## **PLUM ON TIME**

## - some notes

We are all familiar with the fact that, regardless of how accurate we measure time in an objective way, our *perception* of how time is running is fundamentally subjective. Sometimes time runs away much faster than we want sometimes it seems to have stopped. "Time stood still" is a common platitude, also used by Plum. A day can pass like a lightning and a moment can feel like an eternity. Two persons can remember the duration of the same event very differently. St Augustine of Hippo noted this. His conclusion was: "So it is in you, my mind, that I measure periods of time" (https://www.thecollector.com/what-is-time-st-augustine/). This was also Plum's opinion. He noted the difference between experienced time and measured time. He wrote a couple of times about measurement of time but just to make fun of the attempts. The important time to him exists in his character's minds.

"What's the time?" and "What is time?" These two questions sound similar but are totally different. The regularity of the movements of earth, moon and sun made years, months and days natural measures of time since mankind started walking on the earth.

A sundial is probably the oldest astronomical instrument, known from Egypt since 3500 B.C. The Egyptians also used water clocks. The Sumerians in Mesopotamia were maybe still earlier than the Egyptians. In order to give more precise answers to the first of the two questions astronomists throughout history have tried to measure points of time more exactly by making more and more exact observations of the movements of celestial bodies.

The second question is about the essence of time and is a more philosophical one. It has been addressed by philosophers since old times. They pondered over the flow of time and noted the essential difference between past, present and future time. St Augustine, who was not only a Church Father but an influential philosopher, and Aristotle are two examples of philosophers who wrote about the concept of time.

In two of his novels, Plum used the contrast between objectively measured time and individually experienced time for joking. He referred to and made fun of natural scientists/ astronomers and their efforts to measure time more precisely. In both cases Plum's conclusion was, in the spirit of St Augustine: "The truth is that time cannot be measured".

The passages in the two novels are quoted below. In them Plum mixed objective and subjective perspectives, to get comic effects. He referred to scientific time measurement, but he was not at all interested in this. He stressed the feelings of individuals and then used the contrast between experienced time and measured time as opportunities for jokes.

The oldest quote comes from "The Small Bachelor" (1927), chapter 7. He returned to his formulation in "The Old Reliable" (1951), chapter 17. This is another example of how Plum recycled his old ideas and formulations.

I have placed the two versions in two columns, to make it easy to compare them. The main ideas in both versions are the same, many formulations are the same, but in the later he changed some formulations and added others. It is evident that he 24 years later remembered his old formulations and found them so good that he used them again, with some changes.

## THE SMALL BACHELOR, 1927

There are, as everybody knows, many ways of measuring time: and right through the ages learned men have argued heatedly in favour of their different systems. Hipparchus of Rhodes sneered every time anybody mentioned Marinus of Tyre to him: and the views of Achmed Ibn Abdallah of Baghdad gave Purbach and Regiomontanus the laugh of their lives. Purbach in his bluff way said the man must be a perfect ass: and when Regiomontanus, whose motto was Live and let live, urged that Ahmed Ibn was just a young fellow trying to get along and ought not to be treated too harshly, Purbach said Was that so? And Regiomontanus said Yes, that was so, and Purbach said that Regiomontanus made him sick. It was their first quarrel.

Tycho Brahe measured time by means of altitudes, quadrants, azimuths, cross-staves, armillary spheres and parallactic rules: and, as he often said to his wife when winding up the azimuth and putting the cat out for the night, nothing could be fairer than that.

And then in 1863 along came Dollen with his Die Zeitbestimmung Vermittelst Des Tragbaren Durch-gangsinstruments Im Verticale Des Polarsterns (a best-seller in its day, subsequently filmed under the title Purple Sins), and proved that Tycho, by mistaking an armillary sphere for a quadrant one night after a bump-supper at Copenhagen University, had got his calculations all wrong.

## THE OLD RELIABLE, 1951

There are, as everybody knows, many ways of measuring time, and from the earliest ages learned men have argued earnestly in favour of their different systems, with not a little bad blood, one is sorry to say, arising between the representatives of the various school of thought. Hipparchus of Rhodes, for instance, who had his own ideas on the way time should be measured, once referred to Marinus of Tyre, who held different opinions, as "Marinus the flat tire," which, though it was extra-ordinarily witty, was pretty bitter: and when Purbach and Regiomontanus were told the views of Achmed Ibn Abdallah of Baghdad, they laughed themselves crosseved. Purbach, who was a hard nut, said that Achmed Ibn Abdallah knew about as much about measuring of time as his grandmother's cat, a notoriously backward animal, and when kind-hearted Regiomontanus in his tolerant way urged that Achmed Ibn was just a young fellow trying to get along and one ought not to judge him too harshly, Purbach said "Oh, yeah?" and Regiomontanus said "Yeah," and Purbach said Was that so, and Regiomontanus said Yes, that was so, and Purbach said Regiomontanus made him sick. It was their first quarrel.

Tycho Brahe, the eminent Dane, measured time by means of altitudes, quadrants, azimuths, cross-staves, armillary spheres and parallactic rules, and the general opinion in Denmark was that he had got the thing down cold.

And then in 1863 along came Dollen with his Die Zeitbestimmung Vermittelst Des Tragbaren Durch-gangsinstruments Im Verticale Des Polarsterns – a bestseller in its day, subsequently made into a musical by Rogers and Hammerstein, who called it North Atlantic, a much better marquee title – and proved that Tycho, by mistaking an azimuth for an armillary sphere one night after the annual dinner of the alumni of Copenhagen University, had got his calcu-

lations all wrong, throwing the whole thing back to the melting pot.

The truth is that time cannot be measured. To George Finch, basking in the society of Molly Waddington, the next weeks seemed but a flash. Whereas to Hamilton Beamish, with the girl he loved miles away in East Gilead, Idaho, it appeared incredible that any sensible person could suppose that a day contained only twenty-four hours. There were moments when Hamilton Beamish thought that Something must have happened to the sidereal moon and that time was standing still.

The truth is that time cannot be measured. To Smedley, slumped in his chair on the terrace on the following morning, it seemed to be standing still... To Phipps, on the other hand, ... the golden minutes seemed to race.

To support his opinion, that the most important dimension of time cannot be measured, Plum ridiculed the attempts to measure time. How much of what he tells us about time measurement above is nonsense? Did he invent the persons and terminology himself? Wodehouse used to write nonsense quite deliberately and a fair question is: How much of this is nonsense? The first time I read it I recognized some of the names and concepts. I wanted to know: Are the others invented by Plum? Are the names and artifacts he mentioned connected with measurement of time? We are familiar with how Plum treated for instance literary sources when alluding to them. Did Plum treat scientific sources in the same way? Did he, as usual, make references with his own interpretations and did he deliberately make misinterpretations?

I found that all the persons and concepts mentioned in the quotes above have historical sources (see below). He picked names of real scientists from old times, and real instruments and concepts they used. Many instruments were not only used for measurement of time but for general astronomical measurements. The use of names and terminology from astronomy rendered his argumentation a scientific impression, made his text sound "serious", and he contrasted this with silly stories and dialogue, which were his own inventions. Plum often contrasted highbrow formulations with lowbrow and slang. He mixed old concepts, which sounded strange, funny, like abracadabra, with everyday language, slang. He mixed scientific terminology, like "azimuth", with jargon, like "yeah". I think this is just what we could expect from him. He treated quotes and references to old literary texts in the same way. I am one of his readers who appreciate this kind of jokes.

It has been said that Plum's whole world is anachronistic, that Jeeves and Wooster and the world of Blandings are anachronisms. The word anachronism usually means old-fashioned or out-of-date, but it is also used for everything that is misplaced in time. The error to place something modern in an old context is also called a prochronism (Wikipedia), but often the word anachronism is used also for prochronisms.

Anachronism and prochronisms in literature and in movies are often made by mistakes, but Plum deliberately used this kind of misplacement in time as a comic devise. In the quote from "The Old Reliable" he put in no less than three jokes with time of this type:

- 1) Hipparchus had heard of Marinus of Tyre, but Marinus lived hundreds of years after Hipparchus death.
- 2) The ancient astronomists used twentieth century slang in their fictive dialogue.

3) Hipparchus made a joke about two words with the same pronunciation: The place Tyre and a (flat) tire. A flat tire, with a puncture, must mean an inflatable tyre. But the first patent of inflatable tyres (tyre is British and tire is American spelling) did not appear until the middle of the nineteenth century, long after Hipparchus' death.

Plum must have made comprehensive and impressive research when he first wrote the passage about time in The Small Bachelor. I can't imagine that all these names and concepts were remaining fruits of his education as a boy? Natural Science was not his cup of tea.

Below I have collected some information about the astronomers and the concepts which Plum used. (Sources: mostly Wikipedia and Wikiwand.)

**Hipparchus of Rhodes:** Greek astronomer and mathematician (around 190 BC - around 120 BC). Considered a founder of trigonometry. Hipparchus proposed dividing the day in 24 hours with the same length. The Egyptians also divided the day in 24 hours but with varying length. Based on astronomic observations of the sun and earth he calculated the length of one year to 365 days 5 hours and 55 minutes. This calculation demanded that he used more accurate instruments than a sundial. He possibly was the inventor of the astrolabe (an analogic calculation device, a handheld model of the universe) and the armillary sphere (see below).

**Marinus of Tyre:** Greek geographer and mathematician (around 70 -130). Marinus' scientific works are only known in second hand, from Ptolemy. He calculated the equator with an error of about 18% but he is not known for obvious interest for measurement of time. Well, Plum anyhow deliberately ignored historical and scientific facts. He grasped the opportunity to joke about scientific references and about Hipparchus and Marinus.

Achmed Ibn Abdallah of Baghdad: (766 - 869) More known as Achmad Ibn 'Abdallah Habash al-Hasib al-Marwazi, a Persian astronomer and mathematician who lived and worked in Baghdad. He described the trigonometric ratios: sine, cosine, tangent and cotangent. He determined point of time by measuring the altitude of the sun. He also calculated the diameter and movements of the earth, the moon and the sun.

**Purbach**: More known as **Georg von Peuerbach**. Austrian astronomer and mathematician (around 1421 - 1461). He revived classical Greeks, for instance Ptolemaic astronomy, and developed both theories and tools for astronomy, like sine tables that could be used for predicting eclipses of the sun and the moon. I can't see how his works are relevant for the measurement of time.

**Regiomontanus**: Johannes Müller von Königsberg (1436 - 1476) was mathematician, Astrologer and astronomer, active mostly in Vienna. His works were essential for Copernicus and for the development of his heliocentrism. Maybe Regiomontanus also had arrived at the theory of heliocentrism. He studied for and collaborated with Georg von Peuerbach. Plum's dialogue between Purbach and Regiomontanus is realistic so far that they knew each other, but the words are of course Plum's imagination. Work on measurement of Time? Pope Sixtus IV called Regiomontanus to Rome to work on a planned calendar reform.

**Tycho Brahe**: Danish astronomer (1546 - 1601). Made more accurate observations than anyone earlier. He built his own astronomic instruments for these measurements. But works on measurement of time? In the paragraph about Tycho Brahe Plum used some concepts which are relevant to astronomic measurements, but not specially for measurement of **time**.

**Dollen**: Better known as **Johann Heinrich Wilhelm Döllen**, a russian astronomer (1820 – 1897). Among his works is the title which Plum correctly quoted: **Die Zeitbestimmung Vermittelst Des Tragbaren Durchgangs-instruments Im Verticale Des Polarsterns (1863).** 

I suppose that Plum found this German title irresistibly comic! "Zeitbestimmung" is about how to measure the exact point of time at a certain place on earth. As time depends on the rotation of the earth this is an astronomical question. To decide midnight exactly is not possible with a clock. It is a question of astronomy. The story about Dollen and Tycho Brahe is of course funny fiction by Plum.

**Altitude**: The altitude of a star is the angle above the horizon. The instrument Altitude is a quadrant to measure this angle.

**Azimuth**: The azimuth of a star is the angle measured eastward from north along the horizon.

**Quadrant**: An instrument used to measure angles. Brahe constructed large mural quadrants to measure altitudes and azimuths in his underground observatory Stjerneborg.

**Cross-staves**: A cross-staff is a navigational tool to measure the angle between the horizon and a celestial body (altitude). An older instrument than the sextant.

**Armillary sphere**: A model of objects in the sky consisting of spherical framework of rings, centered on the earth ("Ptolemaic") or on the sun ("Copernican"). It represents a celestial coordinate system for specifying positions of celestial objects at certain times. Brahe used armillaries in his observatory Stjerneborg.

**Parallactic rules**: Probably Plum refers to **Parallax** which is the difference in apparent position against the background of an object viewed from two different places. It is measured as the angle between the two viewpoints and the object. The **rules** Plum alluded to may be optical "laws" like: the more distant an object is the smaller is the parallax angle.

Today it's easy to "google" everything, and to check it with Wikipedia. When Plum wrote his texts, he must have collected names and concepts from books or other sources about History of Science. However, he didn't primarily seek *facts*, but *words* that stimulated the fantasy, and which he could use in his own way. His sole goal was, as usual, to amuse, absolutely not to educate or to convey scientific "truth".

Thirteen years earlier than in "The Small Bachelor" Wodehouse very shortly commented in a similar way on the difference between the subjective perception of time and objective measurement of time. In "The Little Nugget" (1914) he wrote: *Time is a thing of emotions, not of hours and minutes, and I had certainly packed a considerable number of emotional moments into my stay at Sanstead House.* An echo of St Augustine.

Above I looked at his references to astronomers. Let's also take a quick look at philosopher's thoughts on time, even if Plum didn't openly refer to them. Time is fundamental for our understanding of everything around us. Time is implicated when we use words like "when" and when we think and talk about development and change of any kind, about motion, about all kind of processes, yes about life. We imagine time as a flow from the future through the present to the past, but *what* is it that flows? We are aware of the effects of time but, as time is intangible, it's impossible for us to grasp the inner essence of it. St Augustine recognized this difficulty. He wrote: "What then is time? Provided that no one asks me, I know. If I want to explain it to an inquirer, I do not know."

St Augustine found both past, present and future time problematic. We deduct that time, even if it is intangible, exists because we can observe evidences of it. St Augustine argued that future time and past time do not exist in the same meaning as physical objects exists. Past and future exist only in our minds. We can reach neither past nor future time and measure it. But the present time? St Augustine doubted that present time "exists". Even the shortest moment of

time can be divided into still shorter moments, in infinity. However small moments we consider, we can never define a *smallest* moment that could be called the present moment. St Augustine also found the concept of eternity, as indefinite time, hard to understand.

Aristotle, long before him, had referred to the present moment as a knife edge without thickness that separated future and past. (https://www.thecollector.com/what-is-time-st-augustine/)

The ancient Greeks used two words for time: Chronos and Kairos. (Wikipedia)

- Chronos was used for the ticking, chronological, quantitative time, measured by calendars and clocks, based on movements of the sun and the moon. Chronos is the origin of the word anachronism, mentioned above.
- Kairos was used to express a qualitative dimension of time, the proper time for actions, independent of clocks and calendars.

Plum was not interested in Chronos, only in Kairos, in how people experienced time in a qualitative sense, of how they spend their time, used it, and their feelings about it. I don't remember that he ever wasted time or paper on accounting for accurate measurements of the duration of the various activities of his characters. When he for instance wrote *There is a time for studying beetles and a time for not studying beetles*, (Right Ho, Jeeves 1934) he used time in the meaning Kairos.

Plum didn't openly refer to the thinking on time of the old Sumerians or Egyptians. Nor to old philosophers like St Augustine, just to astronomists. But there are clear similarities between Plum's views and St Augustine's. He often made hidden allusions, but is that the case here? I don't think so. When Plum used hidden allusions, it was his habit to give hints to the reader by making some twist so readers who recognized the original were able to discover it and smile. I have not found any such twist. Plum stressed what the Greeks called the Kairos meaning of time, but my conclusion is that he didn't consciously allude to their Chronos/Kairos dichotomy. Maybe he was not aware of these concepts.

Much of the writings by St Augustine was preserved to the after-world, and he was very influential on later thinkers. From the way Plum wrote about time I find that he was influenced by the thinking of St Augustine, but I can't find that he was aware of it. In the two quotes above, Plum alluded to astronomers. He alluded to measurement of time, to physics and astronomy, but I can't find that he here alluded to philosophers, neither openly nor hidden. In other occasions he alluded for instance to Schopenhauer, Spinoza and Nietzsche, but not concerning time.

Plum was a master of writing a delightful entertaining nonsense in order to spread sweetness, light and joy. When the Goodale brothers the other year made a scenic version of "The Code of the Woosters" they named they play "Perfect Nonsense". Some of his nonsense I would like to call *qualified* nonsense. What I mean is this: It is absolutely not necessary to have knowledge about the astronomers or the instruments and concepts which he mentioned to understand that it is nonsense and enjoy it. However, if you have some back-ground knowledge you can appreciate other, often hidden, qualities which make it *qualified* nonsense. In the same way his hidden allusions, deliberate contortions and misstatements of old literary writers is qualified nonsense. He picked a formulation from one context and placed them in a quite different context with a comic effect. When we recognize the original formulation, the original context, Plum's version becomes still funnier, a more *qualified* nonsense. For me the word nonsense does not implicate worthless! How can nonsense be worthless if it makes you laugh and makes life

funnier and easier to live? Plum's allusions, for instance to the Bible, are much funnier when you're familiar with the original formulation and the context in the Bible. Then you can discover and fully appreciate his twists and his deliberate misquotes. It's the same way with these allusions to Astronomy. Long live Plum's Nonsense, both when his characters are just drivelling, as Aunt Agatha accused Bertie to do, but especially his qualified Nonsense!

Above we have stressed the difference between measured *objective* time and experienced *subjective* time. There is another complication with objective time that Einstein discovered: Time is not something absolute but *relative*. Note: That time is relative is NOT at all the same thing as that it is subjective! The relativity of time is a physical phenomenon. It shows that time measurement is much more complicated than Tycho Brahe and the others ever could imagine. Scientists, metrologists today discuss how to measure time on the Moon. An implication of Einstein's special relativity theory is: Time ticks faster on the moon. The length of a second is relative and depends on gravity. The difference between time on the Moon and the Earth is not big: When a year has passed by a clock on the Moon there is still about 20 seconds left of a year on the same clock on the Earth. Einstein described the relativity of time already 1905 in his special relativity theory. (E. Gibney: What time is it on the Moon? Nature 24 January 2023)

Did Plum ever allude to Einstein? He didn't allude to him or his theory in the two quotes above, but once he touched the concept of four-dimensional space-time in modern physics in one of his short stories. He didn't refer openly to Einstein or to his special relativity theory, but he explained inexplicable events by referring to "the Fourth Dimension".

This was in "The Amazing Hat Mystery", 1933. The inexplicable problem was that two Bodmin-hats didn't seem to fit their owners! Bodmin-hats always fitted! It was quite impossible to imagine anything else. In the story one person seemed to have a too small hat and another a too large hat. Both Bodmin-hats. A true mystery! The general consensus of opinion is that it has something to do with the Fourth Dimension. You know how things do. I mean to say, something rummy occurs and you consult some big-brained bird and he wags his head and says "Ah! The Fourth Dimension!" A mix-up between the two hats could offer a possible explanation to the mystery, but this solution was rejected. No, I prefer to think the whole thing, as I say, has something to do with the Fourth Dimension. I am convinced that that is the true explanation, if our minds could only grasp it.

Plum explained a mysterious phenomenon by referring to a new concept he had heard of. His formulation suggests that the concept was beyond his understanding, and that he trusted it to be the same way with his readers. Einsteins special theory of relativity (with the famous formula  $E = m*c^2$ ) was presented already in 1905. His general theory of relativity was presented 1915. Einstein and his relativity theory was world famous when Plum wrote this. The relativity theory offered explanation to phenomena inexplicable with Newtonian physics. Plum knew about this and perhaps also of remarkable consequences of the theory like the "twin paradox" (about that time runs faster in high speeds). Plum created an everyday mystery and used this theory as explanation. Later he mentioned Einstein as an example of a famous person (Full Moon, 1947, Stiff Upper Lip, Jeeves, 1963, Sunset at Blandings, 1977), but he never again referred to relativity theory, as far as I could find. Plum's view on time was that it is experienced subjectively.

Finally: a few other examples where Wodehouse touched on different aspects of time:

- Ecclesiastes Ch. 3: "To every thing there is a season, and a time to every purpose under the heaven: A time to be born, and a time to die; a time to plant, and a time to pluck up that which is planted..." (King James Bible). Plum contrasted these philosophical thoughts on life with funny down-to-earth observations:
  - o *There is a time for studying beetles and a time for not studying beetles.* (Right Ho, Jeeves 1934).
  - O There is a time to speak of eggs and a time not to speak of eggs. (Young med in Spats 1936).
  - There is a time for worrying about pigs and a time for not worrying about pigs. (Galahad at Blandings 1965).
  - o *There is a time for reckless courage and a time for prudence.* (Nothing Serious 1945).
  - o There is a time for reeling and a time not for reeling. (Scratch Man, 1940)
  - o *There is a time for girlish frivolity and a time when it is misplaced.* (Stiff Upper Lip, Jeeves, 1963)
  - There is a time for tickling cats under the ear and a time for not tickling cats under the ear. (The Old Reliable, 1951)
- Before long, he was suffering from a feeling that he had been climbing this ladder all his life. The thing seemed to have no end. (Money for Nothing, 1928)
- "What do ties matter, Jeeves, at a time like this?" ... "There is no time, sir, in which ties do not matter." (Very Good, Jeeves, 1930)

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It's a great gift to have a son who is a fellow Plum fan! Frans has given me invaluable contributions which have improved this essay. THANKS laddie! All mistakes are mine!

Space-time: Ödeshög Sweden, February 14, 2023.