Time in Relation to
Self, World, and God

Teresa I. Reed

The modern conception of time separates us from self, world, and God. It separates us from self by replacing the irregular, lived time of human events with the regular, uniform time of the clock. It separates us from the world by reinforcing the mechanical model of the universe. Finally, it separates us from God by eliminating sacred time and eternity and by removing God's presence from the world.

An understanding of time is one of the most deeply held assumptions of human culture. Time awareness tends to be internalized, and people are reluctant to make it explicit because so many other values depend on it. We set our priorities and organize our activities within our lived temporality of consciousness, events, and acts. Now, it is possible to think of time and to experience time in a variety of ways. Three kinds of time will be discussed here: clock time, lived time and sacred time. I will first discuss clock time and its advantages. After distinguishing clock time from lived time, I will discuss the application of clock time to the self, in terms of schedules and functions. I will then discuss how the use of clock time in natural science reinforces the mechanical conception of the universe and of the self, and appears to support philosophical naturalism. Finally, I will show how clock time and the mechanical conception of the universe challenge the very existence of sacred time and religious experience, and I will make a few recommendations about our task with respect to all of this in the twenty-first century.

The path taken by Western culture depended heavily on the mechanical clock. When we think of time, we usually think of clock time. Clock time is regular, uniform time, divided into hours, minutes, and seconds. We are raised to think that clocks “tell time,” but that expression is highly ambiguous. A clock is really only a uniform motion machine to which we can compare other motions and changes. The units of what is usually called “time measurement” are conventional; it does not matter, for example, how long a minute or a second is taken to be, so long as we agree on the definition. Western culture welcomed the regularity and uniformity of the mechanical clock. The advantages of clock time were apparent almost immediately and contributed to its dominance. The scientific advantages of precise time measurement are immediately obvious. Increasingly accurate clocks permitted laboratory sciences to measure the duration of physical, chemical and biological processes. Social advantages include the benefits of synchronizing human activities such as political meetings, university classes, musical events, family gatherings, religious rituals, athletic competitions—anything that people gather together to do at the same time. Socio-economic advantages begin with regularized hours of labor, and progress along with industrialization through multiple shifts and wages based on time, to an increasingly elaborate infrastructure of scheduled transportation, utility, and communication networks. Precise timekeeping provides the solution to practical problems such as navigation, from the longitude problem (solved by Harrison to within a few seconds) to our global positioning system (GPS, which is accurate to within billionths of a second).

Many of the structures of contemporary human life are highly abstract, and they rely on the use of clock time which is itself an abstraction. I use the term “abstract” in contrast to the term “concrete.” From the realist point of

2 Aristotle convincingly argues (against Zeno) that time must be continuous, and because it is continuous, it is actually divisible into conventional units that are potentially infinitely divisible. See Aristotle, *Physics VI*, 1, 231a21–231b20. There is no natural smallest unit of time (or length or motion). Therefore, we are free to subdivide time as much as we like. The Cs-133 atomic clock subdivides the second by defining it as “the duration of $9,192,631,770$ periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the Cesium-133 atom.”

view, the “concrete” world is the world of real things in everyday experience. “To abstract,” as St. Thomas Aquinas tells us, is to separate out in thought. Abstraction occurs when we select out features or patterns that individual things have in common. This process pays attention to the generic and leaves behind, or even discards, the particular. Modern thought tends to assign priority to abstract systems and to devalue particular, concrete individuals. Existential philosophers of the nineteenth and twentieth centuries have criticized this tendency. Kierkegaard, Sartre, Marcel, and others warn us against the modern preference for abstract systems and rational constructions. They warn us that we ourselves are particular, concrete individuals endangered by an emphasis on generic, abstract systems. To the modern mind their warning comes across as vaguely anti-scientific. Modern thought assigns to natural science the task of knowing reality best. The practice of natural science is said to require intellectual objectivity. This objectivity is taken to mean detachment or abstraction from all that messy personal stuff, including opinions, preferences, moral values, purposes and the like. Objective, quantitative science requires precise measurement, including time measurement, and the clock provides an objective standard for uniform periods of time. The clock reinforces the modern preference for objectivity, and the modern preference for objectivity reinforces an emphasis on clock time. Clock time, then, is an abstract structure that applies generally to all events regardless of their particular features. The advantages of relying on clock time conceal the disadvantages of forgetting that clock time is an abstraction from lived time.

Lived time, or time as we experience it in everyday life, differs considerably from clock time. In contrast to the uniformity and evenness of units we find in clock time, lived time is uneven. We experience time as passing more quickly or more slowly, depending on the significance of the events through which we are living. Precise schedules are simply inappropriate and irrelevant when it comes to birth, death, joy, suffering, illness, grief, the creative process, and profound life changes of all kinds. You know what it means to experience an accident in slow motion or see your life flash before your eyes. We say “What a difference a day makes,” “Those were the longest three days of my life,” and so on. Notice that instead of describing some abstract structure of time, these examples describe real events. We experience real events as belonging within a network of intersubjective relationships. “Intersubjective” here means partly subjective and partly objective; it means “personal” but not “relative to the individual” (because there are essential structures of

4 St. Thomas Aquinas, ST I, q. 85, a.1, ad 1. This is abstraction through simple and absolute consideration, where we consider one thing without considering another.
**TIME IN RELATION TO SELF, WORLD, AND GOD**

Intersubjectivity indicates the presence of a real relation or interaction between a person and anything else, and so the term “intersubjective relationship” is partly redundant although I use it sometimes in order to emphasize the relational character of intersubjectivity. Any description of lived time focuses on the events through which one lives, and describes the experience or passage of time relative to those events. Lived time occurs within real experiences which are relational and intersubjective and which vary considerably in significance. This non-arbitrary significance is embedded in the relational character of the experiences, and produces the unevenness of lived time.

It would be easy from a purely objective point of view to dismiss this unevenness and to say that this apparent unevenness is purely subjective and therefore illusory. Why? From the purely objective point of view, clock time is the only “real” time, because it appears to be objective and measurable. However, clock time is an abstraction from time as we live it. The experience of lived time is uneven because lived time gives priority to concrete human events rather than abstract schedules. Clock time, on the other hand, gives priority to abstract schedules rather than concrete human events. Cultural differences come into play here. Is it more important, for instance, to talk with someone you know or to be on time for an appointment? We rarely notice, much less challenge, our cultural preference for clock time. When we rely on the clock to order human affairs, we apply clock time to ourselves. The lived time of human events and of our own self, a temporality which we experience as profoundly uneven, becomes forced into an abstract and uniform structure. The clock time of abstract schedules displaces the lived time of human events and intersubjective relationships.

When lived time is subsumed under clock time, the self disintegrates into a collection of functions. Gabriel Marcel calls this “the functionalized world.” The functionalized world compartmentalizes the person into sets of

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5 This account uses Husserlian intentionality to describe our being in the world. Josef Pieper expresses a similar idea: “[T]he ‘internal’ is the ability to have a real relationship, a relation to the external; to have an ‘inside,’ means [to be able] to be related, and to enter into relationship. . . . A world means the same thing, but considered as a whole field of relationships. Only a being with an ‘inside’ has a ‘world’; only such a being can exist in the midst of a field of relations” (*Leisure, the Basis of Culture*, trans. Gerald Malsbury, intro. Roger Scruton [South Bend, Indiana: St. Augustine’s Press, 1998], p. 81). The terminology of internality and externality, however, can be misconstrued into modern subjectivity and objectivity.

6 Different sports reflect the difference between giving priority to schedules and giving priority to events. For example, football and basketball are time-driven, whereas baseball and tennis are event-driven.
functions (primarily social and biological), and reduces our experience to "elements that are increasingly devoid of any intrinsic value or significance." "Precise amounts of time are allotted for various functions," including sleep and recreation, and the person loses a sense of the whole of oneself; Marcel calls this the fragmentation of personality.7 Similarly, Josef Pieper argues against the priority of the world of total work.8 The clock makes possible the world of total work: we live to work, not work to live. This modern reversal of ends and means gives priority to the abstract system over the concrete individual, and dissolves the individual into the system. Many examples illustrate this point. We define ourselves by our paid occupation and our value by our function within the economic system. Our function within the economic system, to get a job and make money, is the purpose of life (our students have internalized this). Efficiency is the greatest virtue. Productivity requires doing the greatest amount of work in the least amount of time. The appropriate answer to the question "How are you these days?" is "Busy." We are counseled about "time management." Salaried people are "off the clock" but are expected to work unpaid overtime. "Time is money." It is hard to get time off to care for others, and you are in real trouble if you use up your "sick days." People feel lucky when allowed to take "personal days" (Who do your days belong to, anyway?). Hospitals bill by the day and insurance companies mandate a length-of-stay for a medical condition. Attorneys bill by the quarter hour. "Quality time" attempts to compress significant human interaction into a short span of clock time, making up in quality for what we cannot have in quantity. We tend not to notice the weirdness of these things because we tacitly assign priority to the abstract structures regulated by clock time. In other words, insofar as we live by the clock, we are moderns.

Nietzsche understood modernity rather well when he proclaimed the death of God. "God is dead" because the everlasting busyness of a modern life leaves no room for God. Modern people, as modern, embed their identity into their functions and live outside of themselves. Nietzsche says of modern people, "They feel they are already occupied . . .; it seems that they have no time at all left for religion, especially as it is not clear to them whether it involves another business or another pleasure. . . . They are not opposed to religious usages; . . . it is only that they live too much aside and outside even to feel the need for any for or against in such things."9 The externality of the functionalized world

8 Pieper, Leisure, the Basis of Culture, pp. 3–60.
leaves no room for relational experience. We are too busy with our scheduled activities to belong to ourselves, or in the world, or to God. The modern functionalized world is actively hostile not only to relational experience in general, but also to religious experience in particular. The rule of clock time displaces not only the lived time of ordinary human events, but also the sacred time of prayer and contemplation.

It is one of the ironies of history that the invention of the mechanical clock can be traced to the bells used to tell the hours in monasteries. The bells tolled the monastic hours in order to orient one's life away from ordinary lived time toward God. The discipline of interrupting one’s activity at scheduled times served to detach time from ordinary human events in order to lead the soul closer to God. However, and this is the irony, it also contributed to the abstract and objective conception of time that fostered the conception of the mechanical universe. Spiritual withdrawal practices a kind of detachment from ordinary human events, but that detachment is not the same as the detachment of scientific observation. The application of clock time to the world, especially through natural science, separated us from the world and contributed to the modern decline of religion.

Modern science depends on clock time. Science aims at explanation, prediction and control of natural things and processes, and these activities require precise measurement. For example, the gravitational constant was measured first by Galileo, who used an inclined plane and a pendulum. The uniform motion of the pendulum allowed him to quantify the pattern he observed. The goal of quantification is to discover the rational structure of the universe; according to Galileo, the book of Nature is written in mathematics. Galileo’s contemporary, René Descartes, was one of many thinkers

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10 See, for example, Whitrow, Time in History; Dohrn-van Rossum, History of the Hour; Landes, Revolution in Time.


who used the mechanical clock as a model for the physical universe. This idea goes far beyond the usefulness of the clock for making precise measurements. The mechanical model of the universe functioning like a giant clock reinforces the uniformity of time, and the uniformity of time reinforces the model. Causality is reduced to efficient causality, because an explanation of how a clock works is a complete scientific explanation of the clock; form follows function. The removal of teleology from the universe for the purposes of scientific investigation becomes the removal of teleology from the universe altogether.

As the devaluation of lived time progresses, clock time becomes longer, more abstract and more remote from human life. Many examples can be taken from geology, physics, and biology. Geological science discovered evidence of a far distant past—through examining tree rings, rock strata, fossils, ice cores, etc., people learned about the ancient prehistory of the earth. Eternity, understood as outside of time, vanished and was replaced by the indefinite extension of clock time stretching back into the past and forward into the future. The calculation of time began to take place on a vast scale: 100 million years ago X happened, 5 billion years from now Y will happen. Astrophysics developed theories about not only the formation of stars and planets, but also the generation and destruction of our physical universe as a whole, through “the big bang” and either “the big crunch” or eventual entropic exhaustion (that’s “the big whimper”). People now tend to think it makes sense to talk of order emerging by chance from chaos, because “over time” it could happen—as if an event does not need a cause if a very long time is involved. Throw chance and time together, and anything can happen. In a similar way, evolutionary theory postulated the anonymous operation of natural selection; organisms are supposed to adapt “over time” to their environment. Genetics now attempts to calculate the date of a species’ origin, based on the number of genetic changes, and a postulate about the amount of time required for a change. Relativity physics did not relativize time; it took the speed of light as


14 It became very hard for Western people to prevent themselves from calculating time in terms of fixed and uniform intervals. For example, fundamentalist interpretations of time in the Old Testament, in opposition to geological “deep time,” presuppose that biblical mentions of time must refer to our uniform intervals. That is a modern assumption, just as the calculation of precise time intervals is a modern concern. A “day” is our most immediate and natural “unit” for measuring the order and duration of events, especially in the absence of reliable timekeeping devices.
a constant because that is thought to be necessary for clock time to function normally (that is, uniformly) in all frames of reference. In all of these cases, we see that time is only clock time, eternity is only an infinite or indefinite extension of clock time, and the calculation of time expands to vast intervals that are unimaginable and irrelevant to a human life.15

At this point comes the shift from natural science to philosophical naturalism. Natural science appears to provide an objective view of time that tells us we are nothing. It appears that the real experience of an ordinary human life amounts to nothing when measured against the immense scale of the universe. Human life loses its place, its purpose and its significance. Pascal describes our modern situation brilliantly in his Pensées, when he shows how we are suspended between the infinitely large and the infinitely small: “Anyone who considers himself in this way will be terrified at himself . . . seeing his mass, as given him by nature, supporting him between these two abysses of infinity and nothingness. . . .”16 Personal past, present and future have no relation to the past, present and future of the vast universe.17

The plausibility of philosophical naturalism depends largely on clock time and its abstraction from lived time. Without noticing the limitations of scientific method and the abstraction upon which it rests, the philosophical naturalist takes the anonymous and autonomous functioning of physical laws to be the only norm in the universe. It is one thing to argue that the immense scale of the universe dwarfs the span of a human life; it is another to argue from that to the cosmic insignificance of a human life—the life of the human who purports to discover the immense scale of that universe. Although it is possible to practice natural science without being a philosophical naturalist, scientific abstraction as a way of thought encourages people to discard every aspect of life that cannot be understood in scientific terms.18

So far I have discussed the implications of clock time for lived time and the real self. Clock time overwhelms lived time and the real self in two ways:

15 The vastly small Planck distance (1.61 x 10^-33 cm) and Planck time (5.36 x 10^-44 sec) are also unimaginable and irrelevant.
17 Versions of the anthropic principle require consciousness in our universe, in more or less strong ways, but that requirement has nothing to do with an ordinary human life.
18 The abstraction practiced by scientific method cannot be described within that method; it is an abstraction forgetful of itself. This leads to problems about the nature of theory, and to self-contradictory views such as logical positivism. Many aspects of life are vulnerable to the overextension of scientific thought, especially morality.
first, through assigning priority to abstract schedules over concrete lived events, and secondly, through supporting a mechanical and naturalistic view of the universe that appears to trivialize human life. Now I will examine the consequences of clock time for sacred time and our relation with God. The modern abstraction from real intersubjectivity reduces lived time to clock time, reduces the living world to the machine, and separates us from God.

A mechanical and naturalistic view of the universe, ruled by the clock, removes God from the world. In a naturalistic universe, there is no room for the presence of God. For modern thought, the world is only a collection of purely natural things obeying scientific laws. Everything “real” has a purely natural explanation and, conversely, anything without a purely natural explanation in principle cannot be admitted to be real. If the world is purely natural and objective, then a God, if one exists at all, cannot act through the world; there can be no sacraments, no signs of God’s providence, no analogies between Creator and created being, no redemption of the machine. The modern clocklike universe functions quite well on its own. This view of the universe is opposed by sacramental religion. Sacramental religion is inherently and essentially anti-modern, with regard to the world, religious experience, and sacred time.¹⁹

Sacramental religion affirms God’s presence through the world and affirms the validity of religious experience. A spiritual life is much more than an intellectual assertion of a First Cause or an emotional hope in redemption; a spiritual life requires a relationship with God through prayer and contemplation, and/or through the world as a sacramental. From the viewpoint of faith, God sustains the being of all creatures; “in Him we live and move and have our being.”²⁰ According to the Roman Catholic catechism, “The sacraments are efficacious signs of grace, instituted by Christ and entrusted to the Church, by which divine life is dispensed to us. The visible rites by which the sacraments are celebrated signify and make present the graces proper to each sacrament.”²¹ God’s grace makes possible the transformation of nature. The Holy Spirit acts through the Church, through our activity of living and spreading God’s Word. The world, in addition to its natural character, embodies the

¹⁹ The anti-modern aspect of sacramental religion explains some of the affinities between Roman Catholicism and Native American spirituality. These affinities were documented recently in the brilliant museum exhibit “Sacred Encounters.” See Jacqueline Peterson with Laura Peters, Sacred Encounters: Father DeSmet and the Indians of the Rocky Mountain West (Norman: University of Oklahoma Press, 1993).


²¹ Catechism of the Catholic Church (New York: Doubleday Image, 1995), no. 1131, p. 320; see also no. 1084, p. 307. According to the Baltimore catechism, “A sacrament is an outward sign instituted by Christ to give grace.”
goodness and love of the Creator and requires our stewardship. Religious experience, then, is relational and intersubjective; it depends on real interaction with God through the vehicle of the world and our imperfect, embodied human life.

The sacramental view of the world just described stands in sharp contrast to the naturalistic view of a purely objective world. Given the modern dichotomy between the purely objective and the purely subjective, the naturalistic thesis drives God and religion out of the objective world and into the realm of subjective psychology. Since God has no place within the purely objective world, the only place left for God in modern thought is within the purely subjective self. So Kierkegaard argues that the only truth Christianity can have is subjective truth, the terrible risk taken by the isolated individual in making the irrational leap of faith. Religion for a Pascal or a Kierkegaard must be a matter of inwardness alone, and an individual’s relationship with God answers to no objective or intersubjective criteria whatsoever—no criteria for one’s action, from religious doctrine, or from a faith community. The loss of a sacramental view of the world, then, pushes religion into irrationalism. The modern reduction of rationality to scientific rationality does away with the rationality of religious belief. The modern believer, in attempting to reject the mechanical self, is thrust into the odd position of defending religion by insisting on its irrationality. Although it may appear that religion can be preserved by relegating it to the purely subjective self, that move is self-defeating for the person of faith.

The problem of discernment then becomes insoluble. Even Kierkegaard, who criticized modern thought so perceptively on “The Present Age,” could not overcome the modern isolation of the self. See The Essential Kierkegaard, pp. 252–68.

The purely subjective self is the Cartesian cogito, distilled by Descartes for the purpose of proving to the intellect alone that the world exists, and taken seriously by Sartre thanks to his misinterpretation of intentionality. Descartes’ method produced the modern dichotomy between subjectivity and objectivity, and the untenable view of the human person as “the ghost in the machine.”
of genuine religious experience. The person is missing, and so is the possibility of any relational experience. Therefore, the modern view of the world must either reject religion entirely or subjectivize it, and the subjectivizing of religion cannot succeed in defending a religious life, or the presence of God in the world, or the reality of the sacraments.

The purely subjective self, however, is not the real self in lived time. The purely subjective self was conceived as the counterpart to the purely objective world, and both of them are artificial constructs of modernity. The real self lives an intersubjective and relational life in a multidimensional world. I have argued so far that religious experience requires an intersubjective relationship with spiritual reality, and that modern thought makes this experience impossible in principle because of the modern abstraction from lived time. Religious experience also requires an intersection between lived time and eternity, which can be described as "sacred time." Sacred time is the time of religious experience, the time of prayer, contemplation, and liturgy.26 Sacred time cannot be confined to Sunday or a holy day, although it is true that we need to set aside some time specifically for religious activity in order to maintain its importance in our lives. The holy day or festival as sacred time achieves much more than a scheduled break from everyday work. As Josef Pieper says, "The holding of a festival means: an affirmation of the basic meaning of the world, and an agreement with it, and in fact it means to live out and fulfill one’s inclusion in the world, in an extraordinary manner, different from the everyday."27 Modern thought tends to eliminate holy days altogether, because clock time recognizes no significant difference between one day and another. Whereas clock time abstracts from lived time, sacred time transforms ordinary lived time and renders it qualitatively different. Sacred time opens onto eternity and enables the soul to experience a communion with God, often through liturgy and with others, but also through contemplation. Of course this communion occurs on unequal terms, but it involves the deepest levels of one’s true self, the real self capable of intersubjective relationships. Religious experience heightens our grasp of reality and the source of our being. The transformation of a human life through religious experience is literally incomprehensible to modern thought. Modern thought abstracts from the real person and makes the self

27 Pieper, Leisure, the Basis of Culture, pp. 33–34.
incapable of any intersubjective relationship, much less a transcendent one. This modern self could use a tune-up every now and then, perhaps a vacation filled with scheduled activities, and of course there are all sorts of self-help books that tell us how to adjust ourselves and create the connections that we lack. All of that is very far removed from spiritual renewal, the relational act of contemplation that opens up the soul to its eternal validity.

Despite our rightful interest in coordinating human events, despite the success of scientific time-measurements of physical events, the modern conception of time separates us from self, world, and God. Modern thought practices an unacknowledged abstraction, that promotes the dissolution of self, alienation from the world, and the decline of religion. The dominance of clock time results from its success in measuring natural events and coordinating human activities. It would be unreasonable to give up the advantages given to us by our abstract systems and technological devices. However, we must find a way to undo the modern reversal of ends and means. To do that, we must promote an explicit discussion of ends, i.e., reinstate teleology. We must describe the different kinds of wholes and parts, in order to prevent the over-extension of scientific thought. We must refute the modern dichotomy between subjectivity and objectivity and explore the essential structures of intersubjectivity. We must listen to the experience of other cultures that do not elevate clock time over lived time. We must promote and defend metaphysical realism, to affirm the priority of the everyday life which is presupposed by all inquiry. We must show how it is possible to integrate everyday life, scientific discovery, and religious experience. We must defend the faith by addressing the core issues challenging the very existence of a religious life. We must promote urban planning that emphasizes social relationships and fosters the development of real connections among real people. We must be able to explain how “leisure is the basis of culture” to a society obsessed with technē. Our work in the 21st century, then, must challenge the reign of clock time and reinstate both the lived time of real human activities and the sacred time of prayer and relation to God.

28 This unacknowledged abstraction also promotes the loss of community, both the ordinary community of family, friends, and other non-abstract groups, and the community of the mystical body of Christ, i.e., the Church.