
« La Terre est plate, ouvrez les yeux bande de moutons! »
Neil Armstrong
NASA
ARMSTRONG
Désinformation = manipulation : ne soyons pas complices

Dénialisme (de l'anglais 'd*enial*' = '*déni*')

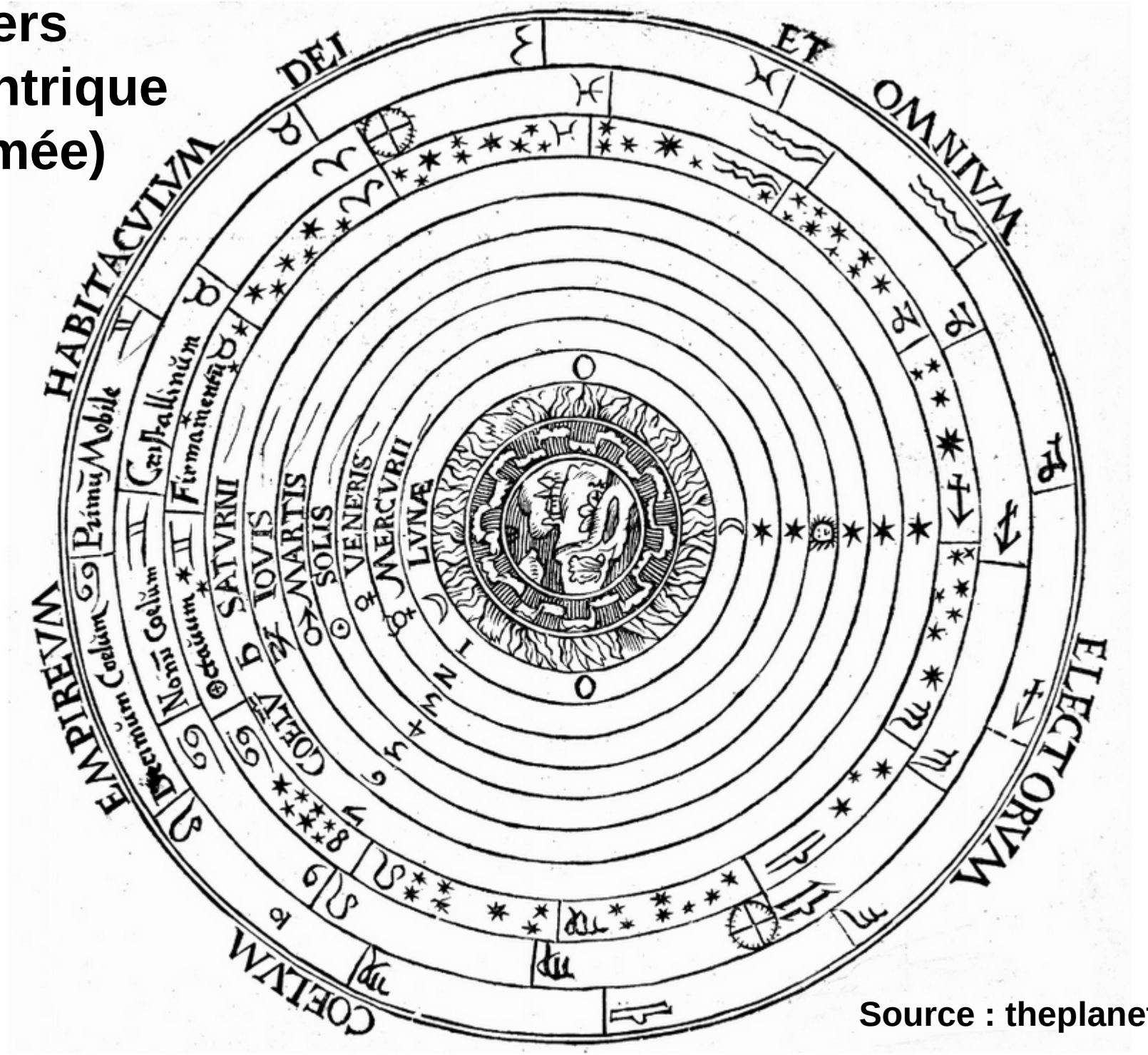
= Choix de nier un fait ou un consensus sans justification rationnelle = dénégation (psychologie comportementale).

= Comportement individuel ou collectif de malhonnêteté ou de laxisme qui consiste à ne pas prendre en compte un fait (sociologie).

= Rejet du consensus scientifique sur un sujet donné, en faveur d'idées radicales controversées à un niveau médiatique (philosophie des sciences), p. ex. :

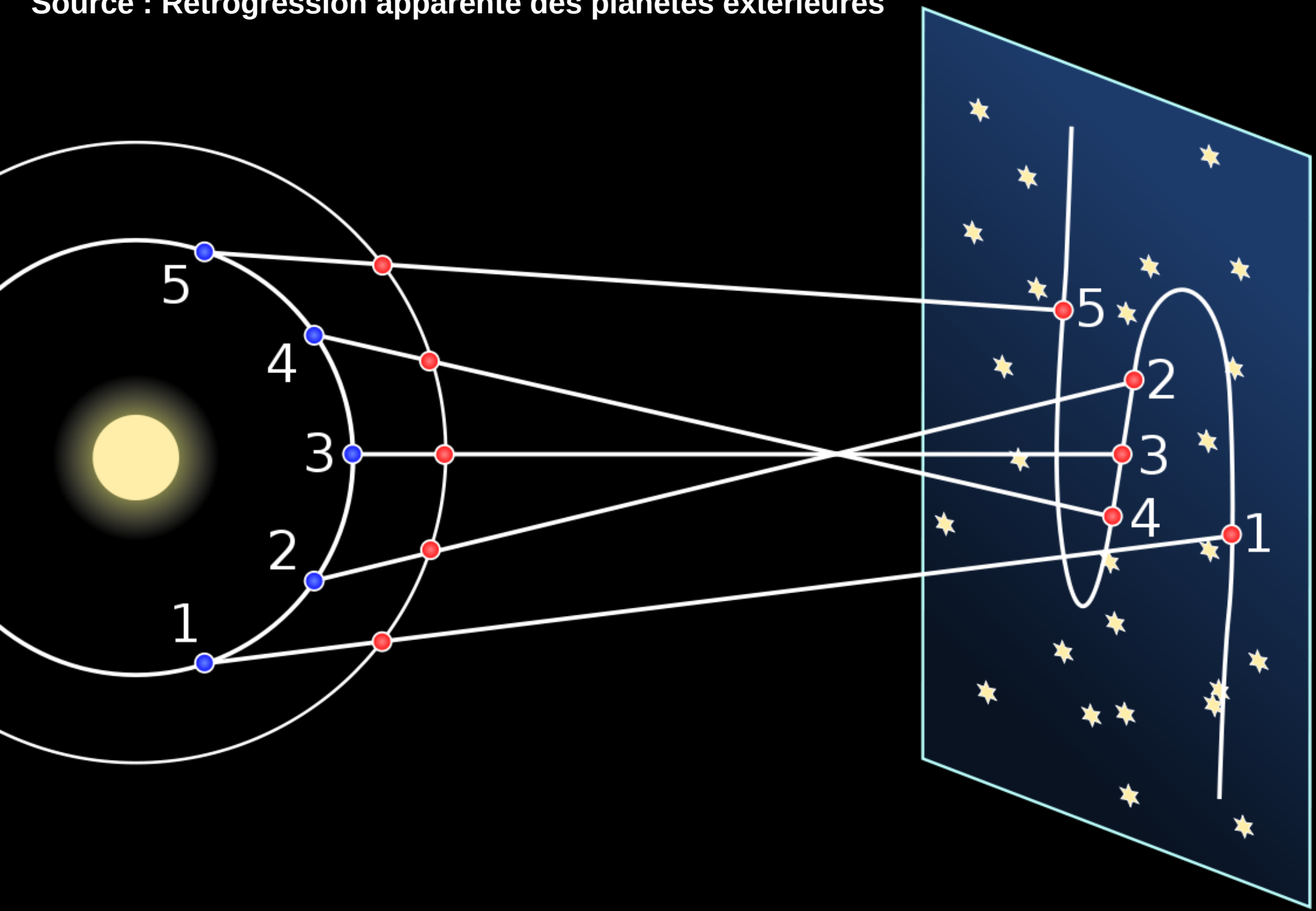
- rejet des preuves scientifiques accablantes ;
- création de contenus faussement scientifiques ;
- tentatives de générer une controverse ;
- tentatives de nier l'existence d'un consensus.

L’univers géocentrique (Ptolémée)



Source : theplanets.org

Source : Rétrogression apparente des planètes extérieures



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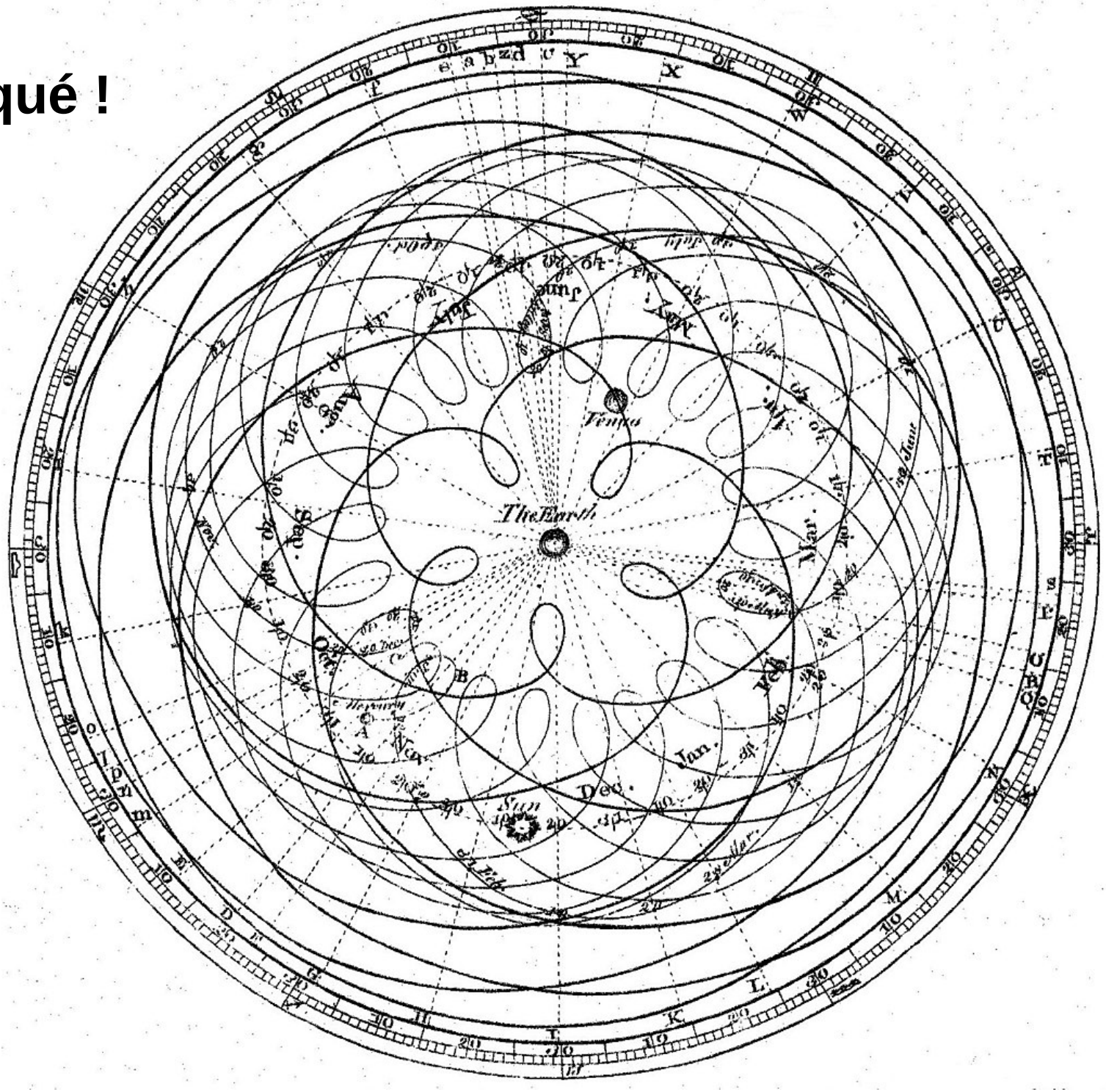
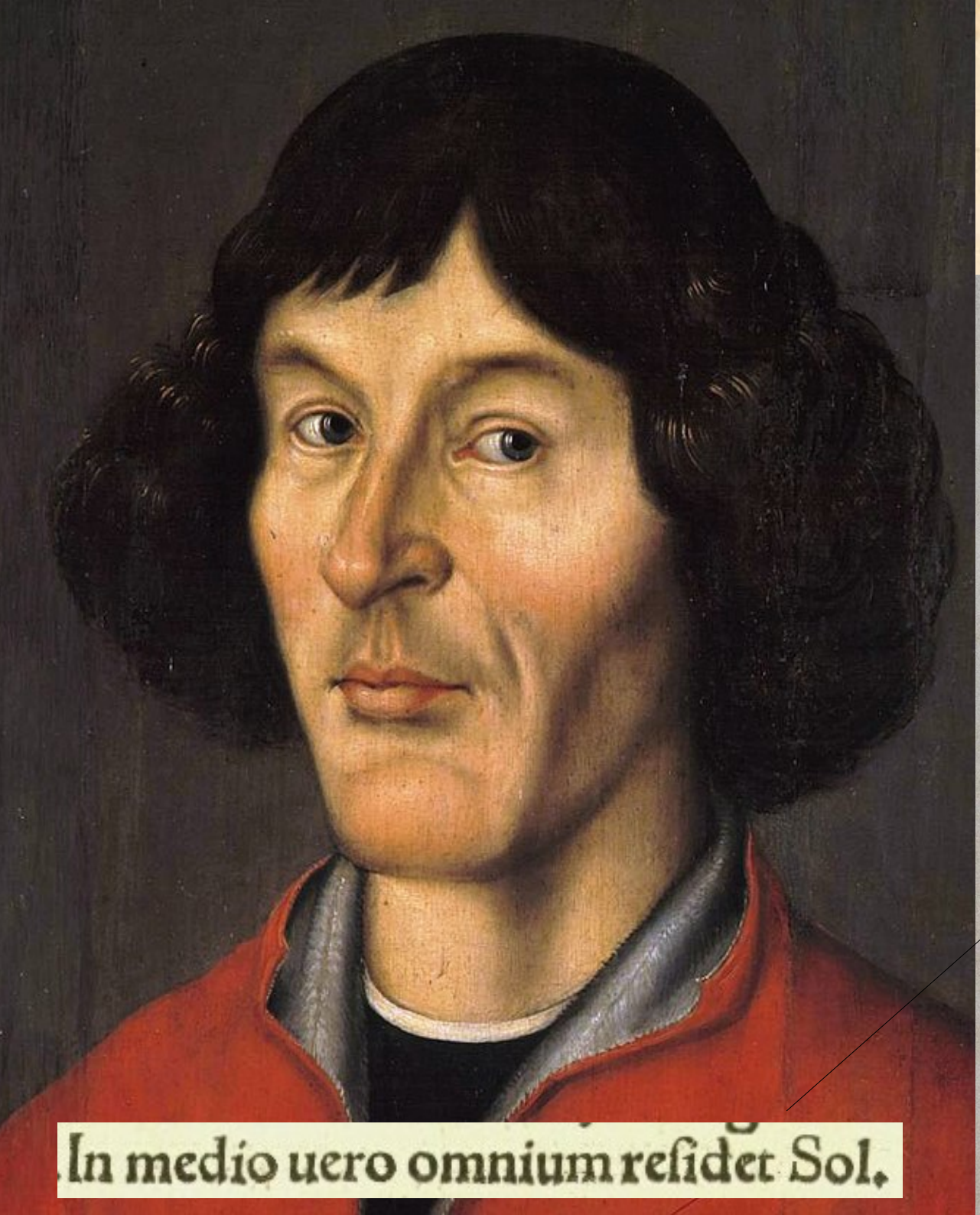
Trop compliqué !



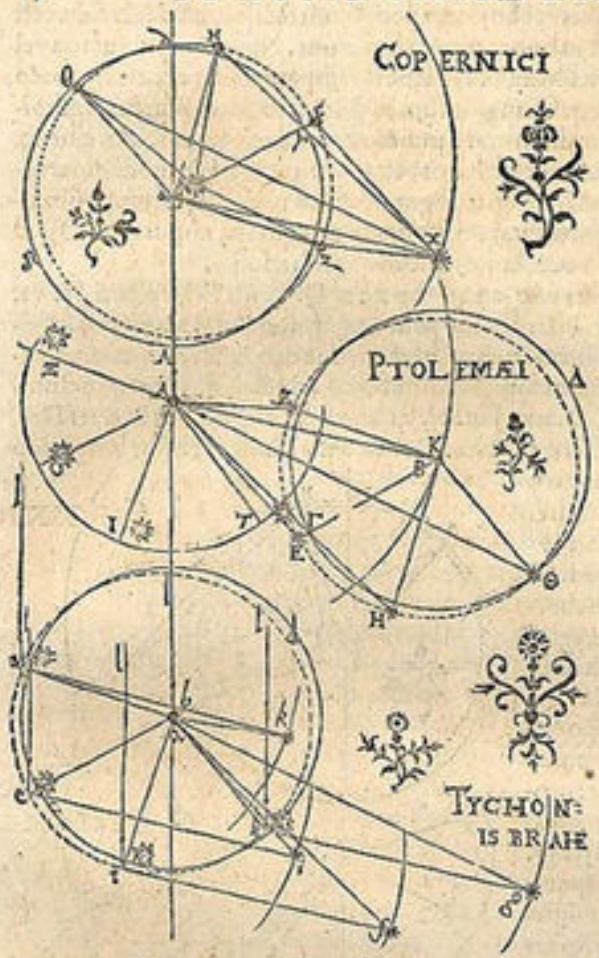
NICOLAI COPERNICI TO-RINENSIS DE REVOLVTIONI-bus orbium cœlestium, Libri VI.

(1543)



Source : wikipedia.org

CAP. XXIV.



Solis vergat in $\frac{5}{1}$ ∞: quamvis hunc gradum cap. XXV libere inquisituri sumus quasi incognitum. Et si TERRA A. MDXC in ☽, anno MDXCII in ☊, anno MDXCIII in ☌, anno MDXCV in ☋. Et anguli ☽ a ☊ ☌ a ☋ æquales, quia a est punctum æqualitatis, & periodica Martis tempora præsupponuntur æqualia. Sitq; Planeta his quatuor vicibus in ϰ, ejusq; linea apsidum αλ. Est ergo angulus ☽ α ϰ secundum indicium anomaliæ commutationis coæquata 12ᵈ.5ʹ.1ʺ.

Quod visum locum Martis attinet, is die IV antecedente hora similis fuit 24ʰ.22ʹ ♈. diurnus ejus diei esset 44. Ergo ad nostrum tempus visus fuit in 25ʰ.6ʹ ♈. qui est situs lineæ ☽ϰ. Sed α ϰ tendit in 15ʰ.53ʹ.45ʺ ♉. Ergo ☽ϰα est 20ʰ.47ʹ.45ʺ. Residuus igitur α☽ϰ ad duos rectos est 32ʰ.7ʹ.14ʺ.

Ut igitur sinus α☽ϰ ad α ϰ, quam dicemus esse partium 100000: sic ☽ϰ α ad ☽α quæsitum. Est ergo ☽α 66774.

Quod si reliquæ ☊α, ☌α, ☋α, ejusdem prodibunt longitudinis, falsum erit quod suspicor: at si diversæ, omnino vicero.

Secundo igitur, anno MDXCII ad nostrum momentum est longitudo coæquata 1ʰ.15ʹ.55ʺ.23‴: commutatio coæquata 8ʰ.24ʹ.16ʺ.34‴. hoc est, ☊α ϰ angulus est 84ʰ.16ʹ.34ʺ. Visus est die XXIII Januar. H. VII. M. XV in 11ʰ.34ʹ ♈ correctione per parallaxin adhibita. Et est motus bidui ejus 1ʰ.25ʹ. Ergo die XXI hora VII M. XV in 10ʰ.9ʹ ♈ est visus. Residua scrupula horæ abjiciant dimidium minutum. Ergo angulus ☊ϰα est 35ʰ.46ʹ.23ʺ, & α ϰ 60ʰ.3ʹ.3ʺ, & α☽ 67467 jam longior quam α☽. Sane quia Sol versus perigæum descendit, &

Source : mma.org

ASTRONOMIA NOVA
ΑΙΤΙΟΛΟΓΗΤΟΣ,
SEV
PHYSICA COELESTIS,
tradita commentariis
DE MOTIBVS STELLÆ
MARTIS,
Ex obſervationibus G. V.
TYCHONIS BRAHE:

(1609)

Juſſu & ſumptibus
RVDOLPHI II.
ROMANORVM
IMPERATORIS &c:

Plurium annorum pertinaci ſtudio
elaborata Pragæ,

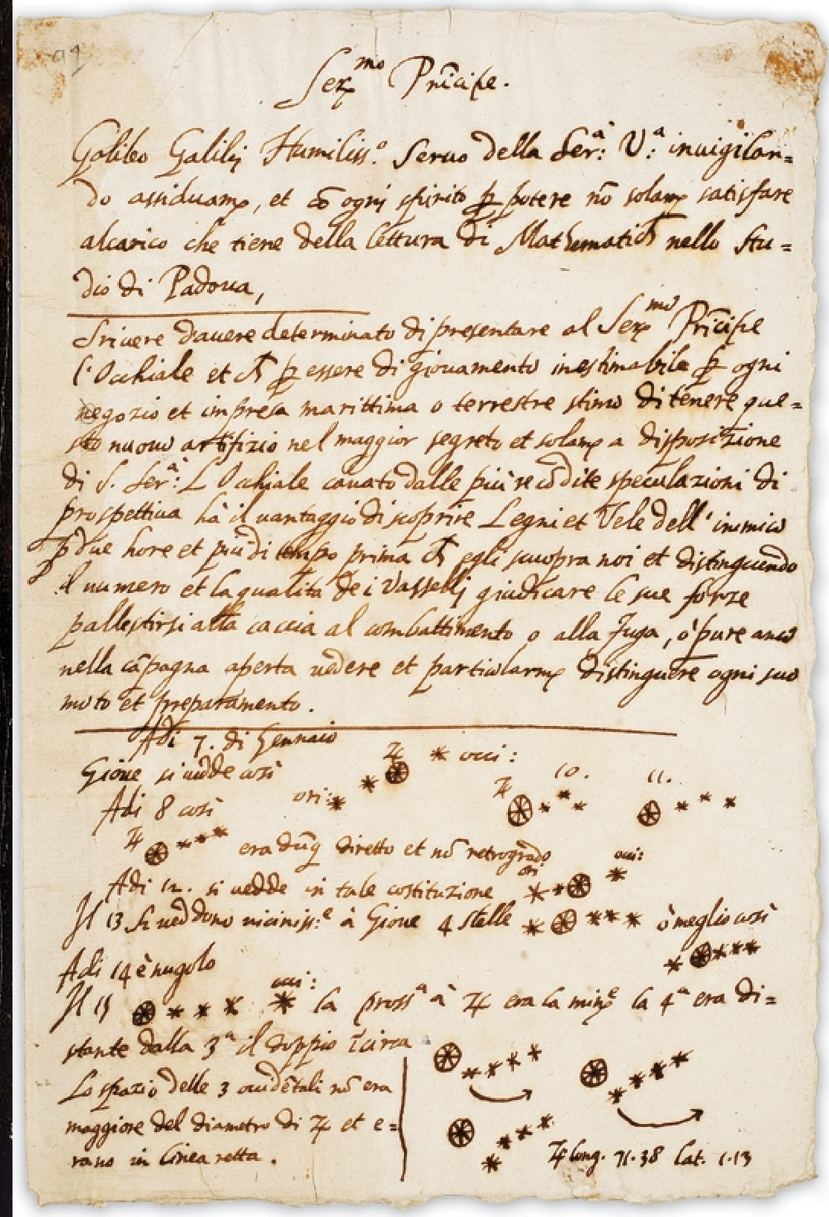
A Sᵉ. Cᵉ. Mᵗⁱ Sᵉ. Mathematico
JOANNE KEPLERO,

Cum ejusdem Cᵉ. Mᵗⁱ privilegio ſpeciali
ANNO æræ Dionyſianæ clɔ Iɔ c IX.

Source : wikipedia.org

DIALOGO
DI
GALILEO GALILEI LINCEO
MATEMATICO SOPRAORDINARIO
DELLO STVDIO DI PISA.

(1632)



Ser.mo Principe.

Galileo Galilei Humiliss.o Servo della Ser.tà V.a invigilando assiduam.te, et con ogni spirito per potere non solam.te satisfare al carico che tiene della lettura di Matematica nello Studio di Padova,

Scrivere d'avere determinato di presentare al Ser.mo Principe l'Occhiale et quello essere di giovamento inestimabile per ogni negozio et impresa marittima o terrestre stimo di tenere questo nuovo artifizio nel maggior segreto et solam.te a disposizione di S. Ser.tà L'Occhiale cavato dalle più recondite speculazioni di prospettiva ha il vantaggio di scoprire Legni et Vele dell'inimico per due hore et più di tempo prima che egli scuopra noi et distinguendo il numero et la qualità dei Vasselli giudicare le sue forze pallestirsi alla caccia al combattimento o alla fuga, o pure ancora nella campagna aperta vedere et particolarm.te distinguere ogni suo moto et preparamento.

Adi 7. di Gennaio
Giove si vedde così
Adi 8 così
era dunq diretto et non retrogrado
Adi 12. si vedde in tale costituzione
Il 13 si veddono vicinissime à Giove 4 stelle o meglio così
Adi 14 è nugolo
Il 15 la pross.a à ♃ era la min.e la 4.a era distante dalla 3.a il doppio circa
Lo spatio delle 3 occidentali non era maggiore del diametro di ♃ et erano in linea retta.
♃ long. 71.38 Lat. 1.13

Source : wikipedia.org

DIALOGO
DI
GALILEO GALILEI LINCEO
MATEMATICO SOPRAORDINARIO
DELLO STVDIO DI PISA. (1632)
E Filosofo, e Matematico primario del
SERENISSIMO
GR. DVCA DI TOSCANA.

Doue ne i congressi di quattro giornate si discorre sopra i due

MASSIMI SISTEMI DEL MONDO
TOLEMAICO, E COPERNICANO;

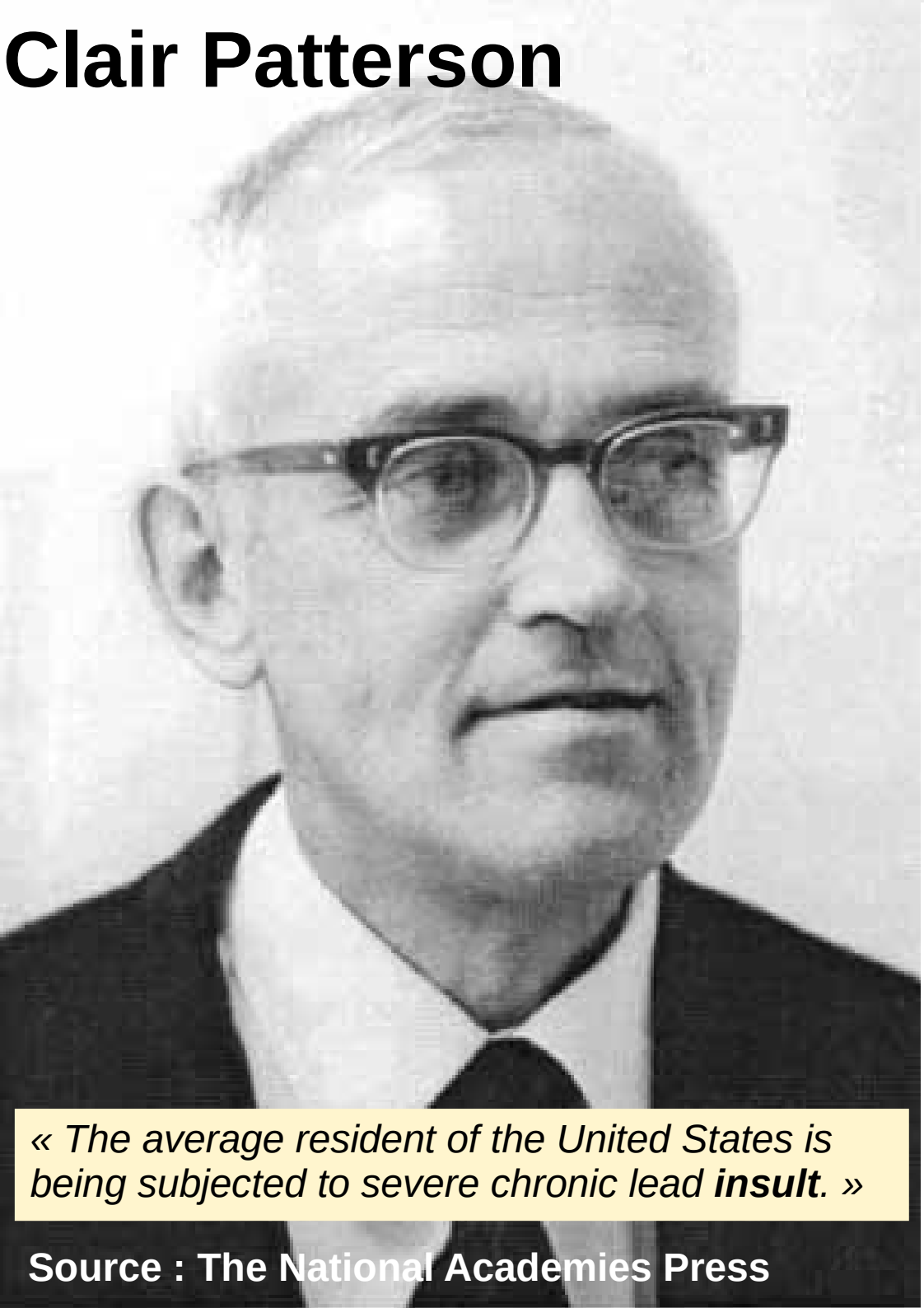
Proponendo indeterminatamente le ragioni Filosofiche, e Naturali tanto per l'vna, quanto per l'altra parte.

CON PRI  VILEGI.

IN FIORENZA, Per Gio: Batista Landini MDCXXXII.

CON LICENZA DE' SVPERIORI.

Clair Patterson



*« The average resident of the United States is being subjected to severe chronic lead **insult**. »*

Source : The National Academies Press

Source : www.tandfonline.comrsc.org

General Article

Contaminated and Natural Lead Environments of Man

(1965)

CLAIR C. PATTERSON, PhD, CAMBRIDGE, MASS

Introduction

AS A GEOCHEMIST, I, along with my colleagues, have studied trace occurrences of lead in the earth and the oceans. In the course of this work it became necessary to consider the quantitative influence of industrial * lead contamination and it was discovered that there has been a profound effect by this agency on the lead content of the oceans and of the atmosphere of the northern hemisphere.[1-3]

A prevailing belief is that industrial and natural sources contribute more or less equal amounts of lead to the body burdens of the general population. It is also commonly believed that the significant range of natural lead concentrations in the blood is not much displaced from the interval between an average natural level and the average toxic level. A new approach to this matter suggests that the average resident of the United States is being subjected to severe chronic lead insult.

Natural Lead States

In our country, the concentrations of lead in the blood of people not visibly ill from lead poisoning range between upper limits associated with acute intoxication and lower limits corresponding to levels which existed in man's prehistoric ancestors. The term "normal" has frequently been applied to concentrations of lead falling within this range, usually for cases not involving acute plumbism and not involving obvious occupational exposure to industrial sources of lead. In this report, the term "typical" is used in such instances.

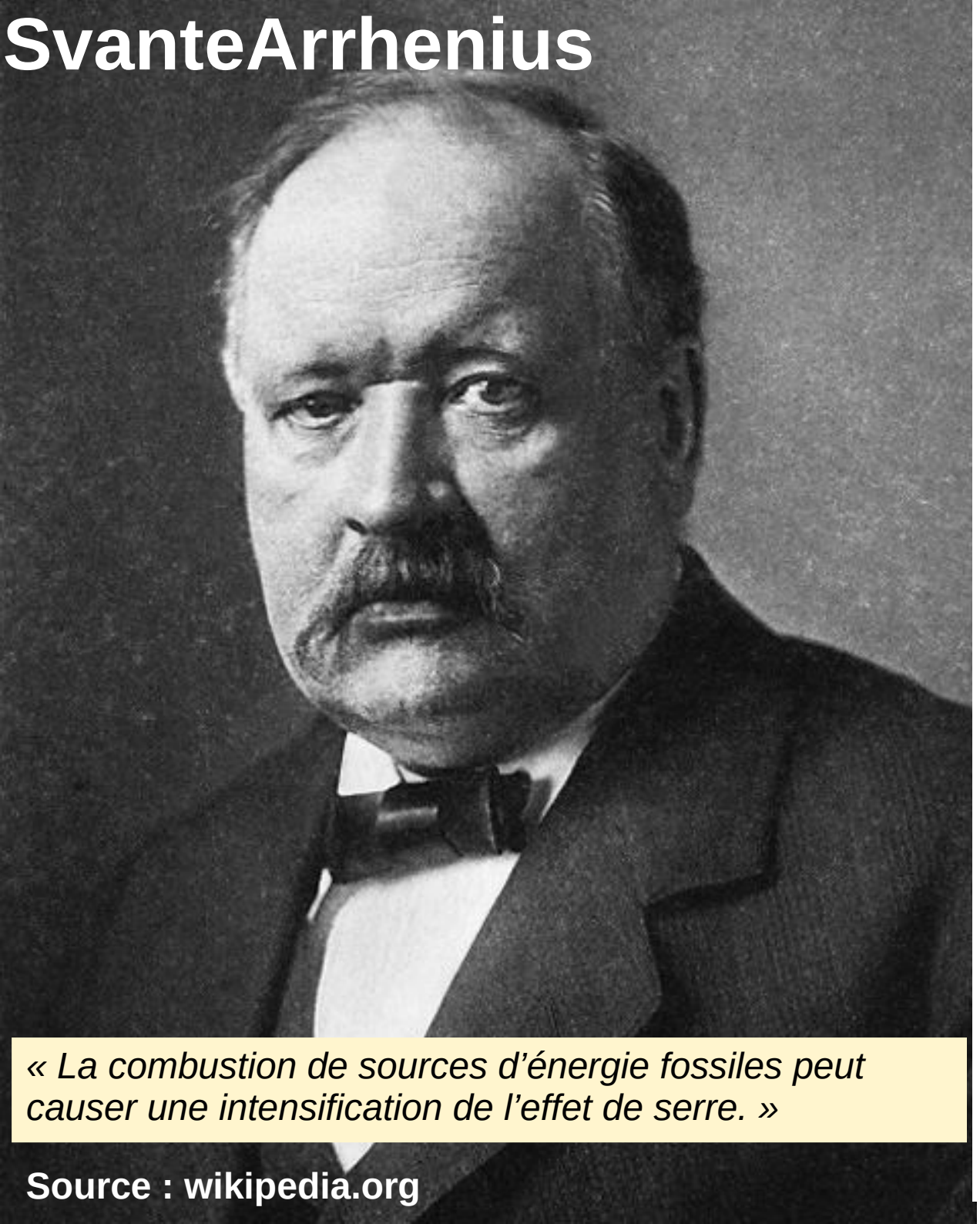
As used here, the term "natural" refers to lead levels in body and environment which are equivalent to those which prevailed during the creation and evolution of our physiological responses to lead. The term "contaminated" refers to lead levels which have been elevated above natural levels by man in activities which are an outgrowth of his abstract intellect. These definitions should help to distinguish between "typical" and "natural" lead levels; they attach a needed physiological significance to the term "natural"; they should help us keep in mind that uses of leaded pigments and cosmetics are acts equivalent in toxicological function to the more sophisticated acts of using leaded gasolines and insecticides. The term natural should not be applied to concentrations of lead in any substance occurring in any society that utilized lead metallurgy unless it can be shown that such substances were not contaminated.

The industrial use of lead is so massive today that the amount of lead mined and introduced into our relatively small urban environments each year is more than 100 times greater than the amount of natural lead leached each year from soils by streams and added to the oceans over the entire earth.[4] There are indications that about nine tenths of the lead in the upper mixed zones of the open oceans in the northern hemisphere originates from lead mines,[2,3] and that the atmosphere of the northern hemisphere contains about 1,000 times more than natural amounts of lead.[5] It is difficult to exclude industrial contaminant lead even from the laboratory during sampling and

Submitted for publication Feb 4, 1965; accepted April 21.
From the Department of Geology and Geophysics, Massachusetts Institute of Technology. William Otis Crosby Lecturer, currently at the Division of Geological Sciences, California Institute of Technology, Pasadena, Calif.
Reprint requests to Division of Geological Sciences, California Institute of Technology, Pasadena, Calif 91109.

* In this report the term "industrial" applies to generalized activities of technological societies and no distinction is made between public or corporate responsibility for such activities.

SvanteArrhenius



« La combustion de sources d'énergie fossiles peut causer une intensification de l'effet de serre. »

Source : wikipedia.org

THE

LONDON, EDINBURGH, AND DUBLIN

PHILOSOPHICAL MAGAZINE

AND

JOURNAL OF SCIENCE.

(1896)

[FIFTH SERIES.]

APRIL 1896.

XXXI. *On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground.* *By* Prof. SVANTE ARRHENIUS *.

I. *Introduction : Observations of* Langley *on Atmospherical Absorption.*

A GREAT deal has been written on the influence of the absorption of the atmosphere upon the climate. Tyndall † in particular has pointed out the enormous importance of this question. To him it was chiefly the diurnal and annual variations of the temperature that were lessened by this circumstance. Another side of the question, that has long attracted the attention of physicists, is this : Is the mean temperature of the ground in any way influenced by the presence of heat-absorbing gases in the atmosphere? Fourier‡ maintained that the atmosphere acts like the glass of a hot-house, because it lets through the light rays of the sun but retains the dark rays from the ground. This idea was elaborated by Pouillet § ; and Langley was by some of his researches led to the view, that "the temperature of the earth under direct sunshine, even though our atmosphere were present as now, would probably fall to −200° C., if that atmosphere did not possess the quality of selective

* Extract from a paper presented to the Royal Swedish Academy of Sciences, 11th December, 1895. Communicated by the Author.

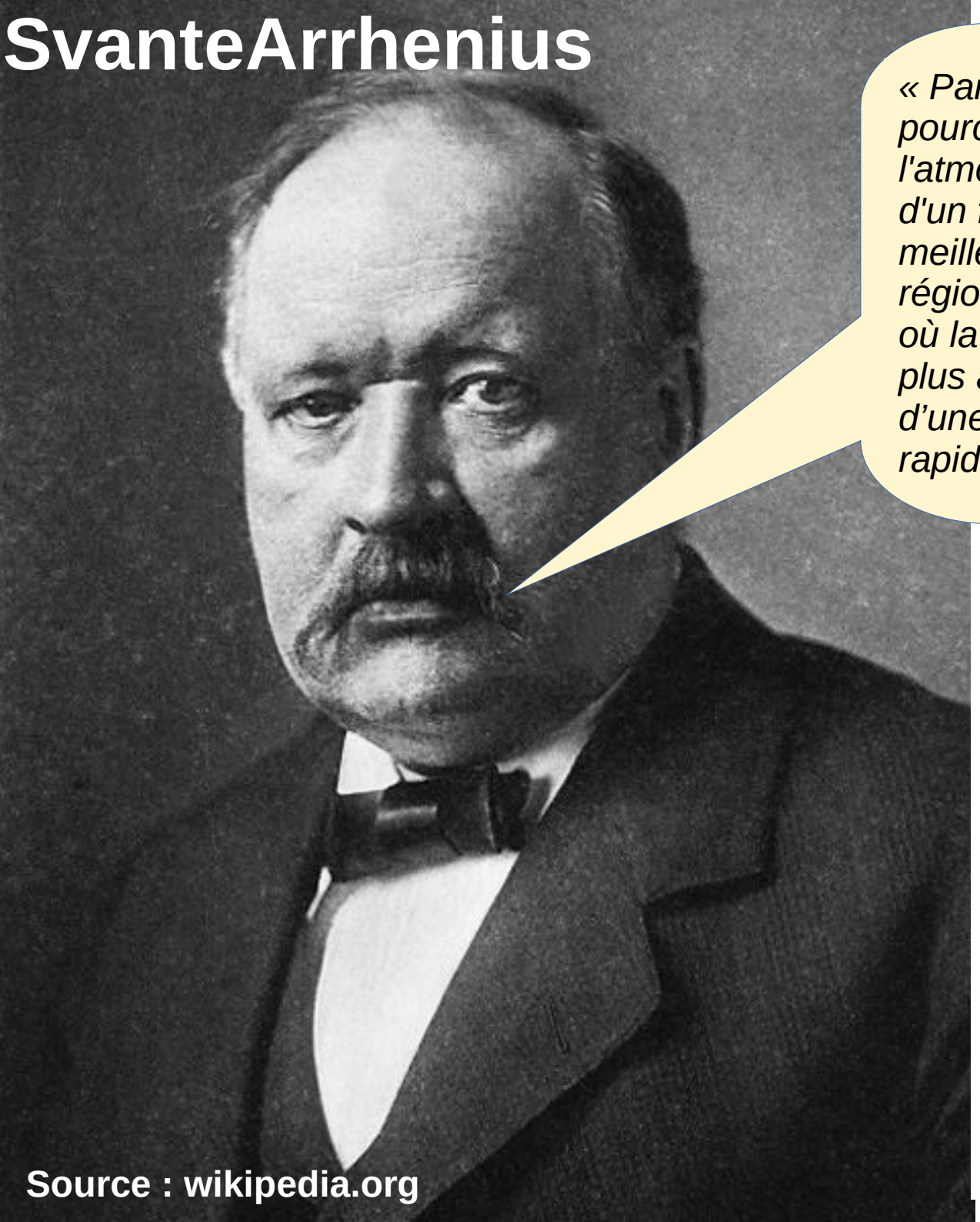
† 'Heat a Mode of Motion,' 2nd ed. p. 405 (Lond., 1865).

‡ *Mém. de l'Ac. R. d. Sci. de l'Inst. de France*, t. vii. 1827.

§ *Comptes rendus*, t. vii. p. 41 (1838).

Source : rsc.org

SvanteArrhenius



« Par l'influence de l'augmentation du pourcentage d'acide carbonique dans l'atmosphère, nous pouvons espérer jouir d'un futur aux climats plus cléments et meilleurs, surtout en ce qui concerne les régions plus froides de la terre, d'un futur où la terre produira des récoltes beaucoup plus abondantes qu'aujourd'hui, au profit d'une humanité qui se propage rapidement. »

Source : wikipedia.org

ARRHENIUS *.

I. *Introduction* : *Observations of* Langley *on Atmospherical Absorption.*

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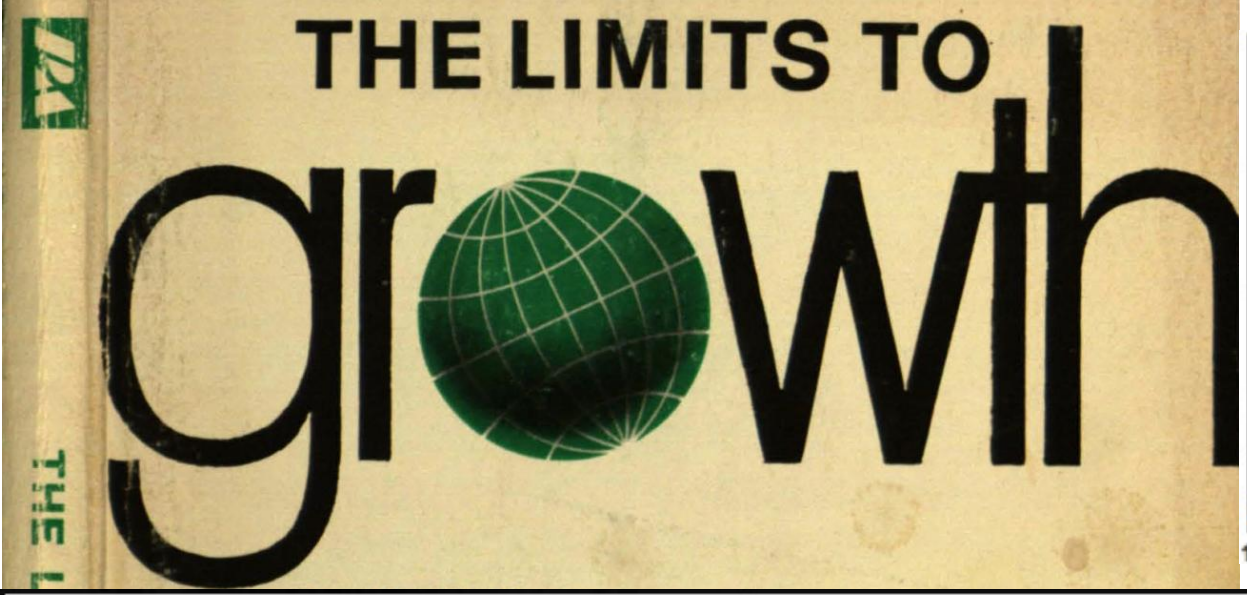
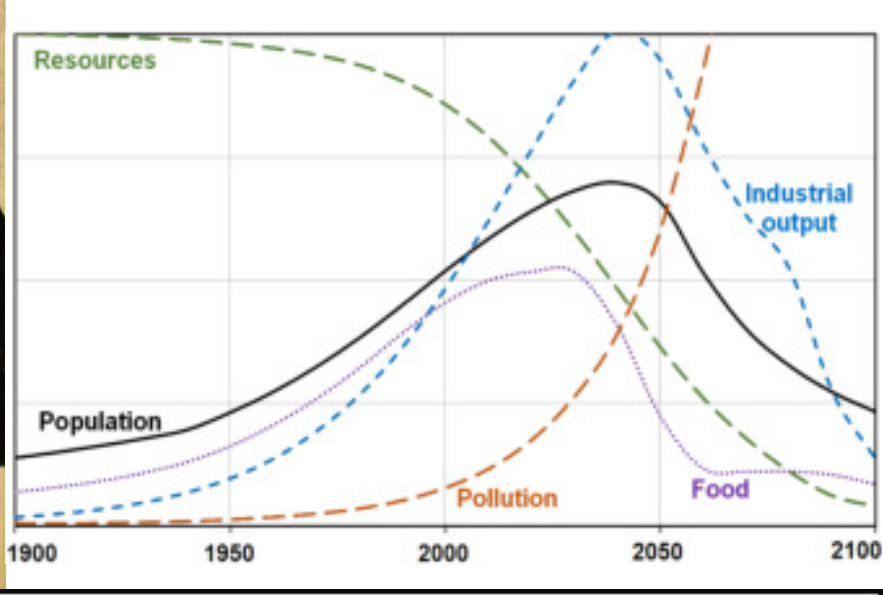
Source : rsc.org





The scarcest resource is not oil, metals, clean air, capital, labour, or technology. It is our willingness to listen to each other and learn from each other and to seek the truth rather than seek to be right

— Donella Meadows —

AZ QUOTES

Premier choc pétrolier en 1973

Source : illustre.ch

28 August 1981, Volume 213, Number 4511 SCIENCE

Climate Impact of Increasing Atmospheric Carbon Dioxide

J. Hansen, D. Johnson, A. Lacis, S. Lebedeff
P. Lee, D. Rind, G. Russell

Summary. The global temperature rose by 0.2°C between the middle 1960's and 1980, yielding a warming of 0.4°C in the past century. This temperature increase is consistent with the calculated greenhouse effect due to measured increases of atmospheric carbon dioxide. Variations of volcanic aerosols and possibly solar luminosity appear to be primary causes of observed fluctuations about the mean trend of increasing temperature. It is shown that the anthropogenic carbon dioxide warming should emerge from the noise level of natural climate variability by the end of the century, and there is a high probability of warming in the 1980's. Potential effects on climate in the 21st century include the creation of drought-prone regions in North America and central Asia as part of a shifting of climatic zones, erosion of the West Antarctic ice sheet with a consequent worldwide rise in sea level, and opening of the fabled Northwest Passage.

Atmospheric CO_2 increased from 280 to 300 parts per million in 1880 to 335 to 340 ppm in 1980 (*1*, *2*), mainly due to burning of fossil fuels. Deforestation and changes in biosphere growth may also have contributed, but their net effect is probably limited in magnitude (*2*, *3*). The CO_2 abundance is expected to reach 600 ppm in the next century, even if growth of fossil fuel use is slow (*4*).

Carbon dioxide absorbs in the atmospheric "window" from 7 to 14 micrometers which transmits thermal radiation emitted by the earth's surface and lower atmosphere. Increased atmospheric CO_2 tends to close this window and cause outgoing radiation to emerge from higher, colder levels, thus warming the surface and lower atmosphere by the so-called greenhouse mechanism (*5*). The most sophisticated models suggest a mean warming of 2° to 3.5°C for doubling of the CO_2 concentration from 300 to 600 ppm (*6–8*).

The major difficulty in accepting this theory has been the absence of observed warming coincident with the historic CO_2 increase. In fact, the temperature in the Northern Hemisphere decreased by about 0.5°C between 1940 and 1970 (*9*), a time of rapid CO_2 buildup. In addition, recent claims that climate models overestimate the impact of radiative perturbations by an order of magnitude (*10*, *11*) have raised the issue of whether the greenhouse effect is well understood.

We first describe the greenhouse mechanism and use a simple model to compare potential radiative perturbations of climate. We construct the trend of observed global temperature for the past century and compare this with global climate model computations, providing a check on the ability of the model to simulate known climate change. Finally, we compute the CO_2 warming expected in the coming century and discuss its potential implications.

Greenhouse Effect

The effective radiating temperature of the earth, T_e, is determined by the need for infrared emission from the planet to balance absorbed solar radiation:

$$\pi R^2(1 - A)S_0 = 4\pi R^2\sigma T_e \quad (1)$$

or

$$T_e = [S_0(1 - A)/4\sigma]^{1/4} \quad (2)$$

where R is the radius of the earth, A the albedo of the earth, S_0 the flux of solar radiation, and σ the Stefan-Boltzmann constant. For $A \sim 0.3$ and $S_0 = 1367$ watts per square meter, this yields $T_e \sim 255$ K.

The mean surface temperature is $T_s \sim 288$ K. The excess, $T_s - T_e$, is the greenhouse effect of gases and clouds, which cause the mean radiating level to be above the surface. An estimate of the greenhouse warming is

$$T_s \sim T_e + \Gamma H \quad (3)$$

where H is the flux-weighted mean altitude of the emission to space and Γ is the mean temperature gradient (lapse rate) between the surface and H. The earth's troposphere is sufficiently opaque in the infrared that the purely radiative vertical temperature gradient is convectively unstable, giving rise to atmospheric motions that contribute to vertical transport of heat and result in $\Gamma \sim 5°$ to 6°C per kilometer. The mean lapse rate is less than the dry adiabatic value because of latent heat release by condensation as moist air rises and cools and because the atmospheric motions that transport heat vertically include large-scale atmospheric dynamics as well as local convection. The value of H is ~5 km at midlatitudes (where $\Gamma \sim 6.5$°C km^{-1}) and ~6 km in the global mean ($\Gamma \sim 5.5$°C km^{-1}).

The surface temperature resulting from the greenhouse effect is analogous to the depth of water in a leaky bucket with constant inflow rate. If the holes in the bucket are reduced slightly in size, the water depth and water pressure will

The authors are atmospheric physicists at the NASA Institute for Space Studies, Goddard Space Flight Center, New York 10025. D. Johnson contributed to the carbon dioxide research as a participant in the Summer Institute on Planets and Climate at the Goddard Institute for Space Studies and Columbia University.

0036-8075/81/0828-0957$01.00/0

ipcc

INTERGOVERNMENTAL PANEL ON
climate change

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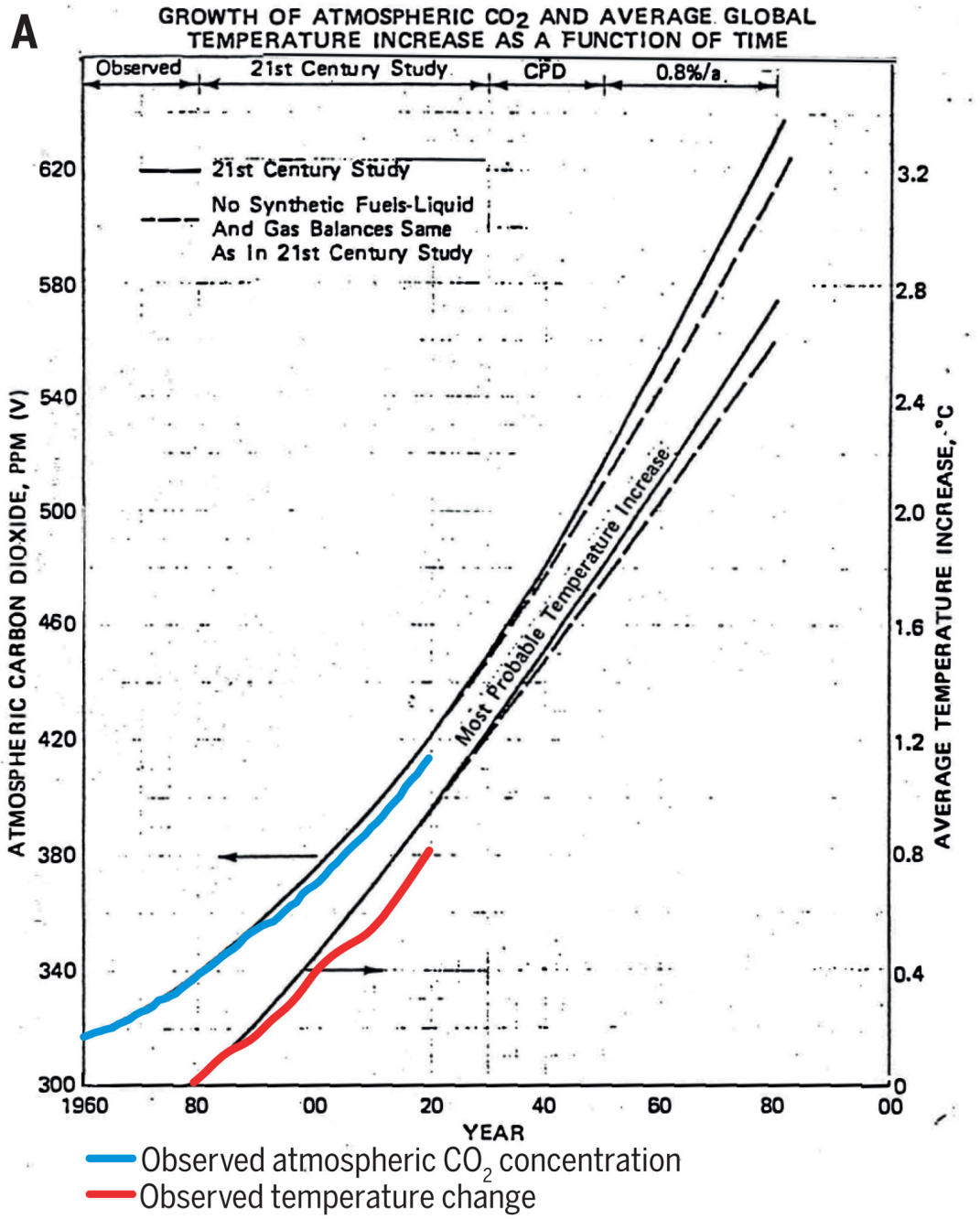
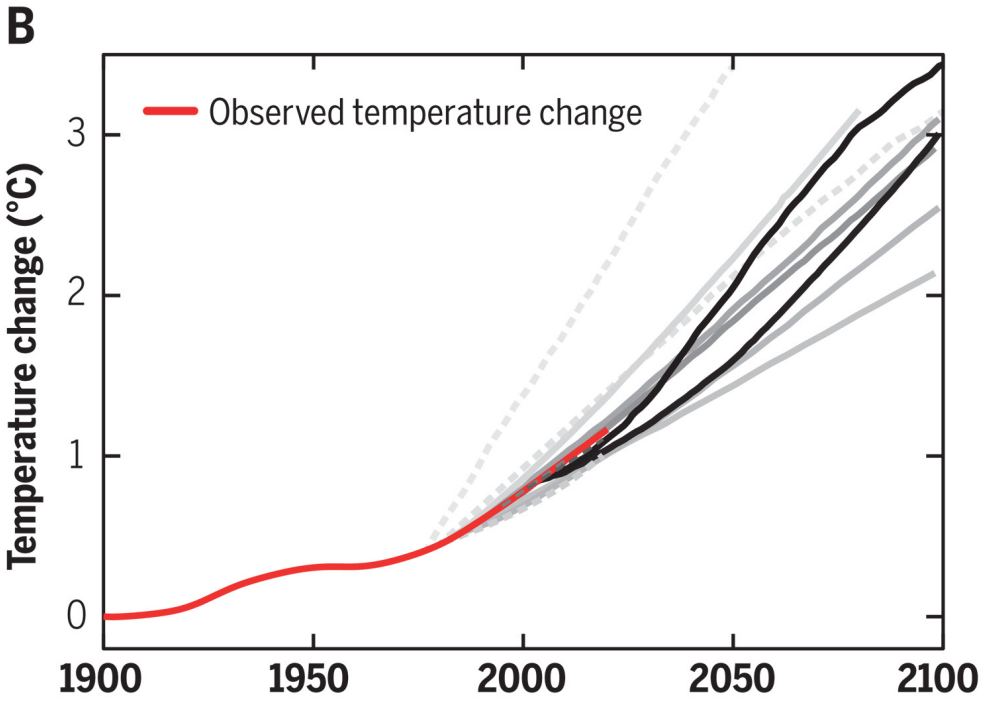
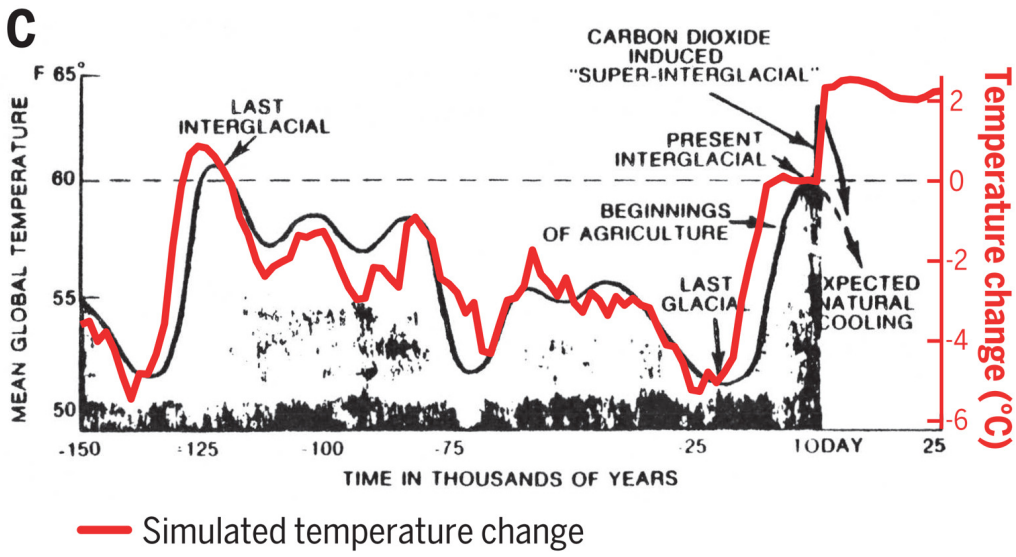
40 années perdues ! The « Exxon Papers »







Source : DOI: 10.1126/science.abk0063

Les marchands de doute

Naomi Oreskes
Erik M. Conway

« Nourrir la controverse »

Le Pommier essai

Jean-François Viot

Préface de Jean-Pascal van Ypersele

CHAUD DEVANT !

Bobards et savoirs sur le climat

Une collègue, un ami ou un parent, nous avons tous une relation qui refuse de penser que le réchauffement climatique a lieu, qu'il a une cause humaine ou que nous pouvons réagir. Alors qu'un consensus scientifique solide existe, certains multiplient les arguments pour nous convaincre que nous ne devons pas nous en faire ou que nous ne sommes pas responsables.

Cet ouvrage va à la rencontre de ces arguments. Au départ d'une discussion entre une nièce militante et une tante physicienne, Jean-François Viot explore l'histoire et les fondements de la science climatique, s'intéresse à l'action du GIEC et interroge les mécanismes du climatoscepticisme.

Son investigation minutieuse dénoue ainsi, petit à petit, les fils des théories qui nient le réchauffement climatique. Il en ressort un formidable outil à la portée du plus grand nombre pour démêler une question fondamentale du XXIe siècle :

Le réchauffement climatique, savoir ou bobard ?

Titulaire d'un master en langues et littératures romanes (UCLouvain), **Jean-François Viot** est également agrégé de l'enseignement secondaire supérieur en Belgique. Dramaturge et scénariste, ses pièces, *Gustave et Alexandre*, *Sur la route de Montalcino* et *Callas, il était une voix* ont été créées avec succès à la scène. En 2014, il a reçu le Prix littéraire du Parlement de la Fédération Wallonie-Bruxelles pour sa pièce *Lettres à Élise*, consacrée à la guerre 14-18 et créée à la fois en Belgique et en France. Il écrit aujourd'hui essentiellement pour l'audiovisuel. Comme essayiste, il a réalisé l'édition critique du *Rubens* d'Alexandre Dumas et des textes de Georges Lemaitre consacrés à Molière. Pour l'écriture de *Chaud devant !*, il a obtenu la certification du MOOC (formation universitaire en ligne) *Making Sense of Climate Science Denial* de l'Université de Queensland.

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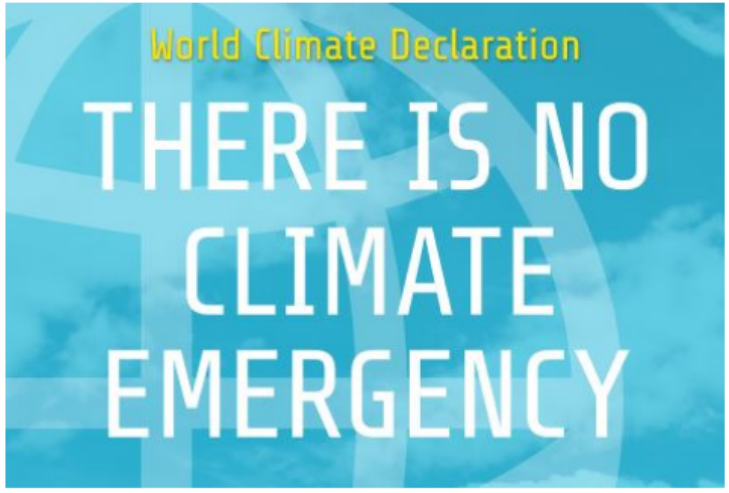
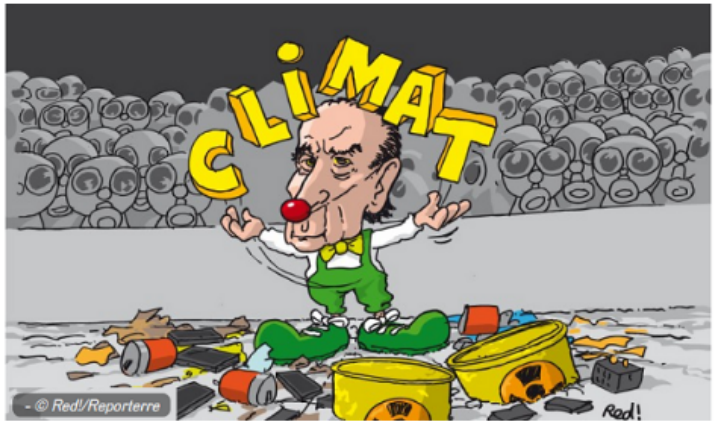
UN DOUTE ? Un ami vous interpelle par une affirmation climato-sceptique ? FAITES-NOUS EN PART via gpc(at)gpclimat.be, NOUS L'EXAMINERONS



ENCORE DES DOUTES ? 8 NOVEMBRE 2022 PAR MICHEL CORDIER

Selon une nouvelle « Déclaration mondiale sur le climat signée par 1200 scientifiques », il n'y aurait pas d'urgence climatique.



ENCORE DES DOUTES ? 28 JANVIER 2022 PAR MICHEL CORDIER

Erreurs et mensonges au sujet du changement climatique

« Apparemment, il y a des débats sur la réalité du changement climatique » « Pour le climat, notre pays n'a qu'un rôle marginal » « L'Homme s'est toujours adapté à toutes les températures » « Nous

Rejoignez-nous !

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Avis des Grands Parents pour le Climat
23 février 2023

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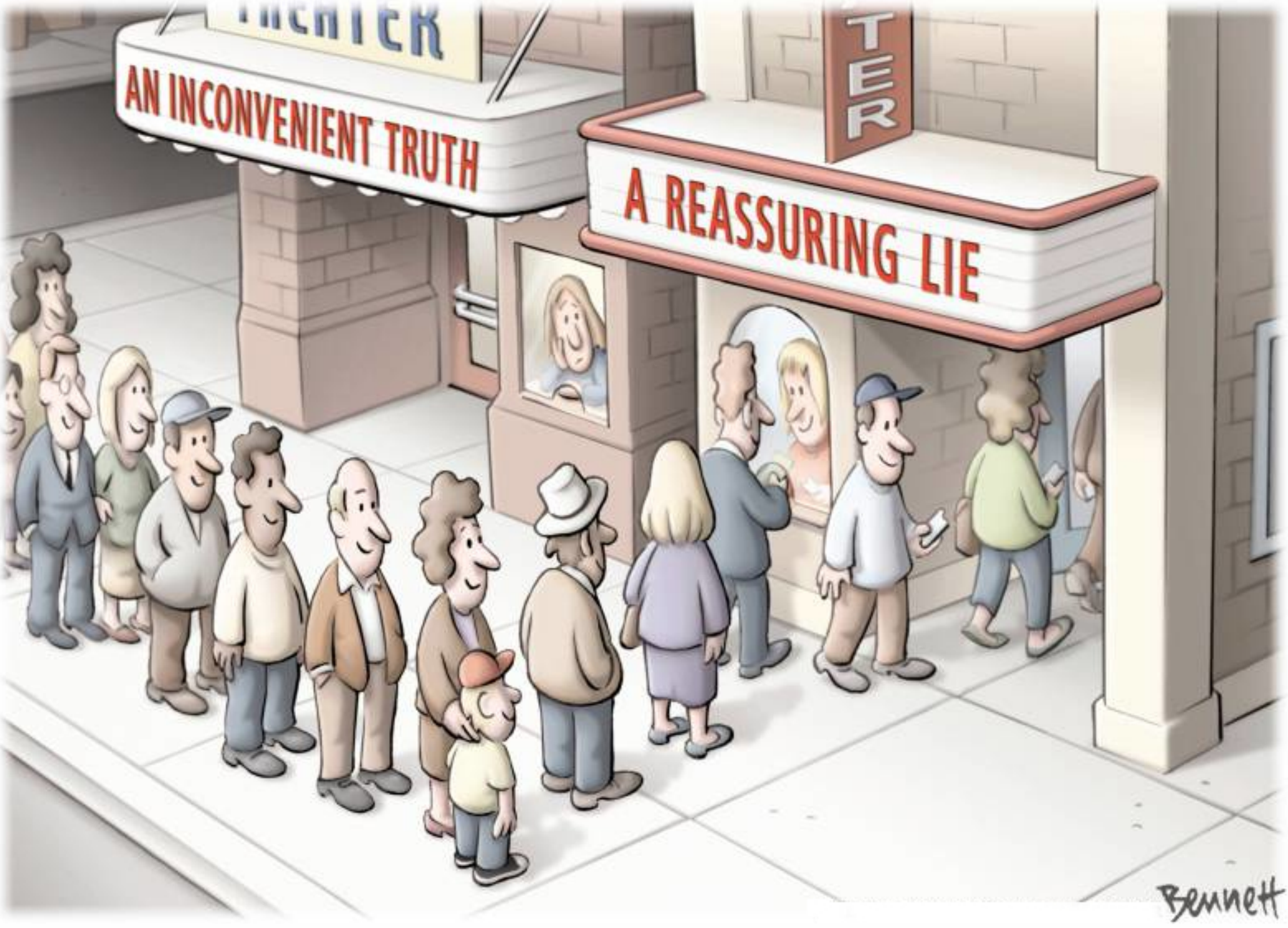
AN INCONVENIENT TRUTH
A REASSURING LIE
Bennett

Conclusions

- **La science** ne détient aucune vérité. Elle a besoin, comme la démocratie, de conflits d'idées et de théories. Mais elle **n'est pas** non plus **une simple affaire d'opinion**.
- **Le RC n'est pas uniquement un problème scientifique**. Il y a aussi d'**énormes ramifications sociétales** - c-à-d politiques - et psychologiques ⇒ puissants mécanismes de résistance parce que le RC :
  - génère de l'*angoisse* et un *sentiment d'impuissance* suite à l'énormité du problème et au caractère intangible du climat ;
  - est *en conflit avec les intérêts économiques établis* ;
  - *remet en cause notre conception du Progrès* ;
  - rend inévitable une *révision de nos modes de vie*.
- Problème des *« colporteurs » scientifiques* qui décrédibilisent la science du climat par l'usage de pseudo-science.
- *La dénégation systématique des faits* qui « dérangent » est probablement aussi vieille que l'humanité, mais elle *sape les fondements même de la démocratie*.
- Le RC reflète une impasse ***systémique*** profonde. Besoin d'une « troisième révolution copernicienne ».

Questions