

WRATH, MERCY, PESTILENCE, AND PLAGUE: HOW THE WISDOM OF THE ANCIENTS OFFERS COURAGE IN PANDEMIC

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ABSTRACT

The authors explore the meanings and contexts for "plague" and "pestilence" in biblical documents and other Circum-Mediterranean traditions. The ferocious, ominous images foretelling the "end of times" in the book of Revelation explain some of the current malaise in reaction to Covid-19. The term "pandemic" denotes undercurrents from the histories of all these words, and together, they help to make sense of contemporary changes in religion and culture. The cognitive perception of time changes, and words take on an intense urgency. A practical solution is found in Paul's advice to the early Christians, which is buried inconspicuously in the New Testament.

1. INTRODUCTION: URGENCY AND BEGRUDGED WAITING

There is an urgency to professional papers written now, in the first part of 2020, the first months of the Covid-19 pandemic. It is as if without our recognition, the analysis of what is happening will hurry along the history of its solution. The impatience is little addressed, even among good friends and colleagues. We all want a cure, a vaccine, and both social and economic stability. Their achievement seems just out of reach, but we cling to science from trusted experts, turn to religion in isolation from our religious communities, and dabble in magic to reduce a massive, collective anxiety.

The international balances of power shift daily while militaries taunt each

other in a recently destabilized network of geopolitical hotspots around the world. The pandemic hotspots form another network, stretching out to signal a different type of danger, related but separate. We know that we must be patient for solutions to the imbalances in power, economic well-being, progress in medicine, and hopes for our own chances of survival. We realize we must wait and try to persevere.

Our urgency and grudging acceptance of the need to wait were historically faced by another group, long ago. In examining their words for similar types of health emergencies – "plague" or "pestilence" or related terms – we seek to understand their psychology, sociology, and the underlying cultural concepts that they use. Their fears and dreams cause us to ask what we can learn so we can achieve a safer, brighter future. We are not the first generation to face deadly contagion. Its management is the history and prehistory of humankind. That task in the Levant two thousand years ago (or, up to five centuries older for the Old Testament) rested on ancient meanings, images, and beliefs. Some of them persist just beneath our consciousness.

Our analysis begins with the exploration of an old concept in the Circum-Mediterranean region: the idea of a "double edged sword" of divine wrath and mercy. We examine a variety of cultures and delve especially into the Old Testament as background to a period of time just before, during, and after the life of Jesus of Nazareth. He creates a sense of urgency among his followers that is keenly felt in a new group of people: early Christians in the eastern Mediterranean and nearby territories. They were impatient for the second coming of Jesus, but their fervor was quieted by Paul in books of the New Testament that are called, simply, "the Letters."

This paper is penned by four authors from different fields: a cultural anthropologist and biologist; an astronomer who is also a Catholic priest, and so knows Latin and Greek; a sociologist and historian of ideas; and an expert in international relations. Were there lessons from the ancient Levant that could be learned to point the way forward? We read of seismic shifts in culture now occurring, and ask how they relate to the Covid-19 pandemic. We begin with the premise that the 2019-2021 pandemic is likely to make deep and permanent changes. What will they be?

2. EPIDEMIC IN ANCIENT SOCIETY

"Plague", "pestilence", and related words used in Biblical writings occur in a context of fearsome images, cosmic power shifts, social disruption, threat to life, and sometimes, an urgency and impatience that attends the "end of times" – the end of the world. We who live modern, urban lives are not entirely immune to these linguistic histories in our languages. They can strike

fear in our hearts, and when we examine their origins, we understand why.

2.1. Plague and Pestilence in Circum-Mediterranean Thought

With the older concepts of "plague" and "pestilence" in hand, we can then anticipate what today's use of similar words in the modern media suggests about social and cultural life in response to the pandemic. Recall, while the first books of the Bible were written in Hebrew, the earliest translation that survives to the modern day, the Septuagint Bible, is in Greek, so we shall be looking at Greek words initially. We found that their origins suggest embedded meanings that may not have altogether disappeared.

The Bible is remarkably useful in understanding the social and political life of the Levant at the time of Jesus and before, in the Old Testament. Two of the co-authors used a similar etymological approach to terms for "compassion," but it had a different purpose. The goal in that case was to ferret out the cognitive components of compassion for an analysis in neuroscience. We were interested in whether and how "compassion" changed with the religious and social movement led by Jesus (Rappaport and Corbally 2018). Here, we search for both the meanings and contexts of "plague" and "pestilence," and by extension, the ways that social and religious thought may be changing in reaction to today's Covid-19 pandemic, and what those changes portend for the future.

2.2. Plague, Divine Wrath, and Mercy

We first approach the connection between "divine wrath" and "mercy" on the one hand, and human illness and afflictions, on the other. From a modern anthropological perspective, this connection comes close to the relationship between "magic" and "illness" in many tribal societies. Medicine men and women use magic for either benign or malevolent purposes, and if the latter, the result is often illness in the person targeted.

In the Circum-Mediterranean cultures over two thousand years ago, the concept of a pantheon of gods and even a single God were emerging, and the connection between godly retribution for poor behavior was widespread. The essence of what is now called "retribution" by theologists is that God (or a god) brings illness to a people when they are not behaving as they should in accordance with specific cultural rules. Then, in a true "double-edged sword," God (or a god) can be merciful by alleviating the suffering. The doctrine of retribution would change later in the New Testament, but in the Old Testament it is still an important theme. For example, God encourages the Israelites to behave according to their covenant with Him. That covenant

states their rules for living in accordance with His values.

Before delving into the concepts of wrath and mercy, we should mention that while Jesus untangled sickness and sin in the New Testament, many evangelical groups now maintain a firm belief that illness is a sign of God's displeasure. We note current survey results from the University of Chicago Divinity School and the Associated Press-NORC Center for Public Affairs Research that reveal almost two-thirds of Americans (who believe in God) also believe that He is trying, through the pandemic, to tell humans to change how they live. The survey found that people are searching for a "deeper meaning" in the Covid-19 virus outbreak. Thirty-one percent of believers say they feel strongly that the virus is "a sign of God telling humanity to change". At the same time, fifty-five percent of believers responding on a semantic differential scale, say that they feel *at least* "somewhat" that God will protect them from being infected (Schor and Fingerhut 2020).

The double-edged sword of "wrath" and "mercy" is found throughout the Circum-Mediterranean area of two thousand years ago. It eventually forms an important part of the doctrine of "divine retribution" in all the major world religions emerging from that region. We see clearly from the survey results that it is not just a remnant of the past, but clearly retained even to the vear 2020. For many, divine retribution helps to explain the nature and origin of the Covid-19 pandemic. This explanation is not an idle exercise. Religion is a major source of rational explanation for many people, and it remains one of the three main, cognitively rational, creative frameworks for all humans, the other two being science and art (cf. Rappaport and Corbally 2015). Humans try to understand why a deadly contagion has come – quite literally - to plague them, and religion helps them form explanations. A modern, neuroscience perspective is found in the work of Michael Gazzaniga (Gazzaniga, Ivry, and Mangun 2014), who posits a cognitive capacity called the Left-Brain Interpreter. This brain capacity constantly churns out explanations for the way the world works. The explanations need not be correct scientifically, but they must be congruent with a specific culture. The Left-Brain Interpreter, through science, art, religion, and other media, provides rational explanations to help humans live.

In many tribal societies, there are wrathful spirits, or spirits that can be summoned to either avenge wrongs (black magic) or convey favors (white magic), if the correctly prescribed rituals are followed and adequate gifts are made to a medicine man or woman. Greek and Roman societies were more advanced than tribal groups or chiefdoms. They had early urban cultures, priestly classes, redistribution of economic wealth, and far-flung trading outposts. In these more complex societies, the notion of "propitiation" of God or gods is taken further and organizes many social activities. There were wrathful and avenging deities, and prayers and offerings that sought to appease them. Divine retribution was part of the theologies of the Greek, Roman, and Hebrew cultures.

2.2.1. The Wrath of Greek Gods; and the Roles of Apollo and Pythagoras

Ancient Greek religion is traced to around the 5^{th} century before the current era, and it produces many of the same features as other Circum-Mediterranean religions, including the dialectic between the "wrath" of gods or God, and their "mercy" toward humans. This theme becomes extremely important in the affliction of epidemics and the removal of the suffering they cause.

The Greek word ὀργή or orgḗ translates better as "wrath" than "anger". The word evokes a relationship between persons or gods. In Greek religion, wrath can be directed between deities, although philosophically and theologically, there are questions as to whether a deity can experience the passion of wrath. Nevertheless, the wrath of the gods is interpreted more readily as directed toward humans when they become arrogant or neglect their duties towards one another and the state. Wrathful and avenging deities have a firm place in Greek religion. "The Furies" called for retribution when the socalled "ties of nature" (e.g., blood and family) were broken. Anger could occur between the gods when there were conflicting claims, but it was directed against humans when they avoided duties, such as sacrifice, hospitality, and honoring the dead (Bromiley 1985).

One can recognize the doctrine of wrath and mercy as a major driver in the sophistication and spread of both the Greek and Roman empires. There were rationales for people to behave well in their family obligations and cooperate with political authorities. Religion supported politics and the state. We see this support by religions of political and economic necessity again and again in the ethnographic literature of pre-modern religions. We see it once more in the support by Protestantism of industrialism in Europe. Religion serves as a kind of "cultural left-brain interpreter," providing explanations congruent with a culture, as well as punishments for uncooperative behavior. Religion also becomes a driver in social change.

Philosophers have some difficulty with the concept of divine wrath because of the teaching that there must be no passion in a deity. Yet, Plato refers to the sufferings that fall on various races because of divine anger, and later philosophers, while critical of mythological conceptions, accept the idea of divine punishment. Attempts are made to placate divine wrath, and natural phenomena like storms and pestilence, as well as deformity and sickness, are interpreted as evidence of the wrath of gods or demons.

The Greek mathematician Pythagoras, who settled finally in southern Ita-

ly and died there, was thought to have a special role with respect to epidemics. He was not just the man who invented the word "philosophy" and the Pythagorean Theorem. He was believed to be the son of the god Apollo or an incarnation of that god. As such, he could heal people by singing or stop epidemics by using a mysterious arrow whose origin is charmingly described here in this story:

Now Abaris had come from the Hyperboreans, and was a priest of their Apollo: an old man, very wise in sacred matters. He was returning from Greece to his own country, to deposit the gold collected for the god in the temple in the land of the Hyperboreans. On his journey he passed through Italy, saw Pythagoras and thought him very like the god whose priest he was. He was convinced, by most sacred tokens which he saw in Pythagoras and which he had, as a priest, foreseen, that this was no other: not a human being resembling the god, but really Apollo. He returned to Pythagoras an arrow, which he had brought when he left the temple as a help against difficulties he might meet on his lengthy wanderings. Riding on the arrow, he [saw] rivers, marshes, swamps, mountains and the like; and by speaking to it, so the story goes, he could achieve purifications and drive away plagues and tempest from the cities which asked his help. (in Clark 1989, 40-41).

Even in this early era, it was clear that religion and religious figures were called upon repeatedly to solve the problem of plagues, i.e., our modern epidemics and pandemics. In calling upon supernatural powers, both the perceived strength of epidemics and the strength of human fears about them both become apparent.

2.2.2. Zoroastrianism or Mazdeism in Persia

While Zoroastrianism may have roots as far back as the second millennium before the current era, it is documented historically from around the time of the classical Greek and Roman religions, i.e., around the 5th century B.C. Zoroastrianism includes belief in a Creator (Ahura Mazda) who is not the cause of plague and illness. A plague is believed to be caused by the Devil (Angra Mainyu). Prayers (mantras) are important in calling the Creator to stop the plague. It was believed that God was more powerful the Devil, so he always wins, but God approves of humans supporting him.

2.2.3. The Wrath of the Gods in the Roman World

The Romans held views similar to the Greeks concerning the wrath of the gods. Their philosophers expressed the same reservations about gods having

"passions," which are deemed a human frailty. Romans saw unusual events as manifesting divine wrath, and it often resulted in famine, sickness, and plague. Religious neglect is the common cause of the anger, and expiatory rituals were devised to avert disaster, like further famine and plague.

2.2.4. Divine Wrath and Plague in Old Testament

Terms for wrath in the Old Testament more commonly denote divine rather than human anger, especially in combinations that distinguish the wrath of God by its power (Bromiley 1985). Wrath was consistently linked to Yahweh, the God of the Israelites with whom they had a covenant or a contract to worship Him alone. This is made memorable in the book of Exodus in the verse, "Thou shalt have no other gods before me" (Ex. 20:3). If Israel were unfaithful to the covenant, then the disease and afflictions that beset them were understood as manifestations of God's divine wrath, i.e., his extreme anger. That feeling has not completely disappeared today, as we saw in the modern survey results given previously. In the Old Testament book of Jeremiah (14:11-12) we read, "Then said the Lord unto me, Pray not for this people for their good. When they fast, I will not hear their cry; and when they offer burnt offering and an oblation. I will not accept them: but I will consume them by the sword, and by the famine, and by the pestilence." Pestilence appeared as an expression for the extreme anger of "the one and only God."

Part of the covenant between God and the Israelites was that God would protect Israel if they behaved in accordance with his will. An attack on Israel would be an attack on God, himself, and on the honor of God (Is. 48:9ff). Moreover, God's wrath against other nations has a broader dimension than the covenant with Israel. It is directed against human arrogance and wickedness by challenging God's claim to lordship over the cosmos. God could use other peoples, such as the Assyrians, in expressing his wrath against Israel. He could send the Assyrians to war against the Israelites. However, in yet another example of the "double edged sword" of wrath and mercy, he could also turn his wrath against the Assyrians when they over-stepped their assignment of punishing Israel (Is. 10:5ff.; Ezek. 25:15ff.; Zech. 1:15). The aim of divine wrath is the establishment of the divine rule of holiness, just as we find later in Jeremiah 32:37-38. It is expressed this way:

Behold, I will gather them out of all countries, whither I have driven them in mine anger, and in my fury, and in great wrath; and I will bring them again unto this place, and I will cause them to dwell safely: And they shall be my people, and I will be their God...

One is also reminded by this passage that the God of the Israelites was indeed a jealous God. He insisted that He be the one and only true God, and punished inconstancy with, among other things, plagues and pestilence. It is clear that the biblical authors felt plague, war, famine, and pestilence were sent by God both to the Israelites to bring them back to the covenant and to other nations, like the Assyrians, who overstepped their role in disciplining them, and in so doing, gave way to arrogance. Divine wrath is involved in ensuring the correct, balanced relationship between God and humans. Plague and pestilence are used as instruments in making that relationship right.

The underlying interplay between divine wrath and mercy ($\check{\epsilon}\lambda\epsilon\sigma\varsigma$ or éleos), while present in the Old Testament, becomes even more clear in the New Testament. Human arrogance might occasion divine wrath (Rom. 2:4ff.), but God's mercy is behind that wrath, directing its goal of reestablishing His love. This is how "God's love" is seen as an aspect of punishment. It is not "retribution" pure and simple, but punishment with a higher purpose.

Today, human arrogance has been obvious both before and in the course of the current pandemic, but so has the selfless display of love from those in the medical profession and other essential services, and even from those simply adhering to the stay-at-home injunctions. The ancient forces of wrath and mercy maintain contemporary meanings, especially when the context is pandemic.

2.3. Plague, Pestilence, and the Apocalypse in the New Testament

The Greek word $\dot{A}\pi o\lambda\lambda \dot{\omega} w$ or *Apollýōn* means "destroyer," and its associations to destruction are clear. *Apollýōn* is usually understood as a play on the name, Apollo, the god of pestilence, who was also the god of the Greek empire. He had the locust as his totem (personal symbol), which refers to one of the most horrific types of pestilence in the Bible: the locust swarm (Bromiley 1985).

In the New Testament, use of the term for "horse" (Greek $i\pi\pi\sigma\varsigma$ or *hippos*) has a relationship to pestilence and to serious social difficulties. In the Book of Revelation 6:1ff., this is carried forward in writing of the apocalypse with horse imagery. We are all familiar with the words and image of "the four horsemen of the Apocalypse." Those passages in the Book of Revelation also refer to conquest, civil strife, hardship, as well as pestilence. We surely understand the relationships between pandemic and civil disruption today. Examples pepper our news sources.

The "demonic locusts" in Chapter 9 of Revelation are compared to horses with heads like lions and an ability to kill with both head and tail. In Revela-

tion 14:20, the horrific nature of the final judgment is revealed in the fact that there is blood on the horses' bridles. At the end, the Messiah and his host were forecast to appear on the white horses of victory (19:11ff.). It is made clear that the Messiah alone "judges and makes war" (19:11). He does this with the "sword of his mouth" (19:15) (Bromiley 1985).

In these chapters of Revelation, we see the use of horse imagery to convey conquest and death, but also the social ills of "civil strife" and "hardship," which are bound up with the concept of "pestilence." The writer of Revelation knew well that pestilence, death, social strife, and hardship were all part of a single phenomenon, one we are witnessing today with the increase in unemployment, loss of wages, shortages of food, and destruction of food chains (for example, supply lines for meat). We can well understand that pandemic and social strife are part of an interwoven whole. Of course, Revelation conveys the idea that they can be wrought on humankind if they stray from religious teachings. The judgment is severe and life-threatening, and the imagery is strong to convey this warning. By extension, "those who ignore a pandemic (pestilence and plague)" may encounter deadly consequences, whether disease or social disruption or both. Few of us witnessing demonstrations for or against the current pandemic's self-isolating restrictions realized that these connections had been documented so long ago.

2.4. Sickness, Sin, and the Apocalypse in the New Testament

The Greek word $v \delta \sigma c$ or $n \delta s s$ means "sickness," "plague," or "epidemic," and it has an uncertain etymology. In tribal and Greek thinking, unhealth is often equated with sin in the circum-Mediterranean area. Tribal thinking in the Levant blends "sickness" and "impurity" in the concept of *miasma*, which is a substance to be avoided. Demons are thought to convey it or to be stirred up by it. Later, Babylonian words for "sin" also denote "sickness," and Babylonian penitential psalms often complain of disease and destruction. Expiations are designed to restore the body. In Greece, Apollo avenges wrongs by inflicting pestilence, and Egyptian lore provides examples of sickness as a punishment for offenses.

On the other hand, the Old Testament never describes sin as a spiritual sickness. The "sickness" in Ps. 103 is a real one. Job, with true innocence, protests the rigid causality between sin and sickness. Judaism works out the doctrine of retribution (sickness *because of* sin), and somewhat disentangles the two. It avoids a direct equation of sin and sickness except for Greek elements in Hellenistic Judaism: If the sick must offer a special confession, it is because of the nearness of death rather than their being sinful. The thinking is that illness may be a "punishment out of love." God is especially near to

the sick, so that they are to be visited and helped, not shunned. The role of medicine is honored as early as the book of Sirach 38:12.

The New Testament views sickness as contrary to God's creative will and understands demonic power to be at work within sickness. While there is a general connection between sin and sickness (for example, Mt. 12:22ff.), Jesus transcends the notion of retribution, and offers both healing and forgiveness (Mk. 2:5ff). Christians would then view sickness as a connection to the divine (1 Cor. 11:32) and make an effort to manage it with prayer and healing (e.g., 2 Cor. 12:8, and Jas. 5:13ff). Jesus accepts sickness as a figure of speech for sin, but he does so only to proclaim that he has come to save sinners (Mk. 2:17). The figurative use is more Hellenistic in 1 Tim. 6:4, with a hint that ignorance is the source of aberration, for example, the description of "error" as a "cancerous growth" in 2 Tim. 2:17. Being sick denotes an abnormal inward state. Jesus' disentangling of sin and sickness is also evidenced in his healing a blind man whose blindness is not due to sin (Jn. 9:1-7). From a modern anthropological perspective, Jesus takes some of the "magic" out of the origin of illness, and so, illness is not because of sin or behaving incorrectly. This approach has a quality nearer to "religion" than "magic."

Afflictions will usher in "the end time" according to Mk. 13:8. However, it is important for early Christians to avoid being too hasty. The "beginning of sorrows" is connected theologically in the Gospel of Matthew to the woes preceding the new birth of the world (Mt. 24:8). These events show that the time of salvation is near. In Rom. 8:22, the afflictions are a cosmic event. All creation awaits the new birth of the world, the coming into being of a new heaven and a new earth. History is full of examples of splinter groups who act hastily and view the "end of times" as immediate. They also often connect end of times with plagues and pandemics.

3. INSIGHTS INTO TODAY'S COVID-19 PANDEMIC BASED ON BIBLICAL CONCEPTS

The evolution of the relationship between sin and sickness appears to be somewhat resolved in the New Testament, where a new threat is described in Revelation—the end of times. The connection between "sin" with "sickness" does not persist into modern times, except in some evangelical Western faiths, religions from other world regions, and some pre-modern tribal religions. The end of times is foretold in part by pestilence and plague in the New Testament, and the foretelling of the end of the world by pandemic has survived to a degree into the modern era—although to what degree is still not clear. We may see that matter clarifying in the following months and years until a vaccine for Covid-19 is developed and distributed to most people in the world. Our view is that this development and distribution will not happen until 2021, at best.

3.1 Pandemic, Poverty, Civil Disobedience, and the End of the World

If there is fear that attends plague and pestilence now, it is *not* because of a connection to sin, but because of scientific explanations of illness and death, and the connection between pandemic and social disruption. It appears to the four co-authors that it is conceivable that the current spates of civil disobedience and social disruption caused by the Covid-19 pandemic have stirred in some people a fear of the "end of times," which was introduced in the New Testament. This is not an altogether irrational conclusion because the international balances of power are shifting, in part due to Covid-19, and there is warlike posturing on the part of some powers reported in the press.

The perpetuation of a conceptual link between plague or pandemic on the one hand, and social disruption on the other, into modern history, appears a credible cause for concern to the four co-authors. In the language of modern social science and epidemiology, social unrest and environmental destruction are clearly connected to pandemic. Many people living in poverty are forced into new associations with non-domesticated animals, and they consume them for food. This is apparently the source of Ebola (theoretically, through eating "bush meat," usually gorillas or chimpanzees, although the reservoir species is probably bat), and to SARS-CoV2 or Covid-19 (directly through bat, in theory). Marginalization, environmental destruction, poverty, and pandemic form a new nexus in modern thought, just as fearsome as the ones in the Bible.

It is possible that people in the modern western world who live in tough economic conditions are also stirred to imagine the "end of the world" by the widespread anxiety due to pandemic conditions and unemployment. This remains a possibility and deserves attention by social science researchers. We must ask – in spite of the question appearing non-sensical to many — whether there are fears that the world is coming to an end. The fear could well be a deeply hidden but strong element of covert culture. The New Testament clearly uses plague and pestilence to foretell the end of times.

3.2 Strong Images Convey Fear of Contagion and Cosmic Consequences of Pandemic

We were initially struck with the strength and ferocity of Greek images related to plague, pestilence, and even sickness: Blood on horses' bridles, social strife and hardship, which spills over into moral sickness or sin. This is serious business, this matter of plague, with cosmological implications. Even after Jesus disentangles sin and sickness, sickness in a plague remains an element foretelling the "end of times," so there are cosmic consequences of pandemic, perhaps even today.

Still, the consequences of pandemic are viewed differently in modern society, but, anxiety about health has a way of unnerving people and they return to basic rituals and beliefs that harken to a different time, a different level of social complexity, a different degree of scientific advancement, and a lack of control over daily food supply, not to mention cosmic events. Like a hurricane or a tornado, a pandemic has a sweeping quality that affects everything and everyone in its path. In moments of solitude and quiet, people return to ancient and more primitive solutions, like talismans, witchery, or those repetitive movements that are said to protect against an enemy no one can see, like hand washing (a classic focus of some obsessive disorders) to combat the millions of viral strands of RNA that are shed by someone infected. How does one know whom to avoid? No one knows, sometimes even the infected person.

No wonder the mitigation for Covid-19 involves physical distancing! We find elaborate instructions to wipe down delivered packages and to sew face masks. We are mesmerized by a winsome modern witch dancing rhythmically in black to ward off the "plague", alone in an Italian plaza.¹ It does not matter the source of the protective protocol, only that it might work, and two solutions are better than one.² These are dangerous times when the earth under our feet and the skies over our heads just may be shifting – but of course not!

Our modern view of illness is different, a matter of science, health, and immunity. Nevertheless, we suggest that some of the earlier implications denoting violence, death, destruction, social strife, and the end of the world are

¹ Under the heading, "Riti Magici," which is translated, "Magical Rites," Israel Felipe posted a video on Facebook on May 5, 2020, at 4:20 AM, which appears to be taken with a cell phone. He writes, "Inesperadamente, uma bruxa italiana dança na praça, em Salento, num ritual de combate a peste. Dança pizzica da tradição mágica Taranta, muito antiga. Achei tão lindo quanto a imagem do papa caminhando em Roma." This translates, "Unexpectedly, an Italian witch dances in the square in Salento in a plague fighting ritual. Pizzica dance of the magical tradition Taranta, very old. I thought it was as beautiful as the image of the pope walking in Rome." Jorge Vázquez re-posted the video on Youtube on May 14, 2020, now available, at: https://www.youtube.com/watch?v=yw2fb5mTcws

² On April 17, 2020, Katarzyna Trunkwalter posted a video on *Facebook*, and garnered over 1,900 comments. In it, an unidentified man enters a nameless Polish grocery store. He reaches to the right, applies hand sanitizer, and rubs his hands together. He turns to enter the store and genuflects deeply and crosses himself. It remains available at: www.facebook.com/katarzyna.trunkwalter/videos/2670632529885614/?t=0

still carried by the modern concept of pandemic. The connections were there in the past and it is likely they remain entangled today, either that, or awakened anew. These connections are enough to sow fear in the hearts of many. Given the increased likelihood of painful, debilitating, and lasting sequelae of disease in the Covid-19 pandemic, (even death all alone because family cannot visit an infectious person), it is no wonder that social and cultural reactions to the pandemic are deeply felt, vividly expressed in widespread media, and sufficient to cause anxiety in many living adults. Children, too, will recall these times as adults, and they may sense the fear anew. Searching for the expressions of that fear and dread in social and psychological changes makes logical sense. There is a great deal of research to do.

3.3 Urgency, Waiting, and the Sense of Time

A new element was introduced along with the foretelling of the end of times in the New Testament. That element is time, and it has perhaps the greatest potential to change thinking and behavior in a pandemic, and to figure into solutions for better managing fear and anxiety. Early Christians were warned, especially by Paul, that the end of times would not be immediate, so they should curb their sense of urgency. They were exhorted to wait and be patient since the second coming of Jesus might not be soon. As a result, the end of times is shoved into the future in most modern Christian faiths. In 1 Th. 5:16-18, we read: "Rejoice evermore. Pray without ceasing. In every thing give thanks: for this is the will of God in Christ Jesus concerning you."

Our attention is drawn to the phrase, "Pray without ceasing," which denotes elements of urgency and repetition in its admonition of steadfast observance. Anxiety causes the sense of time to change and even individuals who have never known obsessive-compulsive disorders find repetitive movements doubly soothing. In spite of physical distancing efforts and lives spent sequestered in our homes, the anxiety spills outward in posts on social media, endless telephone calls, emails into the night, and nonsense cleaning routines. We read of an increase in substance abuse, and some physicians call its high level a public health threat in the US and UK (Randall 2020).³

Many reasonable minds have wondered about the pandemic-level infectious spread of Covid-19, and the consequent social disruption. Perhaps the pandemic foretells that the end of times is not so distant! The dynamics be-

³ New York physician Dr. Nicole Saphier spoke in a news video to the online news source, *Daily Mail*, about the effects the coronavirus was having on suicides, self-harm, domestic violence, and drug abuse. She said they were "on the rise during the coronavirus pandemic." The news video is available now at: https://www.dailymail.co.uk/video/newsalerts/video-2168196/Suicides-drug-abuse-rise-coronavirus-pandemic.html

hind this thinking are not mysterious. The cognitive perception of time is a distributed capacity in the human brain that does not always produce the same result, partly because of emotions. Time perception is handled by a network of different organs, including the cerebral cortex, cerebellum, and basal ganglia (e.g., Fontes et al. 2016). Anxiety rises in a pandemic. An altered perception of time kicks in about "a fix" (a vaccine, a drug, a testing plan), and people get very impatient. Time seems to stretch, too, when they are self-isolating to prevent contagion. They ask: When will this end? They miss their family and friends, and they wonder: How will it end?

This change in the perception of time can drastically affect religious thought and behavior, which together usually convey stability, security, and predictability—exactly the opposite of a pandemic with its sense of urgency. A person is more patient about time's passage when events are predictable and safe. The reassurance and stability built into all human religions begin to crumble in a pandemic and many people turn away from religion, as one coauthor observed in Italy. Many of these same people also lose faith in science and seem most interested in politics. Scientific leaders fail everyone until they have a treatment, a vaccine, and a testing plan, but in the early stages of the Covid-19 pandemic, there are none of these, just confusion. We find ourselves chastised by experts to be patient just as early Christians were chastised by writers of the New Testament to wait. The second coming may not be imminent. We will have to wait perhaps years for a vaccine to be tested for safety and efficacy.

3.4 Paul's Clever Solution Is Now Ours

In early months of a horrific pandemic such as Covid-19, it is natural for anxiety to rise. It is useful to remember that the meaning of the word "anxious" is dual. "Anxious" denotes anticipation and looks forward in time. It also denotes dread about events in the future. "Pray without ceasing" is a phrase that captures both. It has urgency—not from the Greek word, *adialeiptōs*, which translates, "without ceasing"—but from the context of Paul's letter to the Thessalonians. He is writing that early Christians should be patient, but behave well *as if* they expect the second coming of Jesus.

In conclusion, let us remember the method Paul used to encourage early Christians to follow the teachings of Jesus, but to wait patiently for his return. He exhorted his followers to *behave as if* the second coming were near. That was extremely clever, producing patience but adherence to a moral code at the same time. That same combination – continued adherence to the rules, but patience in following them, and waiting for deliverance from the pain of the Covid-19 pandemic – is a tantalizing formula for enduring the

next months in which we have no cure, no vaccine, nor an adequate tracking system.

Our view is that in stirring the anxiety of billions, focusing that anxiety on an unknown future and holding out belief in the possibility of a new medical solution for the deadly contagion, the original anticipatory urgency of early Christians is stirred again and takes on a new form. Cosmological conceptions shift. The balance between science and religion strains. People look for reassurance in both and find no sure answers. Science and religion begin to blend, their differences dissolve, their edges blur. Magic re-emerges into the daylight, after a millennium or two, or less. We have been through this before, say the lessons of the Bible, and finding confidence and courage we shall prevail anew.

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