This short communication attempts to define what the *kairos* time is in terms of cultural spacetime and how it interacts with linear time the *chronos*. The paper consists of three parts: the first part offers the explanation of the cultural spacetime and the flow of time within it, the second part presents the proposed concepts of bidirectional time flow patterns, the third part explains the *kairos* – *chronos* schematics and attempts to demonstrate the complete picture of cultural spacetime of cultural mankind. The paper concludes a derived speculation of the point of total singularity of cultural spacetime. The complete awareness of the *kairos* presence within cultural time is called evolutional turn of humanity that could create configurations of *chronos* time by observing *kairos* *hit et nunc*. Finally, the paradox of retrocausality is partially proved.

**SANTRAUKA**


**RAKTĄŽODŽIAI:** *kairos* laikas, *chronos* laikas, kultūrinis erdvėlaikis, singularumas.

**KEY WORDS:** *kairos* time, *chronos* time, cultural spacetime, singularity.
INTRODUCTION

The paper discusses issues concerning time flow configurations relying on the hypothesis that entire temporal structure of cultural mankind could be perceived in a single temporal unit. This is the phenomenon or rather ontic noumenon we call kairos time as opposed to the linear time – chronos. The paper relies on the general ideas of known thinkers, such as John A. Wheeler (1989) and his hypothesis of anthropomorphic and, thus, self-causing universe, T. de Chardin’s (1959) ideas of omega point and singularity as involutionary consequence and selected works of S. Fuller (2011), B. Ekstig (2017: 457–472), J. E. Steward (2018: 1–35).

Both definitions refer to a different concept of time. Kairos (gr. καιρός, καιροῦ, ὁ) is derived from the Greek word kara (gr. κάρα or κάρη, τό) meaning head. Kairos is qualitative definition of time, the time of opportunity. In Christian tradition kairos stands for God’s time and eternity. Before the liturgy of the Orthodox Church the phrase: ‘Kairos tou poieisai to Kuriou (Καιρὸς τοῦ ποιῆσαι τῷ Κυρίῳ)’ indicates liturgical overlap with the eternity, or no time.

In contrast to kairos, chronos (gr. χρόνος, χρόνου, ὁ,) refers to quantitative amount of time usually having a beginning and an end. It also refers to the sequence of events in space. Chronos is the time that is allotted by God to persons, therefore is finite and contradicts to the concept of eternity.

The attempt to define kairos time in cultural spacetime relies on T. Sider’s (1997: 197–231) solution of the logical problem “The Ship of Theseus”. The problem regards the question of whether the ship would remain the same if we replaced each part of the ship with a similar part but made of a new material substance.

Many Western philosophers, including Heraclitus and Plato, have tried to solve this problem. The philosophers of antiquity held that you cannot get into the same water twice, even if the river is the same.

T. Sider’s extension of the river or ship into the fourth dimension seems to answer some questions. First, Sider relies on the assumption that water is always the same substance because it has always been lifted into the sky by the sun and falls into rivers, lakes, and oceans.

In this case, we are all always in the same water, even if we have not stepped into a river. The same is true of the boat, which is made of the same carbon structure we call wood (ibid.). N. Chomsky (1986) called the phenomenon externalism, i. e. the ability of the subject to expand his mind in such a way that reality becomes what the subject’s brain conceives as reality. To conclude, the further one can extend her/his perception of oneness of the whole reality the more real the oneness becomes. Therefore, not only does the ship of Theseus remain authentic after its parts have been replaced, but the replacements themselves are the ship of Theseus.

We call kairos the mind that perceives the whole of linear time, which is called chronos, in one unit of time and one unit of space. By unit of space or unit of time we mean a spatial or temporal unit that can be logically perceived as one and
complete. When we speak of *chronos*, we keep in mind that *chronos* time begins with the appearance of the first cultured man on earth and ends when the cultured man as humanity transforms into other forms of existence (evolution?) or simply decays for some physical, social, or cultural reason.

*Kairos*, then, makes it possible not only to know the future, which always seemed to be hidden, but in reality, and in polynomial time to create the world by perceiving it only in terms of the rapidity of reason and consequence within historical space-time. G. Gadamer claimed, first, that both peoples and persons and their actions of the particular ‘now’ are predetermined by historical patterns that trace them from the deep past; and second, that hermeneutic perception of reality not only allows us to know reality as it is, but rather creates it. The problem with Gadamer’s hermeneutical aspect here is that the transmission of creation and perception does not happen in polynomial time. Simply put, the one who perceives reality and thus creates it does not, by and large, create it for him/herself, but rather he/she determines the long chain of actions into the distant future.

With this in mind, in this brief communication we would like to attempt to define what *kairos* time is in terms of cultural space-time and how it interacts with the familiar configuration of time – linear time *chronos*. One can also assume that this definition would help solve P = NP problems in computer science and other scientific fields, since it is hypothesised that any NP problem would become a P problem if *kairos* could be perceived as a whole *chronos* in a unit of space and time. However, we presuppose that *kairos* can only be used if a meta-reality is imposed on our reality as an organism.

1. CULTURAL SPACETIME AND TIME FLOW IN IT

Based on the continuum of human culture, cultural space-time can be defined in terms of artefacts created in historical time and works of art created in the possible future. Like the physical continuum, cultural spacetime functions as a structural pattern of causality and consequence. However, when considering cultural spacetime, which is very evident in the urban realm, several observations can be made.

First, that cultural spacetime, being continuous, exhibits flashbacks of singularity much more than physical spacetime. Take cities, for example, and in many of them one can see different temporal choices in a logically observed space. The architect and architectural theorist Aldo Rossi (1966) even claimed that the value of a city is not that the building forms are connected, but rather the integrity of the different temporal levels within a unit of the city. Thus, when we place a new building in a multi-historical city block, we are influenced by the multiple imperatives of that space. What is interesting is that the structures of the multiple pasts become a structure that constantly redefines the arrows of the future.

Based on this notion, we see that cultural spacetime has a continuum configuration, but the continuum here is interrupted by the constant revelation of
flashes of singularity. If we chose to view cultural spacetime as a purposive meta-organism, we would perceive it as a continuum-based structure that is always moving towards the point of singularity. However, the flashbacks of the singularity are in turn consumed and dispersed by the needs and implications of the continuum.

Here we can draw on B. Hillier and J. Hansen’s (2012: 129–153) theory of the social logic of architectural space and the genotype of buildings. B. Hillier pointed out tautological aspects of space. First, he introduced the Mongolian yurt (ger) as an elementary genotype of the building that has a unified spatial logic in which functions are not separated by spatial structures such as walls or tents. This type of building is the microcosm for the particular Mongolian and represents what we might call openness and perception of circular time. The other case presented by B. Hillier is the layout of a Christian cathedral. In this case we see how linear time is represented in the social logic of the cathedral space. We have here a development of the charge, beginning with the narthex, which separates the publicum from the sacrum, then we have the nave, where everyone has access, but the nave is more sacred than the narthex. Later comes the canal, and the last and most important is the tabernacle or altar.

The cathedral here represents different temporal structures than the yurt. First of all, due to the gradual development of the charge of the sacrum, we have a symbolic semantics of the linear life of humanity. The present as such is not contained in one unit, but scattered over many units. However, as soon as you reach the Tabernacle you can see the whole meaning of the being again in a single oneness. Here the charge of the tabernacle is even stronger than in the yurt because the subjects reach and perceive it on their own.

Thus, if at a particular moment of chronos we choose to perceive yurt and cathedral as a oneness revealed through different aspects of that oneness, we make kairos a part of chronos, even though we have insisted that it is precisely kairos that contains chronos in the way that singularity contains continuum.

2. BIDIRECTIONAL TIME FLOW PATTERN

In the analogy of the yurt, then, we see the circular flow of time, and this can be called a noumenon, a unity of culture in a unity of space and matter. In linear time, on the other hand, chronos, culture, develops and manifests itself in the fullness of things and matter distributed in space. Using the cathedral as an example, we have seen how this development has made some things sacred and others less sacred or even publicum, not sacred. The problem that must be highlighted here is that, even if the cultural charges become even stronger in selected places such as the tabernacle, the other places and material artefacts become useless and belong only to the realm of the purely material world.

Let us assume, then, that the abstract beginning of cultural spacetime is near its singular point (Figure 1.). Suppose the cultural singularity is x and the ma-
Material singularity is y. The cultural singularity is x = y. Consequently, any artefact that is material/profane is also 100 percent cultural/sacred. So, in general, if we observe cultural space-time and the distribution of the domain of cultural meaning, we can see that there is less and less culture in old and new things. For example, the artefact yurt is a unit of space-time where x equals y, so it is almost singular. However, if we consider, say, a housing unit in a multi-story residential tower, we are far from observing x = y.

Thus, by moving towards the technological singularity, as M. Kaku (2014) or R. Kurzweil (2005) claim, we are simultaneously moving towards cultural entropy. This entropy could be manifested simply by AI replacing human intelligence, and with-it culture and cultural spacetime.

Let us now look at the lower part of Figure 1. Here we see the material unit—the same y since it represents the same material unit as in the upper part of Figure 1. So if we are going to have a so-called technological singularity in the future, then we hold that y = z, where z represents a unit of space. This leads to the clear conclusion that time is moving backwards towards the entropy of the material world when placed in relation to cultural time. If we take a look at the original settlements of primitive cultures (including the Mongolian wanderers), we find that this point of linear time is close to material entropy, since there is very little matter scattered in the space they inhabit. However, at that time, each artefact was an integral part of the tribe or community as an organism and therefore almost unique in terms of cultural charge.

Figure 1. Bidirectional time flow pattern

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However, as Figure 2 shows, both arrows of time share the same space despite the possibility of different time flow directions.

Kairos, then, is an ability to grasp both ends of time and make decisions to maintain spacetime itself. So instead of one determinant arrow of time, we can imagine two, which not only implies the possibility of bidirectional time flow, but rather suggests that we are able to retrocausally influence spacetime at the point that is distant from us in the past.

Figure 2. Time-flows are different but spacetime is shared
3. **KAIROS – CHRONOS SCHEMATICS AND THE COMPLETE PICTURE OF CULTURAL SPACETIME OF CULTURAL MANKIND**

*Kairos* is widely known as the moment of action of something very important that happens in *chronos*. Thus, *kairos* decides the future flows of *chronos*. When *kairos* is accompanied, *chronos* becomes transparent (both future and past). Analysing the structure of the arrows of time, M. Currie (2007), citing thinkers such as M. Heidegger and J. Derrida, concluded that temporality as such is inevitable in existence. For us, his claim that ‘the thing in which I am is in me’ is important.

Thus, applying some basics of Cantor’s set theory, we can assume that our continuum reality is a set of real numbers \( R (-n, \ldots -2, -1, 0, 1, 2, \ldots n) \). The meta-reality to be perceived is \( \omega \), where \( \omega \) is the set containing every possible information of \( R \), \( \omega \) contains every variation of \( R \), but \( R \) cannot contain \( \omega \). Therefore, \( \omega \supset R \).

So, we have added that the thing that is bigger than us is somehow inside us. But in terms of pure logic, this is impossible. However, if *kairos* is also a property that drives *chronos*, in that it is that particular moment in time that is of the greatest importance to *chronos*, then we can say that it is somehow hidden.

Just recall Gadamer’s (and many others’) claim that the decision for a particular present was made in the distant past (O. Rossi 2002:359–373). The 20th century theologian O. Cullmann (1951) also defined this hidden moment of decision very precisely, placing the end of World War II in the context of the eschatological end of times and the beginning of eternity. According to him, the war is not yet over, but the decisive battle has already taken place.

Suppose, then, that for our reality \( R \), the decision governing that reality is so small as to be surreal for the nature of \( R \). And the smallest of the surreal numbers is called infinitesimal \( \varepsilon \). Infinitesimal is the closest point to nothing in the set of \( R \) and its possible subsets. For example, \( 1 + \varepsilon = 1 \), but \( \varepsilon \) still exists both qualitatively and quantitatively. It is just so small that it cannot be observed from the point of view of \( R \), just as \( \omega \) is too large to be detected from the point of view of \( R \).

Suppose, then, that \( \varepsilon \leftrightarrow \omega \), these two variables form a unit in reality \( R \) because of their interaction. Based on this, let us draw a diagram of the *kairos – chronos* interaction. In Figure 3, we see a segment of linear time moving in both directions. This piece of linear time is divided by units of time \( (t_1, t_2, \ldots) \), which are moments that provide continuity to the flow of time. These moments, which are both decision makers and determinants of continuity, are influenced by the temporal structure of the *kairos* in which the splash of the singularity appears.

Recall Augustine’s (2004 [400]) definition of eternal time, in which he proposes to understand an eternity as a piece of text or a song to be sung. In order to sing, one must know the melody and the text completely. However, the continuity of singing dispels the holistic structure of the song by ensuring that the song is revealed throughout linear
time and not just in a temporal unit. This only means that the whole precedes the revelation of its parts. In this case we can appeal to the capacity of the mind, defined by I. Kant, to know things a priori in the realm of abstract thought. The kairos is therefore both – the smallest and barely perceptible particle of the chronos and at the same time the complete chronos with all possible scenarios.

The Figure 4 introduces the eternity or singular entity presence in chronos by kairos presence within temporal units (t₁, t₂, ..., tₙ).

So we opt for the situation described by Ch. Langan (2017: 313–330) as x ∧ ¬ x, where x at the same given time and space is equal to x and not equal to x. Thus, if we choose to view reality as different aspects of oneness, which is potent to singularity, we can indeed: a) make the right decision in terms of the evolution of cultural spacetime; b) through the application and use of advanced technology, especially computer science and metadata science, we are able to view NP problems in the light of polynomial time solution possibility.

4. CONCLUSIVE REMARKS: WHY KAIROS WORKS?

We have imagined how time might reverse, not our time, but the parallel time of the unit of matter per unit of space, which runs in terms of material entropy as we look back into history. We also have no reason to believe that these two timelines are not connected, because we have seen how the cultural charge acts as a catalyst for material growth in the continuum, and how the material timeline itself consumes towards entropy to increase the singularity of culture. Therefore, it is very possible that how we take care of the coming technological singularity in the future, for example, may make a difference in history. Simply put, if we look at matter as a whole and the entire continuum as a oneness and act on it to create what we perceive, it is very likely that time will begin to flow in history in a different configuration than what has already happened and been recorded by history. Thus, we enable the paradox of retrocausality.
To conclude what has been said, we note that the point of total singularity of humanity’s cultural space-time is neither total entropy nor total singularity. It is the event-horizon-like entity in which total entropy merges with total singularity. This noumen is the birth of a new evo/involutionary state of humanity as a purposive meta-organism that creates reality by thinking it.

If we recall Duns Scotus’ approach to the singularity of being, according to which being is the most prior entity, even before God himself (Stanford 2001), then we can go one step further and conclude that the full perception of kairos is the next step in the evolution of the human species itself, opening up new ways of intuiting and anticipating the future.

References


Endnotes

1 Let us make some digression. For example, consider cultural heritage field where some building are considered valuable and other are not. Heritage value is symbolic and it is not organic but rather relatively added. One would think that heritage phenomenon must indeed be appreciation of culture. But in fact it is artificial effort to give meaning to thing that have no utilitarian function anymore. Therefore, when cultural charge must be imposed on thing therefore it does not perform its utilitarian function that means that culture itself is superficial and real cultural charge is not present anymore.