavras-Chave: Nishida; Einstein; *gravitationsfeld*; *basho*; gravidade; lugar; consciência.

Abstract: An external observer tends to understand the relationship of “gravitational attraction” taking place between two objects located in space as being constituted by an attracting body and an attracted one, however according to Albert Einstein’s idea of *Gravitationsfeld*, bodies of distinct masses generate fields of distinct intensities in the space surrounding them in such a way as all the bodies placed in the universe are constantly attracting each other with different intensities. And the same can be said about Kitarō Nishida’s conception of *basho*, according to which, every phenomenon placed in consciousness possesses a *basho* of a specific intensity in a way that, for the experiencing self, they may be perceived as being active or passive in relation to each other even though they are actually relating mutually through their *basho*. In sum, in the same way as all things are connected in space by gravity, all the phenomena are connected in consciousness by *basho*.

Keywords: Nishida; Einstein; *gravitationsfeld*; *basho*; gravity; place; consciousness.

Introduction

In *Relativity: The special and general theory* [Über die spezielle und die allgemeine Relativitätstheorie], Albert Einstein presents not only a scientific explanation to the “theory of relativity”, but also some of its philosophical aspects as a means to broaden the public understanding of such set of ideas to those with no deeper knowledge on hard physics. He states that:

¹ Nagoya University

THE GRAVITY OF CONSCIOUSNESS FORCE
FIELDS IN NISHIDA AND EINSTEIN

The present book is intended, as far as possible, to give an exact insight into the theory of relativity to those readers who, from a general scientific and philosophical point of view, are interested in the theory, but who are not conversant with the mathematical apparatus of theoretical physics (Einstein, 1961, p. v).

Einstein's theory deals with the relationships of bodies and energy in the space-time continuum and is based in the fact that there are no absolutes in the universe as everything exists, moves and acts in relation to others. He also understood space in a manner very similar to that proposed by Bergson in that it is a medium with no properties intrinsic to it, but distances himself from the French philosopher when he interpreted the force field [*Kraftfeld*] as something that transforms the medium in which lies the body that produces it and gives directionality to the movements of other bodies that come in contact with it.

Gravitational fields

In *Relativity: The special and general theory*, Einstein presents a simple and yet deep explanation about how he understands the gravitational fields and how they modify space and act on the bodies that lie in it. He starts his explanation on the gravitational field as follows:

If we pick up a stone and then let it go, why does it fall to the ground? The usual answer to this question is: "Because it is attracted by the earth." Modern physics formulates the answer rather differently for the following reason. As a result of the more careful study of electromagnetic phenomena, we have come to regard action at a distance as a process impossible without the intervention of some intermediary medium (Einstein, 1961, p. 63).

Even without any further knowledge on the laws of electromagnetism, it is not a hard task to interpret what Einstein says as meaning that if two or more distinct bodies (in this case, a stone and the earth) are to be able to exert any kind of influence on one another, or even if they are to correlate in some way, there must be a common medium in which both exist simultaneously. In fact, there is no mistake in saying that the subject of "the action at a distance" or "remote action" has been a major philosophical and scientific problem since ancient Greek times and Einstein proposes to solve it with a new explanation of the laws of gravity.

Since the works of French physicist Charles-Augustin de Coulomb in the late 18th century, the existence of a medium in which physical bodies ought to exist in order to be able to exert any kind of influence in one another – i.e. to attract and to be attracted, to repulse and to be repulsed – became a consensus amongst scientists. It can also be attested in Einstein's aforementioned affirmation concerning the movement of fall of a stone that the necessity of proving the existence of a medium was fruitless. If bodies exist and relate to each other, the "intermediary medium" is a certainty. Its relationship with the bodies is also clearly present in the transcription of the lecture given by him in Kyoto University in December 1922:

While I cannot say exactly where that thought [the theory of relativity] came from, I am certain that it was contained in the problem of the optical properties of moving bodies. Light propagates through the sea of ether, in which the Earth is moving. In other words, the ether is moving with respect to the Earth. [...] When I first thought about this problem, I did not doubt the existence of the ether or the motion of the Earth through it (Einstein, 1982, p. 46).

Thus, since the very inception of Einstein's theory, the existence of a medium – or an *ether*, as he called it in the aforementioned lecture – in which things move and that allows things to act on one another at a distance is a given fact, but what kind of medium is that? What does constitute

such a medium? To find the answer to that question, we must turn our attention back to his essay *Relativity: The Special and General Theory*. Einstein compares the motion of falling bodies with that of a magnet that attracts a piece of iron. According to him, in this case, when both are set apart from one another, it is clear that it is not the magnet that enters in direct contact with the piece of iron exerting an action on it. Neither are they connected by some invisible string in the apparently empty space between them.

Einstein explains that the magnet does not act *on* the piece of iron, or *in* the space in which both exist. There is a field that spreads through space and that, when coming into contact with the piece of iron, makes it move towards the magnet. This “magnetic field”, is not constituted by some sort of active force of attraction produced by the magnet, but is rather attributed to the space by the material things that are located in it. Being also located in the space and surrounded by the “magnetic field”, the piece of iron also has the property of changing the field and of attracting the magnet to it. Even though through the eyes of an external observer, the magnet – being heavier and having properties that allow it to disturb the magnetic field much more than the piece of iron is capable of – seems to attract the smaller body, in fact, both are simultaneously acting in the field and, from the perspective of the piece of iron, there is no mistake in saying that it is the magnet that is moving towards it, and not the contrary.² Einstein openly accepts the criticism that it may seem arbitrary to simply take the existence of the magnetic field, as it is, as granted. However, as Michael Faraday did before him, he argues that it is a necessary in order to explain the phenomena. He is not interested in establishing a metaphysical basis for his theory of fields, but rather to give tools for the scientists to understand the phenomena and to empirically prove what is theoretically implied. In his words:

We shall only mention that with it's [i.e. the conception of magnetic field's] aid, electromagnetic phenomena can be theoretically represented much more satisfactorily than without it, and this applies particularly to the transmission of electromagnetic waves (Einstein, 1961, p. 63).

In sum, for Einstein, a field is any kind of force that a body exerts in the space where it lies in and that can, in turn, exert some sort of influence on another body. For instance, in the aforementioned case, when a piece of iron is attracted by a magnet, it is, in fact, the magnetic field that surrounds the magnet that is exerting an action on the space where both the magnet and the piece of iron exist. At the point close enough to both the magnet and the piece of iron where the magnetic fields of both are strong enough to produce some movement, from the standpoint of an external observer, the piece of iron is visibly attracted by the magnet. The same occurs in the case of the “field of gravity”. Even though we are inclined to think that the falling stone is attracted by the Earth, the study electromagnetic phenomena proves that there can be no action without the intervention of an intermediary medium.³ So, there is nothing that exists or correlates with other things in a space that is completely empty. Even in complete physical vacuum, there is still a medium where things must exist if they are to relate with others. It means that, although we may see the falling stone as a body moving without any kind of physical contact with the Earth towards which it moves, both bodies exist in a common medium where they relate to each other. And, in this case, such a medium is the “gravitational field”. As Einstein explains it:

² This means that, for Einstein the perception of motion when taking into consideration two or more distinct bodies is relative to the point of view of the observer of such a motion.

³ *Relat*, p. 64.

THE GRAVITY OF CONSCIOUSNESS FORCE
FIELDS IN NISHIDA AND EINSTEIN

The action of the earth on the stone takes place indirectly. The earth produces in its surroundings a gravitational field, which acts on the stone and produces its motion of fall. As we know from experience, the intensity of the action on a body diminishes according to a quite definite law, as we proceed farther and farther away from the earth (Einstein, 1961, p. 64).

Earth, as any other physical body, produces a gravitational field around itself that loses strength as the distance from the body increases, but, nevertheless, never ceases to exist. In the same way, the stone also has a gravitational field (although, due to the body's smaller mass, much less strong than that of Earth) of its own. So, when we believe to be observing a stone that falls towards the Earth without any kind of contact between both bodies, what really takes place is that the gravitational field of the earth enters into contact with the stone and attracts it, shortening the distance between both bodies. As the Earth's mass is considerably larger when compared to the stone's mass, the Earth's gravitational field exercises much more of a force in the stone, which causes it to move in the direction of the Earth with much more intensity than the Earth is moving towards the stone.

Einstein also presents a characteristic intrinsic to the gravitational fields that differ them from the other fields dealt with by modern physics. According to him, even though the electric and magnetic fields are also produced by the bodies and spread throughout the space in which bodies exist, the gravitational field has the property of applying acceleration to the motion of the things affected by it. It means that the body's electric and magnetic fields produced exist and spread through space with no direct connection to the other bodies that enter in contact with it and that receive some kind of influence from it. In other words, the motion applied to the bodies that are affected by a determinate electric or magnetic field varies solely according to the strength of such a field. For example, a piece of iron attracted or repelled by a magnet will move accordingly to the strength of the magnetic fields involved in such an experiment, but this motion will be constant with no difference in speed, what is the same as to say that the aforementioned force fields relationship with the bodies that relate with it is, in a way, one sided as it does not change in accordance with the changes on the environment. In fact, there is no change applied to the environment (or medium). The gravitational field's influence on the things attracted to it, whoever, changes not only accordingly to the masses and densities of the bodies, but also in relation to the environment as, the closer both bodies are to each other, the faster the motion of one in relation to other will be. As Einstein explains it:

From our point of view this means: The law governing the properties of the gravitational field in space must be a perfectly definite one, in order correctly to represent the diminution of gravitational action with the distance from operative bodies. It is something like this: The body (e.g. the earth) produces a field in its immediate neighborhood directly; the intensity and direction of the field at points farther removed from the body are thence determined by the law which governs the properties in space of the gravitational fields themselves (Einstein, 1961, p. 64).

This happens because the field of gravity changes the space itself. Space is a three-dimensional medium extending itself in width, height and depth and the gravitational field spreads in all directions from the body that produces it. However, it acts by bending space in itself and turning the extension in the three directions into something relative to the point in space, which is, in turn, relative to the thing that produces such field. Gravity acts in space in the same way as a weight that is placed on a fabric of some elasticity changes its shape. In this case, the fabric bends towards the weight and any other thing that is placed on it will tend to move towards the

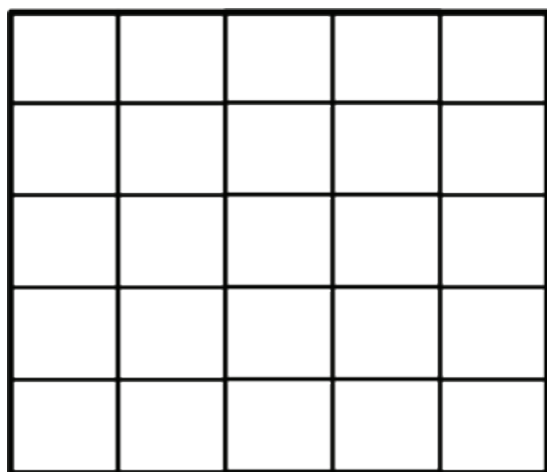
first one unless it has enough weight to change the shape of the fabric in such a way that either the first one will move towards it or that both will move towards each other. Gravity changes the three-dimensional space in the same way as the weight changes the fabric. If we think this first fabric as being two-dimensional (like possessing only width and length, for example), the weight will change it by producing a third one (depth); and the same also occurs with three-dimensional space. The difference relative that gravity causes by the bend of three-dimensional space creates a fourth dimension that we call time.

Harrow uses the images of lines in order to explain how gravity distorts the space-time continuum. If we could trace parallel lines extending through the universe, we would observe that, when passing near bodies of great masses – that, therefore, produce strong gravitational fields – those lines curve towards the body. Thus, position, distance and, together with it, the time that a body takes to travel through space depend directly on the intensity of the gravitational fields that act on it. He explains it as follows:

“World-lines”, representing the progress of particles in space, consisting of space-time combinations (the four dimensions), are ‘strained’ or ‘distorted’ in space due to the attraction that bodies exhibit for one another (the force of gravitation). On the other hand, gravitation itself – more universal than anything else in the universe – may be interpreted in terms of strains on world-lines, or, what amounts to the same thing, strains of space-time combinations (Harrow, 1920, p. 71).

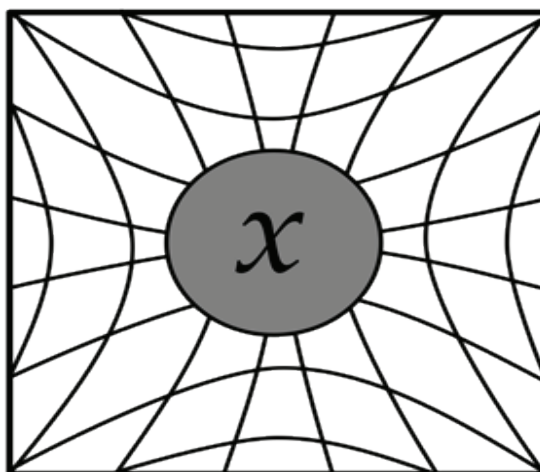
By acting in space and causing it to bend on itself, gravity also distorts the dimensions that constitute the former. Benjamin’s explanation of how, according to Einstein, gravity distorts the “world-lines” following the directions through which space stretches itself, which can be roughly illustrated as follows:

Fig. 1.1



“World-lines” in space

Fig. 1.2



“World-lines” influenced by gravity

The illustration on the left (*Fig. 1.1*) represents a space that has not been disturbed by the influence of any body. Notice how the directions in space, represented here as lines, are parallel to the ones following the same direction as them. However, at the moment that a body (x) enters in that space (*Fig. 1.2*) it distorts it by bending its lines towards itself in the same way as something

heavy would distort the a stretched piece of fabric when placed on it, causing a depression in its surface. Those distortions are, of course, imperceptible to the senses, and a moving body following one of the straight lines of *Fig. 1.1* would still continue in following it in *Fig. 1.2*, but it's path would be turned into a curve like it is represented here. For the sake of keeping the illustration as simple and comprehensible as possible, in both figures, space is represented two-dimensionally, but it is, indeed, three-dimensional and, due to the action of gravity, is added its forth dimension, namely, time,⁴ constituting Einstein's "ether", the "space-time continuum". The closer to a body, the stronger the gravitational field and, thus, the stronger the force that one's gravity exercises on the other.

In a note to the preface of the fifteenth edition of *Relativity: The special and general theory*, dated from June 1952,⁵ Einstein states as follows.

"Physical objects are not in space, but these objects are spatially extended. I this way, the concept "empty space" loses its meaning" (Einstein, 1961, p. 6).

This means that, even in a portion of space in which there is no matter, there will always be the distortion of space caused by the action of bodies so, even if there were to be only a single body in the universe, it would disturb space and there would be no portion of it in which the "world-lines" are perfectly parallel to the ones that follow in the same direction of it, like it is represented in *Fig. 1.1*.

The limits of the universe

Since everything existing in the universe produces a gravitational field, we can say that everything exists inside a gravitational field. If there were to be any extensive body that existed without it, such a thing would not correlate with any other thing in the space-time continuum that constitutes the medium of the universe. Thus, such a body would not be able to exist in the universe at all as Einstein understands it. So, for the physical bodies, to exist in the universe is to do so in a gravitational field through which they can relate with and exist in relation to each other. The greater the mass of a body and the closer it is to something, the stronger the force that is applied by its gravitational field. There is no body with mass that exists without this field, and, even if there were to exist some (it means, if there were to exist some body with no gravitational field and that is not influenced by other bodies' fields), since it would not correlate with the other bodies that exist in the universe, it would be the same as saying that, for the ones possessing fields, such a body did not exist at all. And even if we imagine a universe in which only two particles exist and in which they are separated by the greatest distance imaginable, since both particles must possess a gravitational field, they are instantaneously correlating with each other and "falling" towards each other. In such a hypothetical universe, even though only those two particles exist, because there is gravity, we are able to have a perception of time (in contrast with the time both will take to "fall" towards one another), distance (in contrast to the distance between both) and we are able to say that both exist in a gravitational field that is produced by both and that binds this universe together. So, according to Einstein's understanding of the universe, if things exist, they must do so in a gravitational field. And, if such a field exists, it also exists time, space and the mutual and instantaneous correlation between everything that is in the universe.

All bodies exist inside the gravitational field of the other bodies, thus, we can say that everything that exists, exists in a huge compound of all the gravitational fields of all the things

4 In the same way as a three-dimensional square is a cube and a four-dimensional cube is a tesseract, a "four-dimensional space" is the continuum "space-time".

5 The first edition of this work, written in German, was published in 1916.

that form some kind of absolute field that encompasses the totality of the things that exist in the universe, outside of which, nothing else exists. Even the vacuum is, then, not an absolute absence of everything, but simply a physical space in which there are no material things, but that is plenty of gravitational fields going in every possible direction.

If, then, everything there is exists inside the gravitational field, does it mean that Einstein considers the universe as being limited and bounded by such a field? The fields of gravity extend themselves limitlessly in all directions of space, thus, even if we consider the farthest particle of the universe, it is still influenced by the gravity of all the other particles and, if for some reason, a new particle comes into existence in a location hundreds of thousands times farther than that of the particle that was the farthest so far, since the gravitational field of all the other existing particles, attracts it, it would be a part of our universe as much as any other. Gravity extends itself continuously in all directions *ad infinitum*, however, in a way, if there is nothing to be attracted farther, it is the same as saying that there is nothing there, not even gravity, time, space or vacuum. In order to be a field, in order to exist, gravity must have another body that can be attracted to it. Thus, the universe is at the same time unbounded and, although limited by the location of its farthest particles, is potentially unlimited. It does not mean, however, that there are active and passive bodies when concerning to gravity. The gravitational field of a body of greater mass may attract a body of lesser mass more than the latter's field attracts the other, but both are always mutually exercising their force of attraction.

Nishida's conception of "*basho*"

Now, we shall turn our attentions back to the philosophy of Kitarō Nishida. Nishida's main focus when developing his theory of "*basho*" was, at first, to overcome the dualism of current Western epistemology (overall that practiced by the Neo-Kantians) that he had been criticizing since the publication of the *Zen no Kenkyū*. For him, the duality between subject and object, experience and reality and the like were far from being necessary for the understanding of the work of consciousness. It is important to emphasize, however, that Nishida is not the first to propose a brake-up with such dualism. As John Krummel states:

Ever since Nietzsche in the nineteenth century, there have been Western intellectuals proclaiming the end of metaphysics and with it its dualistic assumptions. A noteworthy and recent example was Jacques Derrida (1930 – 2004). Derrida critiqued Western thought for assuming hierarchical dichotomies, such as male-female, mind-body, nature-culture, object-subject, etc., to be simply *given* rather than constructed (Krummel, 2012, p. 44).

However, Nishida is the first to propose that *place* (in his case, the conception of "*basho*") could hold the key to free the world of consciousness from the dualist logics that had been reigning so far. Since everything exists in the universe as a single unity that encompasses the self and all the phenomena internal and external to it, "*basho*" must work as the logical foundation for a system of reality in which those aforementioned dichotomies have neither proper ontological nor metaphysical value. Also, "*basho*" helps in solving the problem of the universals, as it is the "receptacle of the ideas" that are reflected in consciousness and experienced by the self.

According to James Heisig, Nishida's conception of place acted as a "magnet" that drove together all of the philosopher's previous acceptations. He says:

The idea, unlike any other, was like a magnet that drew to itself all his other ideas and increased its pull, if not its clarity of definition, to the end of his work. Clearly it was this idea, more than any single work, that was Nishida's crowing achievement (Heisig, 2001, p. 72).

In fact, there is no exaggeration in saying that, from the time of its inception in *Expressive action*, it seemed that “*basho*” was the idea that Nishida was looking for throughout his entire career as a philosopher. Until that point, Nishida's philosophical quest lacked a firm ground on which it could be properly established as an original work of philosophy on its own. The long path the “conceptions of space” and the idea of “place” took from the Platonic “*khôra*” and the Aristotelian “*tópos*” passing through Bergson's “*milieu homogène*” and Einstein's “*Feld*” has finally come into fruition in Nishida's philosophy as “*basho*”. Thus, “*basho*” appears as the conception that would connect the entire compound of Nishida's ideas in a same *field*. But how does he define it in the essay originally published in 1926 and homonymous to the term itself? As it has already been quoted in the introduction to the present dissertation, Nishida holds that:

That which *is* must be placed in some thing, for, otherwise, the distinction between *is* and *is not*, would be impossible (NKZ 4: 208).

This passage, seems to echo another previously cited passage from 15 years earlier in which, in *Zen no Kenkyū*, the Japanese philosopher stated:

In the normal sense, to say that that a thing exists is to say that it exists in a certain “*basho*” and time in a certain form (NKZ 1: 75).

Although the *kanji* used to write “*basho*” here is different than the one he would consistently use after 1926 (“場処” instead of “場所”), Nishida is, in both cases, expressing the same very simple idea that “to exist, is to be in *place*.” However, this idea is far from being the core of Nishidan philosophy's originality. Plato and Aristotle also thought in a similar fashion more than two millennia before and, throughout the history of philosophy, Leibniz, Kant and Bergson – to name only the ones verbally addressed by Nishida as having influenced his conception of “*basho*” – also directly correlated the *being* with *space*. And even modern physicists like Einstein, by saying that, although “not capable of being directly experienced” and of very difficult comprehension, the idea of space “appear(s) to be on the basis of our customary habit of thought” (Einstein, 1961, p. 136) pointed out that “space” is necessary for human thought for, without it, we would be unable to express ourselves and to establish any kind of knowledge about the world. Also, it is a common agreement among Plato, Aristotle, Bergson and Einstein that, if a thing exists, it must to so in “*khôra*”, “*tópos*”, “space” or “gravitational fields” respectively and, a thing that does not do so, does not exist from the standpoint of the things that are placed in *something*.

So, what is so original about Nishida's “*basho*”? Since the *Zen no Kenkyū*, the philosopher had been dealing with the idea that the phenomena represent not simply those things or objects that are presented to us, but rather that the compound of phenomena of consciousness is, at the same, all the reality that the *self* is able to experience, while the *self* is not only a subject experiencing the phenomena, but also a part of that experienced reality itself. For him, the characteristics that we infer as being attributed to the phenomena that we identify as objects as well as the distinctions between these and the subjects occur simply because of the way through which we perceive things existing in the world. In this sense, there is no ontological distinction between subject and object as both of them, as well as the characteristics attributed to them exist and are presented to us solely as “pure experience”, i.e. as phenomena *a priori*. It means to say that, concerning the phenomena of consciousness, there is no distinction between subjects and objects or even amongst objects, actions and the characteristics attributed to them. All those phenomena can only be experienced by “pure

experience” which is, for him, the only kind of experience through which one is able to seek some kind of real knowledge [真の知識 – *shin no chishiki*].

The dynamics of “*basho*”

Every object existing in the realm that we perceive as the material world, by being reflected in the “field of consciousness” is presented to us as “phenomena of consciousness” in the very same way as the inner phenomena that we presented above. Their changes in “shape-and-positions” [形状位置 – *keijō ichi*] in space and the changes in their meanings that may result from it do not represent any problem to the system as a whole, but rather indicate us that there must be some force [力 – *chikara*] holding them inside the “field of consciousness” in the same way as Einstein previously demonstrated that there is a force holding every body together in space. According to Einstein’s theory of relativity, even though things change and move, they can never move outside the space-time continuum and the same is true for Nishida’s system in which consciousness has the same role as a medium for the *basho* of the projected things. This proposal is explained by Nishida as follows:

[...] we have no choice but to think that, apart from things and space, there is also something like a force. If we can think of things possessing a force, as a noumenon [本体 – *hontai*] of force, we can also think of physical space with force as being attributed to space. I would like to try thinking of the “knowing” [知ること – *shiru to iu koto*] as a being attributed to the “space of consciousness” [意識の空間 – *ishiki no kūkan*] (NKZ 4: 215).

Therefore, consciousness, as the ultimate *basho* that encompasses the individual *basho* of each of the things projected in it, is also, for them like a space, and a kind of *milieu homogène* if we are try comparing it with Bergson’s space. It also possesses a force – or rather has a force in it – that binds the plurality of *basho* together and, despite their uninterrupted movement and change, bind them all together in the same way as Aristotle understands “*tópos*” and that force that was described as “magnetic field” by Einstein. *Basho*, as a “place [tokoro or *sho*] in a field [ba]” is a “force field” and the “field of consciousness” is both constituted by the “field of forces” of all the *basho* that exist in it and a “force field” in itself.

Nishida continues on his explanation of the force fields:

That which truly envelops the relationship of forces inside of it has to be something like a “force field” [力の場 – *chikara no ba*]. Therefore, in the “force field”, all the lines must have a direction [方向 – *hōkō*]. And, even in the *basho* of cognition that is thought to be embraced inside the pure act [純なる作用 – *jun’naru sayō*], all phenomena must have a direction (NKZ 4: 217).

The “lines” [線 – *sen*] to which Nishida makes reference, represent the relations in the “field of consciousness”. According to him, if we understood consciousness simply as a space in the same manner as we understand physical space, the relationships would be represented by nothing more than points [点 – *ten*] that, with no extension, have no place in space. Relations, although existing in physical space, are like points in Euclidean geometry: have no place to be. However, since, in Nishida’s system of consciousness, even incorporeal things such as the relationships themselves must have a place, they cannot be represented as such. Apart from that, if we are to understand consciousness as a space with forces as he proposed earlier, those points “move” in directions respective to the forces applied to them and the relations between objects, that can be described as the “lines”, are formed by those “points” that are extended by force. A relation between two different objects is, then, represented in consciousness as lines connecting the *basho* of their respective bodies

in the same direction of the “force fields”. This is very close to the concept that Einstein proposed when he explained that the gravitational force possesses a direction and is applied in space and not directly in the bodies that are in it (Einstein, 1961, pp.63-64); as well as it presents similarities with the terms through which Aristotle describes the natural motion of a body in rectilinear direction towards its natural place. Contrarily to Einstein’s “gravitational fields” that change space by binding it, in Nishida’s philosophy “*basho*” applies force only in another “*basho*”, imposing no change to the “field of consciousness” that continues being a kind of unchanged “*milieu homogène*”.

Another interpretation that can be inferred from Nishida’s idea of the direction of the lines in the “force field” explains why the self tends to see to world of phenomena as being constituted by subjects and objects (that Nishida so strongly opposes in epistemology). An observer that witnesses the action of gravity of two bodies from the outside them (Fig. 2.1) tends to see one (the body *A*) as being active (i.e. the attracter) and the other (body *B*) as passive (i.e. the attracted one). It happens because, even though both bodies are mutually attracting each other, when one (*A*) of the them has a mass considerably higher than the other (*B*), it will also produce a stronger “gravitational field” and attract the other body with more intensity.

Fig. 2.1

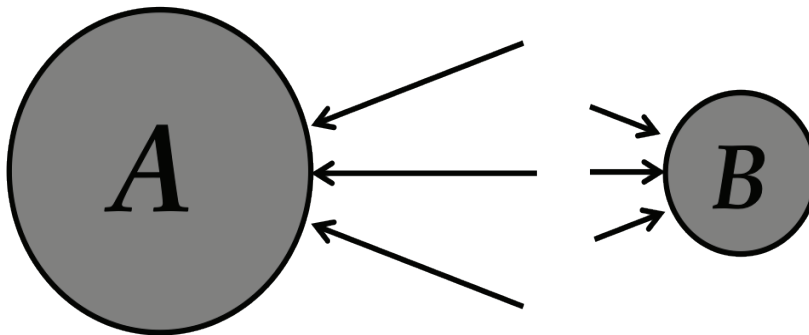
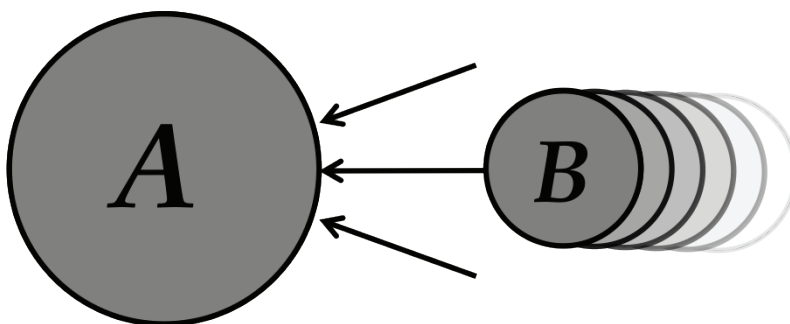


Fig. 2.2



Although, from the standpoint of Nishida’s philosophy, all phenomena are “phenomena of consciousness” with no ontological distinction and no epistemological dualism intrinsically applied to the phenomena themselves, their “*basho*” in the “field of consciousness”, as “force fields” have different intensities in the same way as bodies of different masses produce gravitational fields of difference forces. In consciousness, when a *basho* possessing a stronger “force field” (like the body

A in Fig. 2.1) establishes a relationship with another *basho* (like the body *B*), the balance resulted from the struggle of their forces will result in the understanding of them as being subject (or the attractor, in the case of gravity) or object (the attracted) from the point of view of an observer external to that relation (as in Fig. 2.2).

In summary, when saying that what we observe as reality is the *basho* of things projected in the “field of consciousness”, it does not mean that the self and the physical world exist only as projections inside our consciousness, but rather that this is the way through which they are perceived by the self. Nishida does not think the self as being the conscious thinking thing as did empiricists like John Locke who said:

Self is that conscious thinking thing that feels or is conscious of pleasure and pain and is capable of happiness or misery, and so is concerned for itself as far as that consciousness extends (Locke, 1995, Book II Chap. XXVII, §17).

On the contrary, what Nishida is saying is that self, as well as all the other phenomena have each of their respective *basho* placed inside the “field of consciousness”. That field (much like Einstein’s “*Gravitationsfeld*”) acts in the terms of a “force field” that binds the phenomena together at the same time as it gives them the place in which they are able to establish relationships with each other. And, the consciousness that is limited by such a field is, thus, not the personal consciousness of the self, but rather an immovable field in contrast with the ever-changing phenomena that are in it and that encompasses all that which can be cognized (NKZ 4: 210-211). It does not mean that, for Nishida, there is no individual consciousness, but rather that *my* [私の – *watashi no*] personal consciousness that is understood as being internal and intrinsic to the self also have its *basho* inside the larger field of consciousness that encompasses the unity of the universe. Thus, the “knowing self” that, being existent, also possesses a *basho*, projects itself in the “field of consciousness” in order to be understood by itself. To understand that is not a simple task for, as Nishida points out, “*basho* is though as being external⁶ by the thing that is placed inside of it” (NKZ 4: 217). Therefore, in order to both properly comprehend that every phenomena has a *basho* and to understand the “act of knowing” that is constituted by the self projecting itself in consciousness and establishing direct relations with the *basho* of the things to be known, it is important to understand that the self that experiences things is not external to the *basho* of consciousness. The self projects itself in consciousness and, by doing so, also places itself a *basho* from which it can relate with the other things also placed in *basho*.

“*Basho*” and gravity

So far, it must be clear that what Nishida understands as “force field” is conceptually very close to that what Einstein thought about when dealing with “*Gravitationsfeld*”. Indeed, even the fact that Nishida chose to deal with the term “*basho*” in detriment of “*tokoro*” and “*kūkan*” points towards his interpretation of “place” as possessing some kind of energy, warmth or force which, as it was demonstrated before, is expressed by the portion “*易*” of the *kanji* “*場*” that, in turn, has “field” as one of its usual meanings. For Nishida, then, “*basho*” is not merely the location that a thing occupies in space, or even in the consciousness, but is rather an active field that exercises a force on the medium where the object is projected and, at the same time, gives unity to thing that

6 The understanding, that Nishida attributes to the self, of the *basho* as something external traces a parallel between his philosophy and that of Bergson who also considered that, contrarily to other animals, who saw themselves as being part of the space, humans tend to think of space as something external. This happens thanks of the human ability of being able to dissociate sensations from space and to understand the disposition of different things in space.

is in it and projects the lines that allow those projections (or reflections) of things to relate with each other in consciousness. The “field of consciousness” acts as a force that makes it impossible for any thing inside of it to move outside, much as Einstein’s “gravitational fields” bind the universe together and prevent the bodies from moving away from each other at the same time as it provides the force that gives unity to the body.

Let us recapitulate some of the characteristics of Einstein’s “*Gravitationsfeld*”. According to him, any physical body of any size or mass produces a field in its immediate neighborhood (Einstein, 1961, p. 64). Such a field exerts a direct and immediate force on every other body in the universe in a stronger or weaker manner depending on the body’s mass and on the distance from the one that is receiving its force. So, when a stone is dropped on Earth, for example, there is no mistake in saying that the Earth attracts it in the same way as it attracts Earth, being, the difference in such forces, caused by the difference of masses between the bodies. So, the stone falls towards the Earth in the same way as the Earth falls towards the stone. However, being both bodies separated by some distance, it is incorrect to suppose that such a force is exerted by one body on the other, but rather to say that it is exerted on the space where both lie in. This force, which we call gravity, is uninterruptedly exerted by all physical beings on the space where everything exists. And the same can be held as true concerning “*basho*”.

When I say that “I see something”, the “*basho*” of the “I” (or of the projected “self”, as it is going to be explained further), the “*basho*” of the objectified “act of seeing” and the “*basho*” of the “thing” mutually enter in contact and originate the relationship exemplified here. As, for Einstein, bodies relate with others in space by means of the gravitational fields, for Nishida, things relate inside of consciousness because they are placed in “*basho*”.

John W. M. Krummel also points out to the similarities between “*basho*” and Einstein’s physics by stating that:

Another influence may be the physics of Einstein, whose theory of relativity grasped the attention of Nishida in the early 1920’s prior to his formulation of the theory of *basho*. One may perhaps notice such an influence in Nishida’s discussion below of *basho* as a kind of force field (Krummel, 2012, p. 189).

For Einstein, since all bodies attract each other mutually, the laws of gravity also imply that there is no active or passive body in the universe, but only different points of view on a same physical phenomenon. The only difference between saying that a stone falls towards Earth and that the Earth falls towards the stone is in the point of view of the observer. And Nishida also shares the same idea. For him, since everything exists as “phenomena of consciousness” (even the self), to say that a thing *A* (as described in *Figs. 2.1* and *3.2* from page 138) has a relation with a thing *B* does not mean that *B* is an object of the acting *A*, but rather that the places of things *A* and *B* and of the objectified act itself are correlating (connected not by points of intersection, but by lines with directions) inside the “field of consciousness”. Such a field, in the same way as Einstein’s gravitational field is the force that binds everything that exists in the “world of objects” (and is projected in the realm of consciousness) – in the case of Nishida – or the universe – in the case of Einstein’s physics – together and allows both “worlds” to exist as a single unity in its respective systems.

The understanding of Einstein’s “*Gravitationsfeld*” turns Nishida’s conception of “*basho*” as a “field” into a much more tangible one. In the same way as there are different intensities in gravitational fields, different “*basho*” inside of consciousness tend to also have different strengths, which lead us to perceive things as being subjects or objects. Nevertheless, from the standpoint of consciousness, everything exists inside a unity in which objects, their contents and acts, that

are perceived as phenomena, are projected in “*basho*”, in the same way as, for Einstein, everything exists as bodies surrounded by force field that attract each other mutually by means of an action in space. There are “*basho*” that surpass the thing’s particular “*basho*” and surrounds the other things in consciousness in the same way as gravitational fields are spread throughout the universe and act with more or less intensity depending on the distance and the mass of the body. Every thing is connected by gravity and every object is connected by “*basho*”.

Abbreviation:

NKZ. 1978. *Nishida Kitarō Zenshū* 『西田幾多郎全集』 [Complete Works of Kitarō Nishida]. 19 vols. Tokyo: Iwanami Shoten.

Bibliographical References

EINSTEIN, A. 1961. *Relativity: The Special and General Theory*. Translated by R. Lawson. New York: Bonanza Books.

_____. 1982. “How I created the theory of relativity”. In: *Physics Today vol. 35*. Translated by Y. Ono. College Park: American Institute of Physics.

HARROW, B. 1920. *From Newton to Einstein: Changing the conceptions of the universe*. New York: D. Van Nostrand Company.

HEISIG, J. 2001. *Philosophers of nothingness: an essay on the Kyoto school*. Honolulu: University of Hawaii.

KRUMMEL, J. 2012. “An introduction to the philosophy of Nishida Kitarō”. In: *Place and Dialectic: Two Essays by Nishida Kitarō*. Translated by J. Krummel & S. Nagatomo. Oxford: Oxford University Press.

NISHIDA, K. 2006. *Nishida Kitarō Tetsugaku Ronshū* 『西田幾多郎哲学論集』 [Collected Philosophical Works of Kitarō Nishida]. 3 vols. Edited by Ueda S. 上田閑照. Tokyo: Iwanami Shoten.

LOCKE, J. 1995. *An Essay Concerning Human Understanding*. New York: Prometheus Books.

Revista digital: www.ifch.unicamp.br/ojs/index.php/modernoscontemporaneos



This is an open-access article distributed under the terms of the Creative Commons Attribution License.