

Browser issues? This embedded redundant Portable Document File version (pdf) may Eventually help to at reach the content of this site, which you are attending here.

Welcome to the pages translated into English from this site —

From: <http://www.antagonica.dk/>

page 1

created: 05.07.2009

PDF version 1 – by Bent Kargaard Nielsen

These pages are dedicated to the propagation of new knowledge about the Michelson-Morley experiment in English.

The author of the book has, as also presented on the Danish front page of this site, found critical evidence of logical flaws in the Michelson Morley experiment. Therefore the next pages are created to let you inspect the validity of these observations in order for you to draw your own conclusions.

More material – of what we think of as an even more mind catching type – is planned – This to make the nature of things more easily digested. But for now we hope that with some effort, it is possible to figure out what until now has been a well kept secret, or a not well understood fallacy:

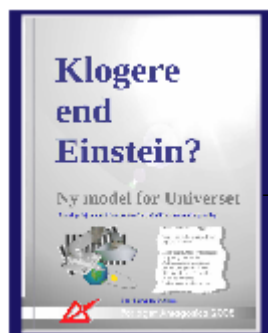
NOTE: For your convenience, some material, which may only be of specific interest to a Danish speaking audience, has been left out — For instance details that has to do with a competition that demands reading the Danish edition of the book in order to compete in a review contest.

Otherwise: Without being too meticulous, the material is to the best of our efforts as close as possible to the content of the Danish pages that are originally published in the editors native tongue.

We hope you will enjoy your visit to our site —

And if you find the material useful — or eventually even enlightening — We would certainly be pleased, if you would share this experience with others, telling them or eventually even export a link to them to this site.

The Michelson-Morley experiment is logically inadequate and its (by the way falsely interpreted) null solution cannot thus support Einstein's Relativity Theories.



This is an English version of parts of some key-content taken from the book entitled "Klogere end Einstein?" (Brighter than Einstein?)

— In essence freely translated by the author himself from this (otherwise not yet translated) book in Danish. The book contains a comprehensive anal-

ysis of several themes, covering what the author sees as poorly based beliefs in the foundational elements of modern (astro)physics. Here is a key-point made public. — To serve the international physics community. (See eventually the translated index of the book for further information.)

Should light beams be considered to be intelligent?

Background

Now — You may have read, or you may have been told in physics lectures, that the 1887 interferometer based experiments on light speed, performed by Albert Michelson and Edward Morley, were ended with the firm beliefs that there were *no* conclusive direc-

tional effects measurable on light, locally travelling in two different directions. *This, unfortunately, is a right out lie!* And... Yes! it is probably now finally time to be expressively fierce about this deceiving statement.

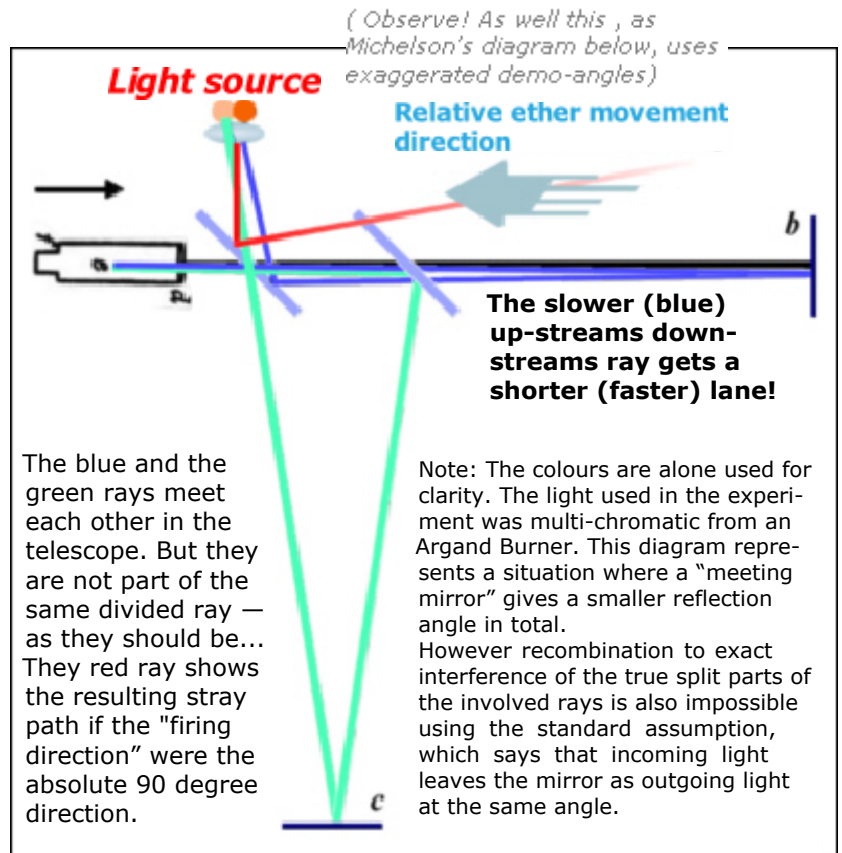
Such change of light speed, measured against one direction and another, was supposed to exist and to be measured as a function of the Earth's presumed movement through – and relative to – an "Absolute Frame" of a "World Ether." This World Ether (sometimes spelt Aether) was thought to provide the medium for any type of the then identified electro magnetic waves – And thus also light.

But! – It was to some an (as mentioned certainly not quite correct) impression of the outcome of this Michelson – Morley experiment, that it should yield a null result. The fact is, that Michelson and Morley *did* observe *systematic* fringe shifts due to reorientations of the light movement axes. They however also – as a fact – calculated these to be *only* one fourth – or with every statistically precaution considered – *at most one sixth* of what they expected.

(If in doubt please consult the original 1887 paper from The American Journal of Science – (See external inks)

Now, here it is! The error overlooked by tens of thousands dedicated scientists for more than a century. Here two completely different rays meet and form the interference patterns — They should be re-united parts of the same ray to make it work!
— And how could that oversight happen!?

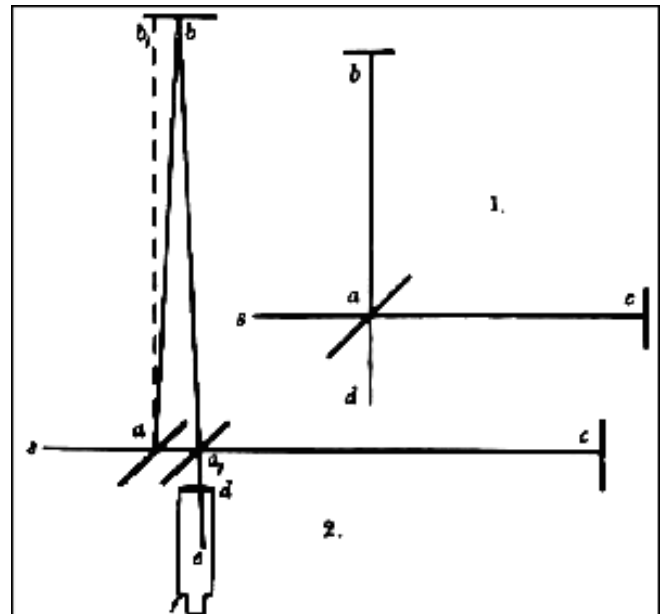
(The next pages tells the story behind this)



Notice that the ether wind and the resulting, actual ray-lanes in the above shown diagram call for a lower incident point for mirror-meeting rays, and that there is a need for an earlier meeting point concerning rays, hitting the "fleeing" side of a mirror. It just has to be so, in order to provide reflections that end in the middle focus of the telescope. Therefore *this asymmetry* makes it impossible for rays from the same split-ray origin to meet again at most orientations of the system and thus create the expected interference patterns from rays of the same origin.

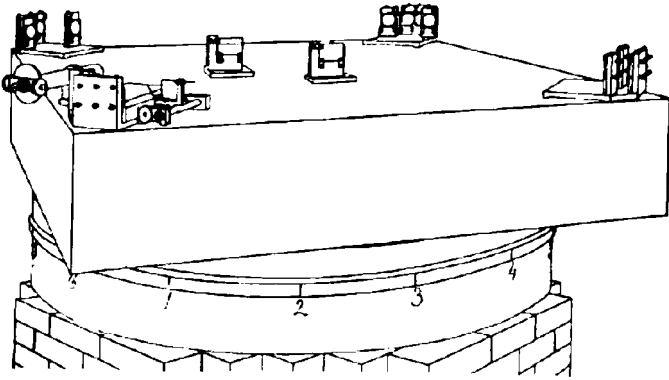
The Michelson-Morley experiment firmly assumed the metric distances to be always the same for those rays that met in interference, and it was likewise assumed that the rays that were responsible for the interference patterns were meeting parts of the same, previously split ray. Furthermore the lanes were assumed to follow a route inside the setup, that, with reference to the stone plate and mirrors, were of the exact same length!

Note: Perhaps one of the reasons why this geometry problem was not detected can be seen to the right: In this diagram Michelson has drawn a situation, where the 'a' mirror is fleeing. And if his colleagues had read the supplement of his article, they could have drawn the (not clearly supported) conclusion that a wider (fleeing) angle (s a b) was presumed and correct.



Further explorations concerning the above mentioned logical oversights by Michelson and Morley and their successors will be considered on the next few pages.

How the Michelson Instrument was Supposed to Work



Above: The rotational setup of the mirrors, of the light source and telescope. (3D drawing in *The American Journal of Science*)

The main research idea is to split a light beam into two parts using a semi-silvered mirror. These split beams are then reflected back and forth in several mirrors, thus making the split beam-parts travel through two different light paths. These light paths are separated by approximately 90 degrees, which make the beam parts cover several meters in directions perpendicular to one another. This happens before the reflection paths directs the beams back to the same mirror that split them. The same tilted mirror will then partly help to re-unite these beam-parts as it sends portions of the beams back into a mutually converging direction.

Due to this meeting a set of striped interference patterns can be seen in a magnifying telescope, if the mirror-setup is properly calibrated. Now, if the whole setup is gently and slowly rotated, the interference pattern will be seen travelling sideways in the telescope in one or the other direction.

This can be measured relatively to a fixed marking on, or at, the telescope lens. It was this movement of those fringes of interference patterns that Michelson and Morley sat out to measure.

They did so because they believed that such movements would indicate, how great the influence of the Earth's movement through an unseen World Ether could actually be. They assumed that they would measure a displacement of the fringes equivalent to a relative World Ether speed of about 30 km/s, which is the Earth's deduced travelling speed around the Sun. The design was based upon the assumption that what caused the interference fringes to move, would be an effect of distance differences that the rays had encountered through their movement in different directions, and that this would be measured by the effects originating from a true recombination of the split beams.

They also ensured an optical lane equality, as they had an extra piece of optic glass positioned in the beginning of the lane of those rays that were first reflected from the front side of the slanted mirror. This is how Michelson and Morley secured that both ray-parts would travel equal distances in glass.

Very thoughtful indeed.

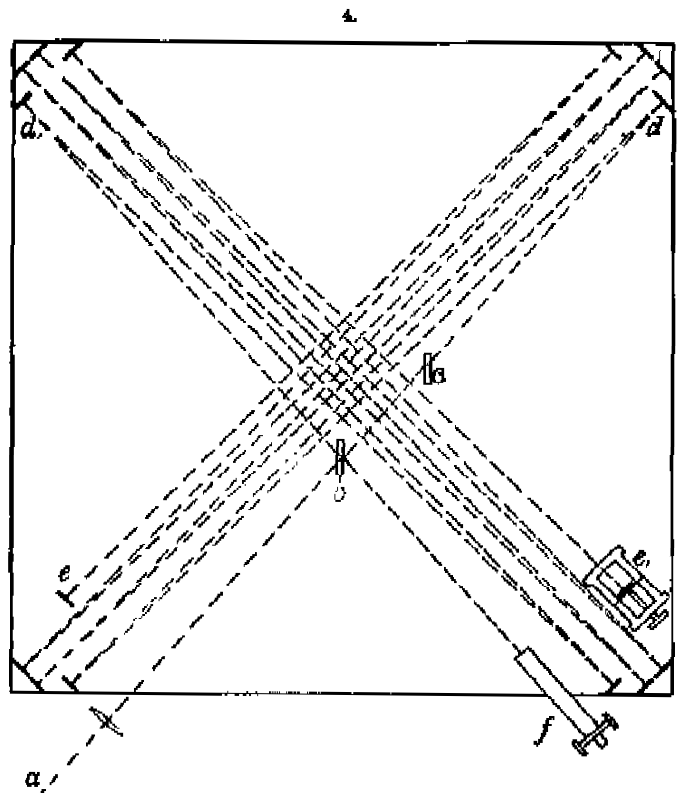
Nevertheless it became evident that the instrument set-up — although providing fringe shifts while rotated — could not work in a way that could yield the results that theory assumed it would provide. Michelson and Morley calculated that the measured fringe drift only indicated an Ether speed of one fourth to one sixth of the expected value.

What could eventually be wrong?

The main issue here is that light beams cannot by themselves compensate for the increasing or decreasing influence that the shifting direction of the relative Ether-flow would have on the individual beam parts if the instrument was shifted i.e. rotated after the calibration. And this is, of course, exactly what the design dictates ought to happen.

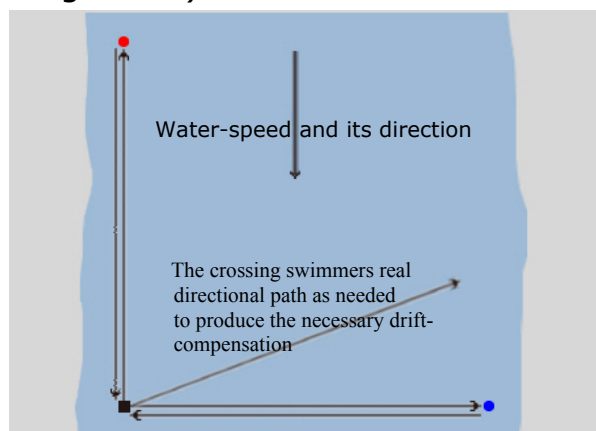
For the setup to work correct, the leaving angle from the light source should be proactively altered by the beam itself in accordance with the in- or de-creasing directional angle of attack from the induced, relative movement of the Ether wind, passing the Earth.

(Continued on next page)



How the instrument supposedly worked (continued) and about the built in error.

How could it happen that this many scientists have managed to avoid spotting the error? Well – As mentioned, just about every scientist in the field knows the analogy Michelson used in order to explain the over all ruling principle concerning the velocity variation for two different directions in the instrument. This analogy was concretised using two swimmers in a river. (See drawing below)



Two equally fast swimmers jump into a slow streaming river to contend.

They swim exactly the same distance measured relatively to the banks, and they turn at points equally distant from the starting position, to which they return. Now it turns out that the swimmer going up-streams down-streams will arrive later to the goal than the river-crossing person.

(Short sample calculation:

Conditions:

Distance to the turning point, 100 feet.

velocity of both swimmers, 5 feet pr second.

River flow speed, 3 feet pr second.

Calculation for the up-down-stream swimmer:

Up-streams to turning point is $100/2=50$ seconds.

The down-stream leg takes $100/8 = 12,5$ sekunder.

Therefore the total up-down-stream time equals:

62,5 seconds.

The across rushing swimmer's time (according to the Pythagoras theorem) is:

4 feet pr second both ways.

That in total equals $200 / 4 = 50$ seconds.

The across racing swimmer is thereby 12,5 seconds faster than the up-down-streams going.)

Now – as a scientist you may have been busy checking, whether Michelson's idea really *is* valid, and that the Pythagoras theorem, the sum of the squares of the catheters equal the square of the hypotenuse, really works. If you then find that something that goes up and down streams really *has* to be slower than something that goes across, given the same speed in the stream, then your content about the truth of the calculation may have left you think that the rest of the Michelson experiment also should work as he has presumed.

But – that is not the case!

Three things has escaped the brilliant scientific minds:

a: Beams of light *are not* intelligent! Therefore they cannot – as humans can – correct their course towards the goal. They cannot re-adjust so that a course is always best, concerning the directions to the goal as related to the changing force and the actual direction of the current. This – for light – inapplicable need to *be able to auto-correct* a line of "firing" – in order to continuously reach the same interference spot in the telescope during the process of apparatus rotation in the assumed current – hampers the total efficiency of the experiment. Such a self correcting regulation of the involved rays of light is of course not possible.

(Continued on next page)

(continued...) — about the built-in error

This is why we have a situation where now other beams of light than the previous ones arrive and create interference.

B: The two parts of a split ray *cannot* have the same leaving angle, as one of them is influenced by the assumed ether-current for a longer period of time than the other one, before it is reflected back into the telescope in a near 90° angle.

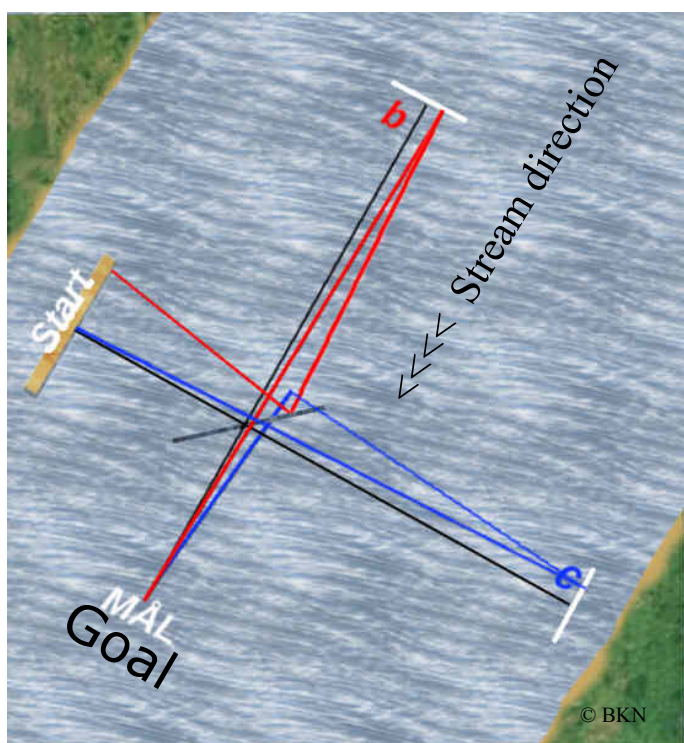
C: Consequently - In most cases this means that it will be rays *with different leaving positions* at the light source that at any given time will meet one another and thus end up in the telescope and create the actual interference patterns. They will not very often be parts of the assumed same split ray.

It turns out that this fact may have a profound influence on the over-all sensitivity of the instrumental setup.

Perhaps most surprising in this context is, that the more modern the set-up is, the more it tends to deliver a "near null" result. This is what happens because lesser distance from the light source to the beam splitting mirror gives lesser sensitivity.

It is in fact the (enlarged) effect on the course of the ray, from the source to the beam-splitter, that is responsible for the variation that the set-up can produce at different positions during its rotational phases.

Perhaps it is easier to understand what has been overlooked by showing this *much more precise* version of the analogy with not just two, but several blind swimmers in the river:



The differences in this diagram, as opposed to the sketchy version of Michelson's basic Idea on the previous page is, that the start positions and the goal position have been translated to pose two different positions – exactly as in the real setup. Also think of the light beams as represented through a multitude of blind swimmers. These are sent towards a floating barrier. Here the 'blue' swimmers are instructed to duck under the mirror-representing float line, which imitates the slanted mirror. However, the second time they meet the barrier they let themselves be "reflected" towards goal. The 'red' swimmers are reflected the first time and they duck under the second time. Only swimmers with correct angles to the "mirrors" as a function of their off-set direction will reach the correct interference position at the goal. Red and blue lines represent the virtual distances and directions and the de-facto used angles. Notice the red swimmers "cheating" start-point. Angles needed for the slow route shortens the over-all distance, making route-time effectively faster than Michelson assumed it would be! The whole arrangement, can be turned in the river.

Historic Conclusions

What can be asserted as a minimum is, that the experiment performed by Albert Michelson and Edward Morley in 1887 concerning the speed of light, worked in ways that these gifted fathers of the experiment were unaware of.

Reasoning errors due to a not quite true translation of an otherwise brilliant principle into the actual instrumental set-up, made these capable physicists unable to deduct the correct values from their experimental data.

This – and the mechanism behind the following puzzling results have been transferred to numerous re-testing set-ups performed by several brilliant experimental physicists – Among others the dedicated and esteemed Dayton C. Miller, who spent more than twenty years trying to perfect this type of measurement method.

If Michelson - And Miller - had been able to take these instrumental peculiarities into account, then Albert Einstein would hardly have been able to view the results as a proof of light speed being a constant.

– Also, the idea of no relativity in light's movement towards an observer, no matter the speed differences between the two, would probably not have been put forward.

Only other types of experimental setups can disclose with certainty what amount of ether-drift that exists at any given location. At least "something" *is* going on. The Sagnac Effect, the "not null result" that Michelson and later others obtained, combined with the data from Dayton Millers research, together with periodical red-shift in double stars – All this builds a very strong case against the constancy of light speed.

These conclusions are used as the background knowledge in the book which should be translated into English within a year or two. At least that is what is planned. (But! no guarantees are issued!)

However – From these conclusions the author took the liberty of taking a fresh look on several *other* major beliefs that has long been accepted and served as valid foundational dogmatic viewpoints in mainstream physics and astronomical-physics.

And it is almost redundant to say this, but:

What the author saw (coming from a recent background concerned with logical AI-programming) was not the expected, well controlled, *solid logically* based science as he had expected.

Naive beliefs and incomprehensible conclusions clearly beyond all healthy logic exists at the very foundation of physics. Not only had the Michelson and Morley experiment and several succeeding experiments been misinterpreted, but other beliefs of foundational character was – in the eyes of the author – severely flawed, when seen from a purely logic, analytical viewpoint.

To mention a few: The suggested timeline in "Big Bang theory." "Strange" geometry used to back up curved space and tensor ideas. The particle/wave duality reasoning. Time as considered to be a physical entity.

Please think for yourself! This is what the author suggests that you do. – Not claiming he is right in every true scientific sense of the word. That would be unscientific.

But any healthy mind can, with some efforts, see numerous faults within the present scientific framework of accepted theories – If they allow themselves to do so.

Publisher by no choice — (22 polite refusals from now fellow companies)
— and author of the book in question —

65 — and soon 66 — But whom we are...

Yes.. Whom “we” really are? That’s a tough question to answer —

For the time being I have to run my small publishing agency, and in this capacity, I (we!) am/are the indisputable decision maker(s) and policy drafter(s) and in command of four more or less cooperating desktop- server- and portable computers while doing all the necessary “little” nitty-gritty things such a business demands.



The business side of the trade is a learning by doing process. But that’s all right. In fact learning and understanding (and some times teaching) has – throughout my life – been the primary incentive to get up in the morning and past my once in a while nagging health issues. That is if - of course my attention was not called for in some more specific ways in order to provide for a living.

Hard to grasp, impossible to understand, stubborn as – well, you know... “down under”

Flexible and yet sometimes impossible to move an inch – Having a long term patience far above average and yet sometimes a very short fuse. A measured IQ of 160 + .. Oh... Well... that’s more than twenty five years ago... And to day I often feel just as stupid as ever. Nevertheless:

I am hard to impress, and if I find something that bothers me, I try to find solutions. Also nobody are so big that they, if deserved, cannot be cut down to size. Myself included. And if I in the scientific fields do encounter anything that does not measure up to standard, I do not hesitate to investigate its implications — and — if important enough — to try to correct the situation, if I think I can grasp what is wrong...

This is the short version behind my attitude towards the scientific community of to-day and especially the bulk of scientific beliefs that — for the time being — rules the knowledge-industrial theatre and the minds of too many (astro)physicists.

Nevertheless

I shall try not to evade the question of whom I am in too obvious ways...

A good all round description might in fact be encompassed by the “title” ‘DaVinci Light’ which some good friends now and then like to tease me with.

Yes! Sure! I do think humans — adequately equipped — can fly solely by their muscular power! Yeah. I know it has already been done. But that winged bicycle-design can most certainly be substituted with a far more elegant and almost practical design.

Dodging again? Let us be creative and try a table:

Year	Occupation	Primary interest	Secondary interest	Tertiary interest
0-3	Imaginatory play	Mom/dad Sing / read with	Cuddle toys Sister mec.Toys fire truck	Philosophy (why am I me!?) pillow fight
3-6	Imag.fight Role construction play	Mechanical or figuine / build toys	Mom / dad reading adventures	Wrestling bicycling ball and table games
6-9	Reading role-play school drawing	Wild animals Toys el motor read cartoons	Hero History mythology	Avoid eat meat Sme girls are swt
9-12	Reading play drawing school	War History ww2 Arcafts warships	Ancient warfare technology	Astronomy football modern warfare
12-15	Read'n draw'n warplane spotting	History astromy World Litterature	Tecnology girls chess sailships	Napoleon warfare cars nuclear theory
15-18	Reading drawing inventing painting	Inventing new transp.techniques	Philosophy Computer theory	Any fields hereafter implicit contain girls!
18-21	Drafted! reading writing novels	Psychology philosophy running	Reclaim health from lurking back injury	Politics educational possibilities
21-24	Adult college student of psych.			Care about family
24-27				

And more to come
This site is still
under construction
and here is a good
place for contem-
plating enhancements.
Don't you think?

This, just to let you have a glimpse — which means — showing a preliminary translation of the chapter headings and the short chapter résumés of the mentioned, but otherwise not yet translated book in Danish – A book which treats the below mentioned set of beliefs in modern physics.

Chapter headings and short résumés:

Introduction

A statement concerning the scientific foundations of the book, claiming severe dissatisfaction with the present situation in basic physics research, where intolerance reigns and some mythical beliefs are almost impregnable to healthy logic and accompanying experimental data.

Chapter 1

Strange things happen

About a fairly involuntary beginning of this research that became the foundations for this book.

– Commenting on a media-journalist with wild claims – igniting the investigations – And some self- and media criticism.

It all accidentally began while watching a Swedish TV-program. The young journalist claimed, that NASA had provided proof of the truth in ancient creation myths from several old civilisations. It was said that the Universe had been born from a celestial egg!

This was a factual misunderstanding, of course. It was based upon the similarity of a NASA-produced picture of the sky concerning the microwave background radiation. This Mercator projection, with the similarity of an egg, was falsely interpreted as such, and a totally weird story was spun around it.

Chapter 2

About a personal unease

A real unrest occurred while I – through the NASA home-page – was confronted with some elements of what I later on learned *did* in fact form a part of the "Standard Cosmo-genetic Theory". I was genuinely Baffled. Really!? Was it really true? That this wild "Big Bang" idea had become so widely accepted!?

Next:

A tour through my unexpected awakening to the late twenty one century beliefs of "modern Big Bang" reality within astronomy and astrophysics. Pondering on how it could be, that this had been established as an ideology and as a so widely accepted, assumed reality.

Chapter 3

Big Bang – The impossible Theory ?

A retrospect tour through hundred years of decent science, which nevertheless ends in a mystery. The ideological and scientific reasons for the strengthening of The Friedmann-Lemaître / Robertson-Walker edition of the "Big Bang" beliefs is presented, and some major objections concerning this illogical phantasy are mentioned.

Chapter 4

About the Michelson- Morley experiments. The beginning of a crisis within astronomy

What is the truth – Technically seen? The 1887 experimental sessions of Michelson and Morley revisited and described.

Historically this scientific key-experiment – and especially its postulated zero result outcome – does not agree well with night-sky observations that are also assumed to support the "Big Bang" creation of the Universe as a possibility. The red-shift of spectral lines – and observed blue-shifts for that matter – contradict the "official" interpretation of the Michelson-Morley experiments, saying, that light does not really behave as waves as its speed is a constant. Therefore logic tells us, that one or the other observations must be false. Two different and contradicting assumptions of aspects of the same physical nature of the same element cannot be assigned to pose as proofs of the same theory.

Chapter 5

An analysis of the Michelson-Morley experiment and its apparatus set-up.

A preliminary evaluation of its physical-geometrical assumptions – And thus the detection of a possible, general error. A renewed scrutinising of what was supposed to happen by once again reading the original paper, as presented by Albert Michelson in 1887 in "The American Journal of Science", had to take place.

– A presentation of the analytical steps that were performed. A contradiction of facts between what was described as the expected ray-dynamics, and what was presented through the drawings, is offered.

The misconceptions as they were step-wise deduced.

A presentation of what the Michelson text claims and what can be rationalised from the information about – and in – the actual diagrams, that should illustrate the presumed dynamics. It is shown what really ought to happen dynamically in the diagram by using the same accepted preconceptions that Michelson and Morley suggested were used.

A later revision of the interpretation of the believed dynamics, due to an alternative reflection hypothesis, found in the supplement attached to their main article, does not save the experiment from the thus detected, built in errors.

Chapter 6

– The impossible Big Bang beliefs.

Big Bang as a celebrated theory, which unfortunately is a mess of self-contradicting assumptions, weird reality proclamations and dynamic impossibilities.

This chapter is dedicated to an analysis that presents the logical inconsequence of the alleged observational realities that the "Big Bang supporters themselves say that they can use to support the "theory".

Furthermore a thorough "step through" analysis is offered in the appendix, to serve those, who have the presumed severe spatial-temporal, perceptual handicap.

Chapter 7

Is an alternative model for the Universe a possibility?

Summing up the presumed facts. A sketchy hypothesis.

Considering these presumed facts, due to the previous analysis, there might be a possibility for a conceptual turnaround. This gives a causal basis for explanations much simpler than those of to-days complex astrophysical beliefs. Beliefs that – by the way – are not always truly based on realistic causal assumptions.

Although certainly not elaborate (or perfect) in any aspect, the proposed model needs fewer basic foundational assumptions to support it, and may also solve some issues that are observed, but not treated in the existing theoretical framework.

Chapter 8

Turning to philosophy: Treating the sometimes very naivistic approach that uses logically obscure methods of thinking in modern theoretical physics.

How can you know *when* you know and *what* you know?

– The average physicist seems confused. What *is* causality?

A short "brush-up" tutorial is offered to the bewildered scientist, as it seems to be necessary to clarify what can be explained and how. The explanatory basis for some physical aspects in modern theory is not in line with standard causality. It is highlighted by example, that physics sometimes rely on the fairly skewed idea that you can *measure* yourself into a definition.

Chapter 9

About causality as seen in a historic perspective through classic philosophy.

Contemplating the art of observation and especially pondering about the construction of, and the need for, the use of well defined categories.

Socrates, David Hume, Newton and Immanuel Kant are referenced in an obviously much needed effort to resurrect the respect for accurate thinking. It is declared necessary to understand the in-exceptional nature concerning form and dynamic aspects when you define an entity that can be thought of as reliable as possible in a foreseeable future.

Chapter 10

More about the understanding of descriptions that involve causes and effects.

Nothing we know of about the surrounding physical world can be held perfectly true and absolute in its perceived essence. Causality is a *principle* for declaring, naming and measuring dynamics, and it is based on accepted and testable features of the dynamically responding and involved entities.

The causality based web of knowledge is not reality itself. Therefore the Bohr/Heisenberg claim, that causality is dissolved at nuclear size levels, is deemed to be absurd. What is *not* physical in nature (but of mental origin) cannot be "dissolved" due to (alleged) special physical circumstances.

Chapter 11

The emerging confusion about a causality based description of physics.

The double-slit experiments and the (naive but nevertheless) growing doubt among physicists concerning the validity of causal explanations.

– The double slit experiment of Thomas Young, and the duality claims brought about by his successors, due to new results from this type of experiments, are considered and investigated. Some of the results seem strange and the doubt is therefore understandable.

The logical and psychological impact of these seemingly paradoxical results may well explain the accept of the hence emerging, strange hypotheses, and it is argued that the not solved physics of these experiments were those that catered for *illogical duality* beliefs about the features of light.

Later on these illogically "confirmed" paradoxes paved the way for reality- and logic-dissolving ideas like super positional states in quantum theory and of multiple "shadow-universes" of a "parallel" (yet, however, strangely interacting) nature.

Chapter 12

Resistance against the exotic, anti-causality demanding "explanations".

About Schrödinger's cat.

– And a proposal for a causal based model which, through a wave involving explanation, may solve the mystery of the peculiar "one-at-a-time" observed "interferences" among discretely launched particles in double slit experiments.

Chapter 13

Geometry, the "truth" of mathematics, the concept of time and Platonic inspired, formal idealism.

Here begins an ideologically, rebellious engagement.

– Nothing wrong with religion. But it should not be mixed up in – and be mistaken for – being science.

In this chapter and in those that follows, a charge is mounted against the abundances of lurking (sub)religious beliefs that influence modern physics.

Also this Chapter includes an analysis, which is aimed at resurrecting true Euclidian geometry. Therefore views are presented that are in disagreement with views about geometry held by prominent theorists as for instance Roger Penrose.

Möebius-band based, geometrical ideas get a bashing. (An analysis of the Möebius band and its accompanying, improper conclusions is extended in a chapter in the appendix.) Also certain Einstein ideas are contradicted. The poor reality connections that exist in some of the physicists ideas are explained through the influence from the religious Newtonian heritage.

Citations from Roger Penrose's: "The Road to Reality" 2004 – are used to highlight some in-consequences flourishing in the – in some cases – too self-sufficient mathematically-idealistic habits of thinking.

Chapter 14

Sir Roger Penrose's subversive attack on physical realism is analysed.

His Plato-inspired ideas of "The Physical World", "The World of Mentality" and the "Mathematical World" are contradicted. The authors position is, that this idealistic three part system is a Platonic brain-child with just no correspondence to reality.

Chapter 15

More about geometry, mathematical idealism and realism.

Euclid – Definitions and idealism.

– About how old masters of geometry have impeded themselves with restrictions, and how they through such exercises have created myths about the foundations for other "geometries" and caused confusion about the possibilities within Euclidian geometry.

Chapter 16

Roger Penrose and the consequences as they unfold, due to the idealistic (and inadequate) foothold in the 5th postulate.

A story about the modern revival of Platonic idealism, and how this not very viable good-bye to realism has been an inspiration to seek unrealistic explanations. – This as a possible explanation on how it can be, that such gifted people can lose themselves in such reality depleted physical models, due to this idealism, which they mainly find supported by a clearly misunderstood set of strange geometrical ideas.

Chapter 17

Penrose, Einstein, time and force fields.

More about mathematical idealism, exotic geometry, pseudo constants and the measurements of time and space.

– It is shown that Roger Penrose (as with him probably even a great number of other theoretically working "physicists") has a fairly ambivalent relationship with the physical experiment. They really tend to believe, that what they reveal through mathematical pondering on chosen subjects should take precedence over matter.

Chapter 18

About the concept of time

Debating the erroneous perception of time as a real physical existing entity with the dignity of being a real "tangible" physical dimension.

– Furthermore it is shown to be the unrealistic, mathematically inspired, bi-polar thinking, that provides the framework for the idea of the reversibility of time.

Chapter 19

Analysing Entropy as a concept in – and through – systemic understandings while treating the concept of time.

Value concepts and their ignored relevance to the understanding of the concept of entropy.

It is shown that essential parts of the reasoning behind the concept of entropy is a psychological construction. It rests partly on a humanly biased value-concept, and it is thus without real significance to the physical reality.

Due to such ideologic based fallacies it can be demonstrated that unclear and to the involved physicists significant conceptual failures thereby can be uphold. They are however just fantasies based upon creative misunderstandings.

Chapter 20

It can only get better?

– A concluding chapter presenting the (naive?) hopes for the future of the author as to what the next years should bring about, when it comes to a more reasonable, tolerant environment for *real* experimentally based, causal supported science.

It also sums up what the author sees as the most menacing and fault-inducing beliefs held by the majority of the scientists that work within the realm of physics – and a strong recommendation to let go of such impeding views.

Headlines of what is explained and / or treated in extended depth in the appendix of the book:

Grand Unifying Theory

Big Bang

The interferometer

The Doppler-effect

The Möebius Band

When science becomes industrialised

Last call for sanity?

Author, Bent Kargaard Nielsen

Danish edition: dec. 2008

301 pages 321 DK kr. ISBN 978-87-992841-0-8

English edition planned.