Jennifer M. Gidley

THE FUTURE

A Very Short Introduction

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Contents

List of illustrations xiii

Introduction 1

1 Three thousand years of futures 20

2 The future multiplied 44

3 The evolving scholarship of futures studies 63

4 Crystal balls, flying cars, and robots 82

5 Technotopian or human-centred futures? 100

6 Grand global futures challenges 116

Conclusion 136

Appendix: Global futures timeline 139

References 147

Further reading and websites 151

Index 159

List of illustrations

1a *The Nabonidus Chronicle*, an ancient Babylonian text, reports that the Greeks adopted the Persian Achaemenid Calendar 330 BCE **15**
British Museum

1b Ancient candle clock **16**
Syria: A candle clock, from al Jazari's 'Book of Knowledge of Ingenious Mechanical Devices' (1315 CE) / Pictures from History / Bridgeman Images

2a Prague astronomical clock, 1410 CE **18**
Andrew Shiva, Wikimedia Commons

2b Digital Pebble smartwatch, 2016 **19**
Wikimedia Commons

3 *The Man in the Moone*, 1768 **32**
Written by Francis Godwin under the pseudonym Domingo Gonsales, Illustrator unknown

4a Montgolfier balloon, 1783 **35**
Courtesy of Library of Congress Prints & Photographs Division, LC-DIG-ppmsca-02447

4b French fantasy images of flight, 1900 **36**
Courtesy of Library of Congress Prints and Pictures division, digital ID ppmsca.02561

5 Futures methods as part of Generic Foresight Process **60**
This graphic adapted from a 2000 version. Original published in *Foresight* 2003, 5(3): 10–21.
© 2000–2016 Joseph Voros

6 Typology of five evolving futures approaches **66**
© 2010 Jennifer M. Gidley

7 Long Now clock, 1999 **79**
Courtesy of the Long Now Foundation

8 *Flying Firemen in the year 2000*, Jean-Marc Côté, 1899 **85**
Wikimedia Commons

9 *Futuristic Flying Car*, *c.*1900, Harry Grant Dart **86**
Courtesy of Library of Congress Prints and Pictures division, digital ID 13554u

10 A flying car, 2015, proposed for launch in 2017 **87**
Courtesy of Aeromobil

11 Herbert Televox, 1927 **88**
Courtesy of the Heinz History Center

12 Atlas, 2013, Boston Dynamics winner of the DARPA Challenge in 2013 **91**
Public Domain

13 Global environmental, geo-political, and socio-cultural challenges **119**
© 2016 Jennifer M. Gidley

14 Alternative global environmental, geo-political, and socio-cultural futures **120**
© 2016 Jennifer M. Gidley

Introduction

Introducing ‘the future’

The future we face today is one that threatens our very existence as a species. It threatens the comfortable urban lifestyles that many of us hold dear and the habitability of the earth itself. The times we are in are critical, and the challenges we face as global citizens are complex, intractable, and planetary. The impact of climate crisis alone is pointing to frightening futures of rising seas, drowning cities, mass migration of climate refugees, drastic food shortages due to loss of arable land to drought, floods, and salination, and the mass extinction of species. Several Pacific islands have already disappeared, and in the USA, the first climate refugees are being resettled from low-lying islands to higher ground. And this is just the beginning.

Renowned theoretical physicist Stephen Hawking, Oxford philosopher Nick Bostrom, and billionaire entrepreneur and engineer Elon Musk have issued serious warnings about the potential existential threats to humanity that advances in ‘artificial super-intelligence’ may release. When we include the volatility unleashed by random acts of terrorism, growing economic disparity, and the global youth mental health epidemic, it may seem that this book is going to be a doomsday story. What a challenging time to write a *Very Short Introduction* to the Future.

But the trends pointing to future as time bomb are only one side of the picture.

In spite of the potential for catastrophe that current trends suggest, we are also in the best position ever to turn negative trends around through the means at our disposal. As a species, we have never been more conscious, more globally connected, or more capable of radical positive change than we are today. With the instantaneous communications available millions of people can be mobilized in an instant to act for good causes, if only the understanding, passion, and will can be engaged.

Regardless of the choices we make as a species on these challenging issues, the futures we create through our actions today will impact the entire future of humanity for thousands, if not millions of years to come. Humans have always influenced the future, as we will see when we explore the history of humanity's relationship with the future.

For thousands of years we have struggled to predict, control, manage, and understand the future. Our forebears sought advice from oracles; read the stars through astrology; debated concepts of time and future philosophically; wrote utopias and dystopias; and, in the modern scientific era, tried to predict the future by accumulating and interpreting patterns from the past to extrapolate models of the future.

But the single, predictable, fixed future that the trend modelling proposes does not actually exist. Instead, what is out there is a multitude of possible futures. What lies at the heart of this changed perception is an evolution of human consciousness. Knowing this means we have the power to imagine and create the futures that we choose, bearing in mind that some people have much greater power and influence than others, depending on life circumstances. Undoubtedly social, political, and economic structures limit some more than others. We must also distinguish

between futures we can create and the futures of everyday certainties we rely on, such as the daily rising and setting of the sun, and the annual flow of seasons. We need to be aware that we use a kind of 'everyday foresight' in order to conduct our daily lives, based on certain assumptions, such as public transport being reliable, travel bookings being trustworthy, and weather forecasts being mostly right.

Until recently, social and cultural systems were built around our belief that life generally happens as expected. In the 21st century we are seeing many of our socio-cultural and ecological systems unravelling. Today's world is complex and unreliable. Tomorrow is expected to be more so. The US Department of Defense coined a new term in the 1990s: VUCA, which stands for volatile, uncertain, complex, and ambiguous. The business world has enthusiastically adopted VUCA in its leadership narrative.

As the pace of change accelerates, the word 'future' is becoming ever more ubiquitous—in the popular media, in business literature, and in educational and academic spheres. Consultants everywhere call themselves futurists. Since the turn of the 21st century, with the exponential rate of technological change, time itself seems to be speeding up, bringing 'the future' ever closer. The now popular use of the term 'future' has led to a global proliferation of government departments, corporate agencies, consultancies, and trend-spotters all claiming to be future-focused. The word 'future' itself has become trendy and trend spotting has become a fad. It is now considered obligatory for schools and universities to include in their strategic plans terms such as 'future-proofing' and 'preparing for the future'. And yet, paradoxically, short-termism thrives, in business, government, and education circles, with little evidence of engagement with the futures studies literature established over several decades.

From a personal view the future is mysterious and ever changing: sometimes it is like a rainbow with the pot of gold

always out of reach. Other times it rushes at us like a tornado or drowns us in a tsunami of chaos. The future is paradoxical: it is completely open and beyond our control and yet it is the object of trillions of dollars in government expenditure aimed at controlling it. It is both the playground of science fiction, and the raw material of town planners and policy nerds. The future can be short, ephemeral, and so full of surprise that it is over the moment after it happens, or it can seem to take forever to arrive. Haunted by nightmares or pregnant with hopes and dreams, our personal futures are strangely full of shadows and joys from our past and yet can always be created anew by courageous actions in the present.

In this *Very Short Introduction* to the Future I hope to throw some light on the multiple facets that I have discovered in twenty-five years of research into the fascinating field of futures studies. I flag some of the tensions one might expect when reading about the future, most notably between scientific prediction on the one hand and ungrounded speculation on the other. I discuss whether the future is a time or a place, the history of thinking about the future over 3,000 years, and attempts to steer a course between the extremes of Malthusian doomsday catastrophes and the panorama of Cornucopian techno-optimism.

While the book will include a gloss of populist approaches, the main focus of this VSI will be to introduce the curious reader to the diverse dimensions of the fifty-year-old transdisciplinary field of futures studies that counts among its experts thousands of professors, researchers, practitioners, and students, across all continents. Futures studies operates as a global academic field, on the assumption that consciousness has increased to embrace multiple future possibilities, and that we are free agents to create worlds of our choices and participate consciously in our own evolution. Introducing readers to the art and science of this pluralistic approach to understanding the world of multiple futures is a major focus of this book.

Naming the study of the future

The English word 'future' seems to have been first used in the 14th century. The Online Etymological Dictionary places its roots in the Latin 'futura/futurus' meaning 'going to be, yet to be', from the verb *esse*: to be. It also appears in Old French as *futur*: 'future, to come' in the 13th century. However, the taken-for-granted concept of the future we have today is much older.

Study of the future is so extensive now that a panoply of terms exists to describe it, the most common being 'futures studies', 'foresight', and 'prospective'. By exploring the main terms, I hope to bring coherence into the diversity. The earliest approach to the future was called 'prophecy' and was associated with old pre-rational worldviews, dating back to the first millennium BCE. The term is rarely used today except perhaps by the media trying to trivialize futures work.

At the turn of the 20th century the term 'forecast' was commonly used to describe any kind of writing about the future. Along with the belief in progress and the seemingly unlimited developments in science and technology, forecasts by famous figures were fashionable. The success of the 1920s *To-day and To-morrow* UK book series is a case in point. Forecasting was revamped in the 1960s, and is still preferred today by those who consider their approach to be scientific. Forecasting is the closest to 'prediction' of the terms we are considering and is often linked to technological developments, as in 'technological forecasting'. While it is commonly thought that futures studies is mostly about prediction based on extrapolation from present-day trends, predictive futures is only one of several serious futures approaches.

As historian of the future Warren Wagar notes in the following quote, H. G. Wells was one of the first to call for a more formalized study of the future consequences of new technological inventions.

> It is not far-fetched to fix January 24, 1902, the day of [H. G.] Wells' Royal Institution lecture, as the day when the study of the future was born.

Following the successful publication of his pioneering book *Anticipations* in 1901, Wells gave an invited lecture at the Royal Institution in London, later published as *The Discovery of the Future*. He announced that there needed to be a systematic, 'academic study of the future'. It would take another fifty years before it was taken seriously in the academic arena. In a 1932 radio broadcast Wells decried the fact that although there were thousands of professors of history, there was not a single professor of foresight in the world. For Wells, foresight was tuning in to the future consequences of our actions, as he said:

> All these new things, these new inventions and new powers, come crowding along; every one is fraught with consequences, and yet it is only after something has hit us hard that we set about dealing with it.

The first to attempt an academic approach to studying the future was German professor of history and government Ossip K. Flechtheim who coined the term 'futurology' in the post-Second World War period. He viewed it as a broad human or social science: 'a system of organized knowledge concerning a particular subject'. He saw its potential as a 'projection of history into a new time dimension' with the differentiation being that, since it cannot make use of written or oral records, futurology will use methods such as interpretation, generalization, and speculation, like cultural anthropology or theoretical sociology. The term is rarely used today.

In 1957 French philosopher, businessman, and educator Gaston Berger (1896–1960) coined the term 'prospective' when he set up the Centre International de Prospective in Paris, and published the journal *Prospective*. For Berger, prospective was the mirror

image of retrospective. It was not just about trying to see the future, but about taking action. The term is most commonly used today among French prospectivists such as Michel Godet and Latin American futurists such as Guillermina Baena Paz and Antonio Alonso-Concheiro. Godet reaffirms the action aspect of Berger's prospective: 'Prospective considers the future to be the result of human agency, which, in turn, is strongly conditioned by human desires, projects, and dreams.' A few years after Berger founded his centre, French prospectivist Bertrand de Jouvenel (1903–87) founded the organization Futuribles in Paris (1960), and also published a journal of the same name, still in circulation today. De Jouvenel's conviction was that the future is not predetermined, and simply unknown, but that a wide range of futures is possible for any given state of affairs, meaning that the actual outcome would be according to our intervening actions—human agency.

In parallel with these European developments, in the USA the RAND Corporation was developing the scenario planning methodology, particularly through Herman Kahn's 1960s work on post-war scenarios. French oil executive Pierre Wack was reputedly the first to work with scenarios in the private sector, working with Royal Dutch/Shell in London from the 1970s. Godet has used scenarios since the 1980s in his French prospective approach, followed by Peter Schwartz's Global Business Network scenario approach. Scenario planning is a broad methodology that can be used within any of the various approaches to futures studies. To understand which futures approach underlies the scenarios we need to look for the key terms, theories, goals, descriptors, and associated research methods.

In the late 1960s some of the big changes that were happening in other disciplines also impacted the study of the future. The most important change in the naming of the study arose with the insistence by leading thinkers in the field such as James Dator and Eleonora Masini that both the terms futures and studies needed to

be plural, bringing about the birth of 'futures studies'. This move to pluralize the terms may seem minor but it reflected a deeper philosophical and political manoeuvre to democratize and pluralize the future. The pluralization of futures studies was formalized by the founding in 1973 of the World Futures Studies Federation. Futures studies as I use the term in this book is a transdisciplinary academic field combining education, philosophy, sociology, history, psychology, and economic theory with real-life observation to propose, for the benefit of society, not just one kind of future but multiple futures. Current researchers who are working from this broad stance use this plural term 'futures studies' to describe the overall field of research and practice.

Wells's term foresight made a comeback in the 1990s and is quite commonly used today especially by practitioners. The High Level Expert Group for Foresight in the European Commission describes it like this: 'Foresight can be defined as a systematic, participatory, future intelligence gathering and medium-to-long-term vision-building process . . . aimed at present-day decisions and mobilizing joint actions.' Strategic foresight is generally regarded as a sub-branch of foresight. Richard Slaughter describes it as a fusion of futures methods with those of strategic management. On the other hand, for those who work in the areas of strategy and planning, strategic foresight is a relatively new and often welcome extension to their work into longer-range contexts. Godet suggests strategic foresight is the closest English term to represent the French approach, except that it lacks the activism of the French prospective.

There are a few other terms that have been used in more minor ways by individuals or subgroups and I can only mention them briefly here.

The term 'prognostics' was used in Soviet Eastern Europe, during the Cold War period. Masini linked it with scientific positivism and Lenin's thought. Hungarian futurist Erzsébet Novaky

explains that in prognostics the explorative aspect of futures studies was subordinated to the centralized planning of the Soviet regime. In the 1960s and 1970s some futurists working to empower participants to create alternative preferred futures used the term 'futuristics' but it never gained much traction. Another term, 'futurism', was widely used in the early 1970s to characterize the field but is generally avoided today because of its association with the far right radical art movement in Italy during the early 20th century.

The term 'anticipation', first used by Wells in his 1901 book *Anticipations*, is also making a reappearance. Notably, Wells used the plural form to imply multiplicity and openness rather than foreclosure. In the 1980s Frank Biancheri coined the term 'political anticipation' in a pan-European political context. Robert Rosen subsequently drew from Soviet anticipatory systems approaches to try to legitimize future study as a science through mathematics, computer science, and cybernetics. Recent developments include Project Anticipation at the University of Trento, Italy, and the Anticipation Research Group, Bristol University, UK.

The newest term in the futures line-up is 'trend spotting'. More often than not it refers to aggregation of past or current information, for the purpose of extrapolation. While trend spotting has a contemporary buzz to it, it is fundamentally tied to the belief that the future is nothing more than a projection of past trends. This term is popular with consultants looking to give their clients an appearance of being very current, and having a competitive edge. Ironically this lightweight populist approach that lacks the depth of scholarship of some approaches discussed may be quite commercially successful, for example in market research.

Times have changed since Wells put out his 1932 call—there are now several professors of foresight in the world. Furthermore,

over the past fifty years numerous university courses have engaged in futures studies, many of them at Masters level; dozens of national institutions and several global NGOs have been founded to research and/or apply long-term thinking; multiple methodologies have been developed; hundreds of books have been published; and there are now at least five distinct philosophical approaches to futures studies.

In summary, after a century of different names for studying the future, some competing with each other for pre-eminence, there is a general consensus that there is a transdisciplinary field called futures studies. Even those people who prefer terms such as strategic foresight, scenario planning, or prospective would agree that these notions are incorporated within the complex pluralism of futures studies.

Is the future a utopian place?

Historians of the future often look to utopian literature as evidence of early future concepts. A brief discussion of utopias will throw some light on whether the future is to be thought of as a time yet to come, or an imagined place representing our fears or desires writ large. The idea of utopia as an imagined ideal place is often associated with the future. Furthermore, frightening futures, such as those frequently depicted in science fiction movies, are called dystopias. Essentially, utopias and dystopias are stories about desired and feared futures occurring in places other than the 'here and now'. But there is a more complex interwoven relationship between the concepts of utopia/dystopia, the future, place, and time.

The utopian genre as we know it today originated in ancient Greece, with Plato's *Republic* being widely regarded as the first serious attempt at creating a utopian model of civilization. More correctly it was a eu-topia—meaning a good place. This laid foundations for others to write their idealized visions of a place

where life was more perfect. Paradoxically, it was at that point in ancient history, when Greek philosophers were proposing the concept of linear time (past, present, and future), that the idea of 'utopia as an imagined place' appeared—beginning with Plato's *Republic*. Lyman Tower Sargent in *Utopianism: A Very Short Introduction* distinguishes between these formal utopias that began in classical Greece and Rome, and the earlier utopian myths that harked back to a past golden age. The *Republic* was not called a utopia at the time because the term was not used until the early 1500s when Thomas More (1478–1535) wrote his book *Utopia*.

The early utopias were very much grounded in an 'other place' so their potential to influence the future (or 'other time') was implied rather than explicit. Such a utopian narrative was a parable of a better place with hidden implications for how things could be done differently in the future. An early example of a simple dystopia related to place is the myth of St George and the dragon. Whether it is based on fact or fiction it is a narrative that tells us that in those days, early in the first millennium CE, dystopias were relatively simple and binary: the village is threatened by a dragon; a courageous young man kills the dragon; the village is safe—especially the damsel in distress—and life is returned to its happy utopian simplicity.

Like all concepts the notions of utopia and dystopia have themselves evolved.

It was later, towards the end of the 18th century, that the utopian narrative took a more explicit futures-turn. Sociologist Wendell Bell explains it this way:

> At the end of the eighteenth century, a significant shift from space to time took place in utopian writing. The typical setting of the ideal society (or its opposite, dystopia) radically changed from a different place at the same time to the same place at a different time.

Historian of the future Ignatius F. Clarke made a similar point about the 'decline of the old-style terrestrial utopias' only to be replaced with a new focus on the 'ideal state of the future' in the literature of the technologically progressive nations. As societies became more complex, so did utopias and dystopias.

A paradox of more recent utopian futures narratives is that many utopias are constructed through a totalitarian imposition by government forces, or some form of social engineering. Most utopias have dominant ideological aspects, which in many cases border on totalitarianism. As a global society our recognition of this increased in the 20th century with the collapse of totalitarian systems, precipitating a flourishing of dystopian fiction. Another paradox is that linear models of how civilizations develop are always value-laden. Some are weighted towards an idealized future whereby the past is problematized as primitive, while progress, development, and evolution are lauded as unilinear paths to civilization. The opposite weighting is applied in theories and ideologies that demonize the present and look to a romantic past in an idealized way—they utopianize the past.

Going forward into our present-day ideas of utopia and dystopia what do they tell us about the future, time and place? Some of the science fiction movies today could be categorized within Bell's post-18th-century type (same place, different time). For example the Mad Max series is set on earth but on a future earth that has been devastated. However, many contemporary futuristic movies are set in colonies in outer space, for example the Star Trek and Star Wars series, the Alien series, the Terminator franchise. This creates a third type distinct from Bell's other two types. This third type, very common today, is set in a different time (the future) and a different place (outer space). There is also a much greater concentration of dystopian, even apocalyptic, narratives in the popular mass media today than there is utopian.

Is the future a time yet to come?

A common assumption when thinking about the future is that humans have always had a three-part idea of time—consisting of past, present, and future. This is not how humans have always viewed time and is not how all cultures view time today. This linear view of time emerged about 2,500 years ago, in parallel with the origins of Western philosophy in ancient Greece. Prior to this period we humans lived in a more embedded, cyclical sense of time governed at the cosmic scale by the large astronomical cycles, and at the everyday scale by the rhythms of the seasons and the solar and lunar cycles.

The cultural evolution literature tells us that, from the time of Plato, humans were expanding their views of the world as represented in myths, stories, epic poems, and pictographs, to more abstract, thought-out conceptions of the world. Evolution of consciousness researchers explain that the newfound ability to form abstract mental concepts enabled the Greek philosophers and mathematicians to lay the foundations for the kind of logical thought that we aspire to today. The striving of philosophers such as Parmenides and Heraclitus to understand the nature of existence led to the formation of a variety of schools of philosophical thought with respect to time. The key ideas were that time is eternal, permanent, and unchanging, versus the notion that time is the measurement of change. The latter concept led to the idea that existence can be divided into linear blocks of time: past, present, and future in contrast with the old cyclical view of time as flow. Along with the linear concept of time came philosophy and mathematics. Pictograms were replaced with alphabets and written history was born, meaning that the past was becoming more fixed, and the future was becoming conceptually distinct, and an object of interest in its own right. This linear view of time continued to dominate in the West until the turn of the 20th century.

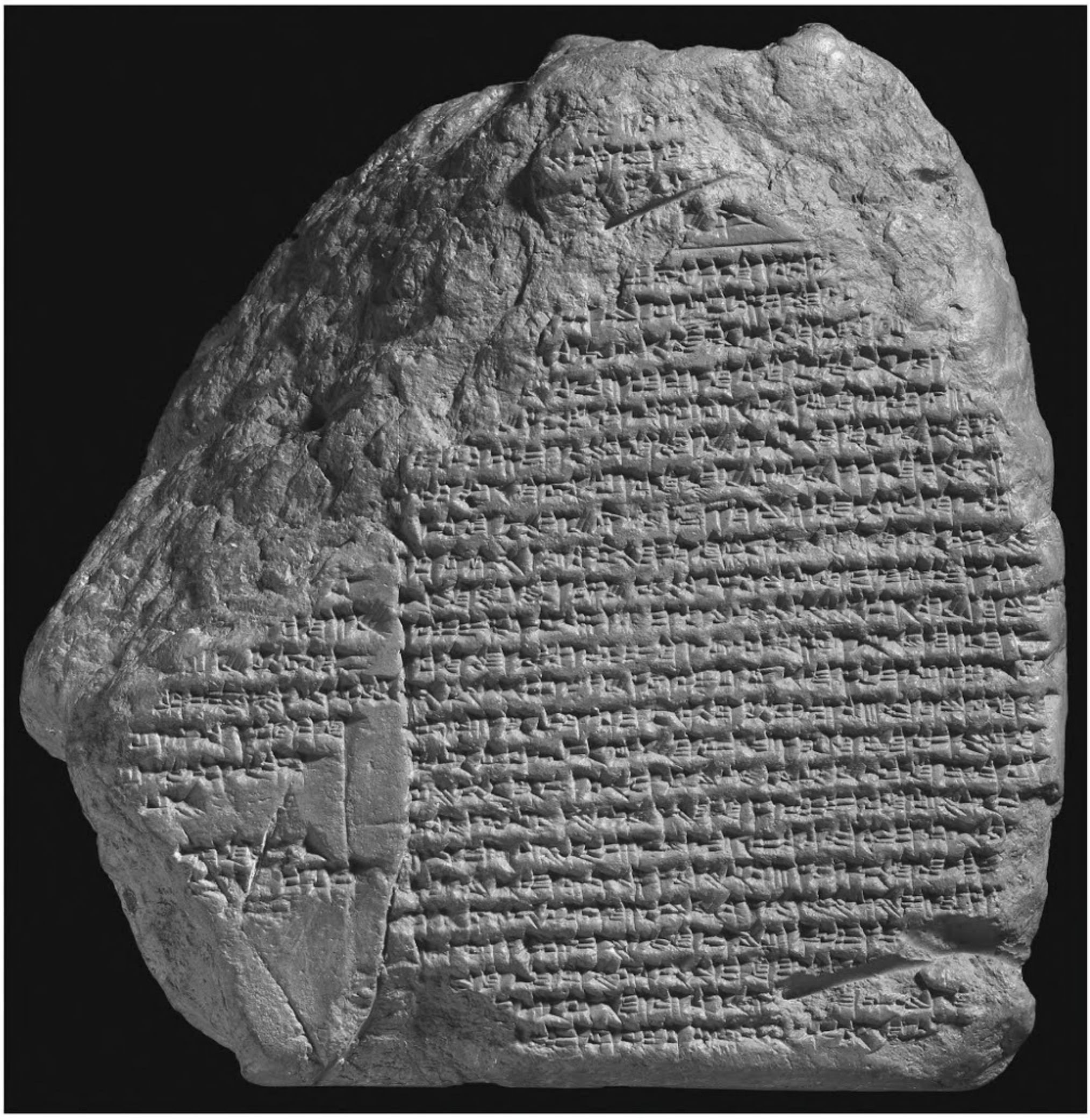
The quest to tame time

As part of the human quest to understand and tame our world we set out thousands of years ago to measure and control time, in the hope of controlling our future. This was achieved on the macro scale through calendars and astrolabes that measured the passing of the sun, phases of the moon, and the patterns of the stars and planets. On a micro scale it was achieved through clocks. These two types of time machines—calendars and clocks—were not always as separate as they are today.

Most of the historical calendars we know about today (Persian Achaemenid, Chinese, Mayan, Roman, and Julian) were invented 2,000–3,000 years ago. This was the same era when Greek philosophers were reframing time from its cyclical to its linear shape and developing abstract thinking.

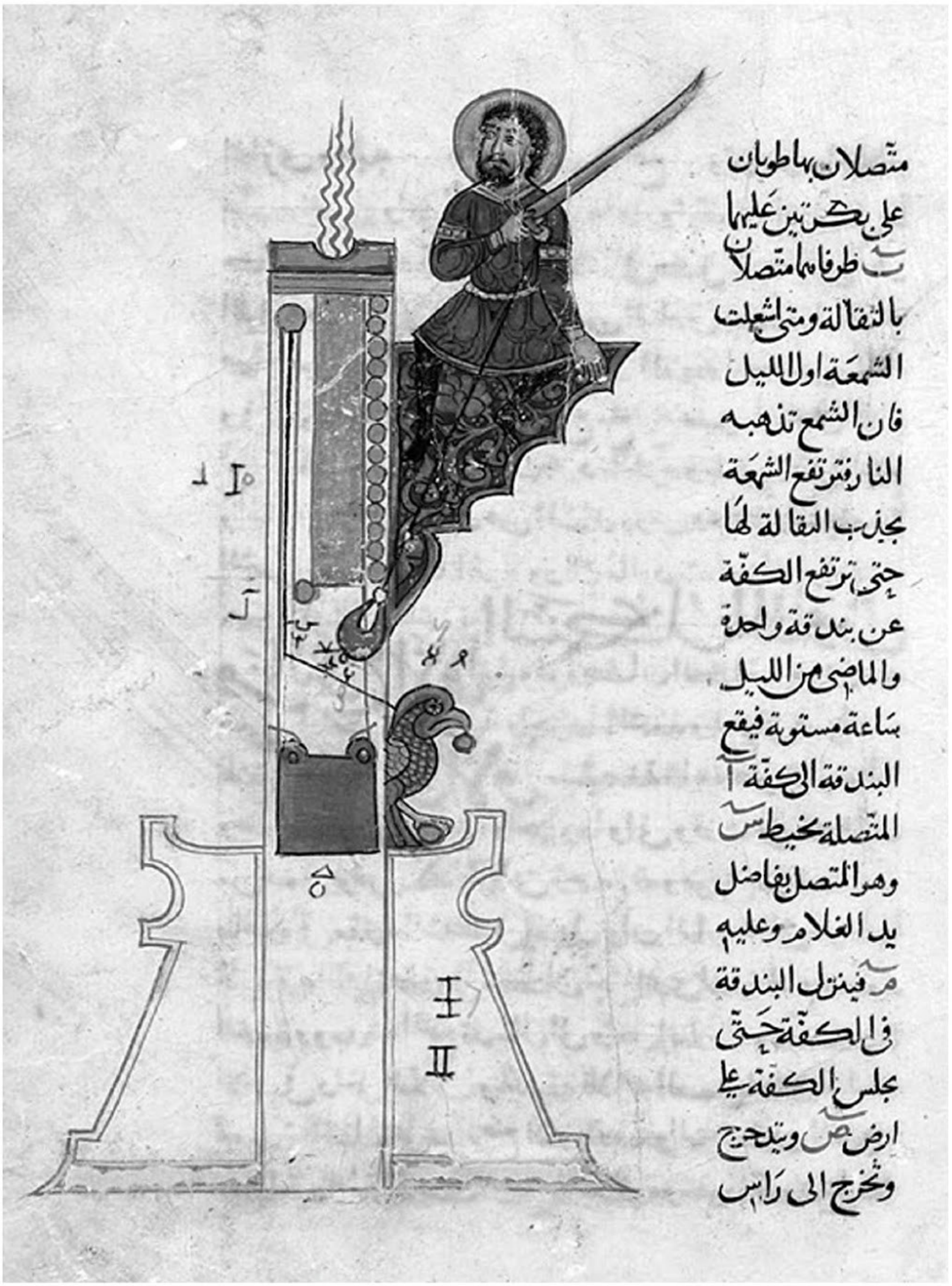
The ancient Persian culture is an interesting example of an early culture with a strong relationship to both time and the future. The old Persian calendar was a solar calendar and is one of the oldest chronological records in human history, having been in existence in the second millennium BCE, pre-dating Zoroaster. There are complete archaeological records going back to at least 330 BCE for the version known as the Achaemenid calendar (see Figure 1a), which was adopted by the Greeks after the conquest of Babylon. The Persian calendar is still regarded today as being highly precise as it is calibrated astronomically rather than mathematically. It is still the official calendar for Iran and Afghanistan.

At around the same period as the Persians, the Chinese developed a calendar based primarily on lunar cycles. While the Chinese today use the modern Gregorian calendar for civil purposes, they still use the Chinese calendar to determine their festivals, such as the Chinese New Year.



1a. *The Nabonidus Chronicle*, an ancient Babylonian text, reports that the Greeks adopted the Persian Achaemenid Calendar in 330 BCE.

The Mayan civilization also had a calendar in the first millennium BCE and it is more complex than either the Persian solar calendar or the Chinese lunar calendar. The Mayan calendar involves a complex interlacing of three different cycles of time with one of those cycles—the Great Cycle—ending on 31 December 2012. There was much media publicity about this in 2012 because of lack of understanding of the complexity of the calendar leading to misinterpretation and the claims that this spelled the end of the world. What is particularly interesting about the Mayan calendar is that it includes as its third cycle what is called the Long Count.



1b. Ancient Syrian candle clock, 1315 CE. From al Jazari's 'Book of Knowledge of Ingenious Mechanical Devices'.

This is where we begin to find the relevance to futures thinking and in particular the contrast between the short-termism of the dominant societal paradigm and long-range thinking, for example the 'long now' concept developed by the Long Now Foundation in San Francisco.