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“2889” vs. “2890”

Arthur B. Evans

Abstract

This article offers a detailed comparison of Michel Verne’s 1889 short story “In the Year 2889” and Jules Verne’s 1891 recycled version of the same story, now called « La Journée d’un journaliste américain en 2890 » [The Day of an American Journalist in 2890]. In my analysis, I have also pointed out some of the alterations Michel made to his father’s version when later editing it for inclusion in the posthumous 1910 edition of Verne’s *Hier et demain* [Yesterday and Tomorrow], now retitled « Au XXIX^e siècle : La Journée d’un journaliste américain en 2889 » [In the 29th Century: The Day of an American Journalist in 2889].

Résumé

Cet article propose une comparaison détaillée de la nouvelle de 1889 de Michel Verne “In the Year 2889” [En l’an 2889] et de la version de Jules Verne recyclée en 1891 de la même histoire, maintenant intitulée « La Journée d’un journaliste américain en 2890 ». Dans mon analyse, j’ai également souligné certaines des modifications que Michel a apportées à la version de son père en l’éditant plus tard pour l’inclure dans l’édition posthume de *Hier et demain* de Verne, cette fois intitulée « Au XXIX^e siècle : La Journée d’un journaliste américain en 2889 ».

Introduction

During the almost four decades since the publication of Piero Gondolo della Riva’s 1978 bombshell article on the topic [1], a great deal of attention and moral outrage has been directed at Michel Verne for rewriting his father’s posthumous works. Michel’s versions of these novels have been widely condemned by mainstream Vernians as « une véritable

1 Piero Gondolo della Riva. « A propos des oeuvres posthumes de Jules Verne ». *Europe* 595-596 (Nov.-Déc. 1978): 73-82.

escroquerie littéraire » [a true literary fraud] (91) [2], and a “grotesque distortion” (vi) of Jules Verne’s legacy [3]. The offending editions were soon replaced by published versions of Jules Verne’s original manuscripts—texts which, despite their sometimes dubious quality, have nevertheless been praised as “cleansed of the slag that disfigured his work” (xiii) [4]. Michel’s proscribed texts have also been removed from the official list of Verne’s *Voyages extraordinaires* appearing on one of the most important websites about Jules Verne, relegating these works to the category of “Apocrypha” [5] and ensuring that future generations of Verne readers will no longer view these versions as a legitimate part of Verne’s oeuvre.

Given the contentious historical backdrop surrounding Michel’s rewrites of his father’s works, I thought it might be interesting to examine a case where their roles were nearly reversed—where Jules Verne rewrote and republished under his own name a work written by his son Michel—a case that has received relatively little scholarly attention and virtually no moral outrage. Such is the curious publishing history of the futuristic short story “In the Year 2889” (1889). This story was commissioned by the editor Loretus S. Metcalf of New York’s *The Forum* magazine, was published in English in the February 1889 issue (vol. 6, pp. 662-677), and was clearly signed as written by “Jules Verne.” But, thanks to another important discovery by Gondolo della Riva published in 1974 [6], we also now know that this story was actually written by Verne’s son, Michel. This secret was revealed in one of Verne’s personal letters to his publisher Louis-Jules Hetzel in January 1889, where the author openly confides: « L’article dont je vous ai parlé pendant votre visite à Amiens a paru dans le *Forum* de New York ; après arrangement entre Michel et moi, il a été entièrement écrit par lui (ceci entre nous) et il paraît avoir beaucoup plu » (286) [The piece that I spoke to you about during your visit to Amiens appeared in *The Forum* of New York; according to an arrangement between Michel and myself, it was entirely written by him (just between us), and it seems to have pleased him greatly].

But this strange tale of authorial subterfuge does not end here; it is just the beginning. Following the publication of “In the Year 2889” in *The Forum* by Verne *fils*, Verne *père* took the French version of this text [7], made substantial modifications to it—e.g., extending its technological extrapolations, making its descriptions more vivid, giving greater depth to its

- 2 Olivier Dumas. *Jules Verne*. Lyon: La Manufacture, 1988.
- 3 Frederick Paul Walter and Walter James Miller. “Foreword.” Jules Verne. *The Meteor Hunt*. Trans. by Frederick Paul Walter and Walter James Miller. Lincoln, NE: University of Nebraska Press, 2006. vi-xxi.
- 4 Olivier Dumas. “Preface to the French Edition.” Jules Verne. *The Golden Volcano*. Trans. and ed. by Edward Baxter. Lincoln, NE: University of Nebraska Press, 2008. vii-xvi.
- 5 See the “Complete Jules Verne Bibliography” on Zvi Har’El’s “Jules Verne Collection” website at <http://jv.gilead.org.il/biblio/>
- 6 Gondolo della Riva, Piero. « A propos d’une nouvelle ». *Cahiers de l’Herne : Jules Verne 25* (1974): 284-288.
- 7 Since neither Jules nor Michel Verne could read or write English very well, there seem to be two possibilities here: that Michel originally submitted the text in French to *Forum* editor Metcalf who had it translated into English, and/or that Metcalf sent Verne *père* a translated French version of the English text for proofing purposes. For more on Jules and Michel’s use of English, see my article « Le Français vernien » in *Les Modernités de Jules Verne*, ed. Jean Bessière (Paris: Presses Universitaires de France, 1988): 87-105.

characters, and injecting more satiric humor into the story generally—and changed its title to « La Journée d’un journaliste américain en 2890 » [The Day of an American Journalist in 2890]. He then gave a public reading of this revised version during a session of the Académie des Sciences, des Lettres et des Arts d’Amiens on January 18, 1891 and published it thereafter in three different venues: the *Journal d’Amiens, Moniteur de la Somme* (January 21, 1891): 2-3, *Le Petit Journal* (August 29, 1891): 2-4, and finally the *Mémoires de l’Académie des Sciences, des Lettres et des Arts d’Amiens* 37 (listed as 1890 but published in late 1891): 348-370 [8]. This second version of the story was then reprinted at least three times during the twentieth century: twice by Daniel Compère and once by Samuel Sadaune [9].

To complicate its publishing history even more, after his father’s death in 1905, Michel edited and republished Jules’ rewrite of his story in the 1910 posthumous collection *Hier et demain* with the—again revised—title of « Au XXIX^e siècle : La Journée d’un journaliste américain en 2889 » [In the 29th century: The Day of an American Journalist in 2889]. On its title page, Michel included the following explanatory footnote: « 1 Cette fantaisie a paru pour la première fois, en langue anglaise, en février 1889, dans la revue américaine *The Forum*, puis elle a été reproduite, avec quelques modifications, en langue française. Dans la version actuelle, on s’est parfois référé au texte primitif anglais. M.J.V. » [This fantasy appeared for the first time in English, in February 1889, in the American journal *The Forum*; then it was reprinted, with some modifications, in French. In the present version, the original English text was sometimes referred to. M.J.V.]. This third version was eventually translated into English in 1965 by I. O. Evans as “In the Twenty-ninth Century. The Day of an American Journalist in 2889” (*Yesterday and Tomorrow*, London: Arco, pp. 107-124). As for Jules Verne’s “2890,” to my knowledge, it has never been translated into English until now.

The following pages contain a side-by-side juxtaposition of Michel’s original English text “In the Year 2889” (version #1) with a translation of Jules’ « La Journée d’un journaliste américain en 2890 » (version #2). In my analytical commentary via embedded endnotes, I also discuss how Michel edited the posthumous « Au XXIX^e siècle. La Journée d’un journaliste américain en 2889 » (version #3), with special focus on those instances where he changes his father’s changes to his original story.

8 My thanks to Volker Dehs for his invaluable help with these many bibliographical details.

9 The two Compère editions were published in 1979 and 1994 by the Atelier du Gué (in Villeongue d’Aude) and the Sadaune edition was included in his *Contes et nouvelles de Jules Verne*, published in 2000 by the Éditions Ouest-France (in Rennes).

Michel Verne, “In the Year 2889”

Little though they seem to think of it, the people of this twenty-ninth century live continually in fairyland. Surfeited as they are with marvels, they are indifferent in presence of each new marvel. To them all seems natural. Could they but duly appreciate the refinements of civilization in our day; could they but compare the present with the past, and so better comprehend the advance we have made! How much fairer they would find our modern towns, with populations amounting sometimes to 10,000,000 souls; their streets 300 feet wide, their houses 1000 feet in height; with a temperature the same in all seasons; with their lines of aërial locomotion crossing the sky in every direction! If they would but picture to themselves the state of things that once existed, when through muddy streets rumbling boxes on wheels, drawn by horses—yes, by horses!—were the only means of conveyance. Think of the railroads of the olden time, and you will be able to appreciate the pneumatic tubes through which to-day one travels at the rate of 1000 miles an hour. Would not our contemporaries prize the telephone and the telephote more highly if they had not forgotten the telegraph?

Singularly enough, all these transformations rest upon principles which were perfectly familiar to our remote ancestors, but which they disregarded. Heat, for instance, is as ancient

Jules Verne, “The Day of an American Journalist in 2890”

The men of this twenty-ninth century live in the midst of a perpetual fairyland, without appearing to realize it. Bored with marvels, they remain indifferent to all those wonders that Progress offers them every day. In a more just world, they would appreciate the achievements of our civilization as they deserve. In comparing it to the past, they would comprehend how far we have come. They would more fully admire our modern cities with their streets measuring a hundred meters wide, with their buildings three hundred meters high and temperature-controlled, and with their skies crisscrossed by thousands of aero-cars and aero-buses. How could one compare these cities whose populations sometimes reach ten million inhabitants with those villages from a thousand years ago—those Parises, Londons, Berlins, or New Yorks—muddy and crowded hamlets on whose streets one could see bumpy carriages trundling along and pulled by horses! Yes, horses! It's unbelievable! If only they could remember the defective steamboats and railways of those days, their frequent collisions and also their slowness, wouldn't today's travelers greatly value the aero-trains and especially those pneumatic tubes beneath the oceans, which are able to transport them at a speed of 1500 kilometers per hour? Lastly, wouldn't they enjoy even more their telephones and telephotes if they recalled those old apparatuses created by Morse and Hughes and used by their ancestors that were so inadequate for sending rapid messages? [1]

It's a strange thing. These amazing transformations are based on principles that were well known but perhaps too long neglected by our forefathers. It's true that

as man himself; electricity was known 3000 years ago, and steam 1100 years ago. Nay, so early as ten centuries ago it was known that the differences between the several chemical and physical forces depend on the mode of vibration of the etheric particles, which is for each specifically different. When at last the kinship of all these forces was discovered, it is simply astounding that 500 years should still have to elapse before men could analyze and describe the several modes of vibration that constitute these differences. Above all, it is singular that the mode of reproducing these forces directly from one another, and of reproducing one without the others, should have remained undiscovered till less than a hundred years ago. Nevertheless, such was the course of events, for it was not till the year 2792 that the famous Oswald Nier made this great discovery.

Truly was he a great benefactor of the human race. His admirable discovery led to many another. Hence is sprung a pleiad of inventors, its brightest star being our great Joseph Jackson. To Jackson we are indebted for those wonderful instruments, the new accumulators. Some of these absorb and condense the living force contained in the sun's rays; others, the electricity stored in our globe; others again, the energy coming from whatever source, as a waterfall, a stream, the winds, etc. He, too, it was that invented the transformer, a more wonderful contrivance still, which takes the living force from the accumulator, and, on the simple pressure of a button, gives it back to space in whatever form may be desired, whether as heat, light, electricity, or mechanical force, after having first obtained from it the work required. From the day when these two instruments were contrived is to be dated the era of true progress. They have put into the hands of man a power that is almost infinite. As for their applications, they are numberless. Mitigating the rigors of winter, by giving back to the atmosphere the surplus heat stored up during the summer, they have revolutionized

heat, steam, and electricity are as old as mankind. At the end of the nineteenth century, weren't scientists already affirming that the only difference between physical and chemical forces lay in the manner of vibration of their respective etheric particles? [2]

Since this enormous step of recognizing the common source for all these forces had already been made, it is incomprehensible why it took so long to figure out the rates of vibration that differentiated them. It is especially extraordinary that the method of reproducing them independently has only been discovered recently.

Yet that is how things happened, and it was only in 2790, a hundred years ago, that the legendary Oswald Nyer managed to do so [3].

A true benefactor of humanity, this great man! His ingenious discovery led to all the others. A constellation of inventors was born out of it, culminating in our extraordinary James Jackson [4]. It is to him that we owe the new storage batteries, some of which condense the power of the sun's rays, others the electricity accumulated in the heart of our globe, and others the energy generated by sources such as waterfalls, the wind, streams and rivers, etc. It is also to him that we owe the transformer, which releases the living force from those batteries—in the form of heat, light, electricity, or mechanical power—and thereby obtaining from them the work desired.

Yes! Progress really dates from the day when these two instruments were imagined and developed. Their applications are countless today. Mitigating the frigid temperatures of winter by using the stored excess heat of summer, they have greatly benefitted agriculture. By providing propulsion systems for flying machines used in aerial navigation, they have enabled

agriculture. By supplying motive power for aërial navigation, they have given to commerce a mighty impetus. To them we are indebted for the continuous production of electricity without batteries or dynamos, of light without combustion or incandescence, and for an unflinching supply of mechanical energy for all the needs of industry.

Yes, all these wonders have been wrought by the accumulator and the transformer. And can we not to them also trace, indirectly, this latest wonder of all, the great “Earth Chronicle” building in 253d Avenue, which was dedicated the other day? If George Washington Smith, the founder of the Manhattan “Chronicle”, should come back to life to-day, what would he think were he to be told that this palace of marble and gold belongs to his remote descendant, Fritz Napoleon Smith, who, after thirty generations have come and gone, is owner of the same newspaper which his ancestor established!

For George Washington Smith’s newspaper has lived generation after generation, now passing out of the family, anon coming back to it. When, 200 years ago, the political center of the United States was transferred from Washington to Centropolis, the newspaper followed the government and assumed the name of Earth Chronicle.

Unfortunately, it was unable to maintain itself at the high level of its name. Pressed on all sides by rival journals of a more modern type, it was continually in danger of collapse. Twenty years ago its subscription list contained but a few hundred thousand names, and then Mr. Fritz Napoleon Smith bought it for a mere trifle, and originated telephonic journalism.

Everyone is familiar with Fritz Napoleon Smith’s system—a system made possible by the enormous development of telephony during the last hundred years. Instead of being printed, the Earth Chronicle is every morning spoken to subscribers, who, in interesting conversations with reporters, statesmen, and

commerce to make a giant leap forward. It is to them that we owe the steady production of electricity without batteries or machines, light without combustion or incandescence, and that inexhaustible source of energy which has increased industrial production a hundred-fold [5].

All of these marvels, we are going to see them in an incomparable office building: the home of the *Earth Herald*, recently inaugurated and located on 16823rd Avenue of Universal City, the present capital city of the United States of Two Americas.

If the founder of the *New York Herald*, Gordon Benett, were alive today, what would he say when seeing this palace of marble and gold, which belongs to his illustrious descendant, Francis Benett? Twenty-five generations have come and gone, and the *New York Herald* has remained in the Benett’s remarkable family. Two hundred years before, when the government of the Union moved from Washington to Universal City, the newspaper followed—unless it was the government who followed the newspaper!—and then adopted the title of the *Earth Herald* [6].

And let no one imagine that it had diminished under Francis Benett’s administration. No! On the contrary, its new director was to give it an unequalled boost of vitality and power by making full use of telephonic journalism [7].

Everyone is familiar with this system, made possible by the incredibly widespread diffusion of the telephone. Each morning, instead of being printed as it was in olden times, the *Earth Herald* is “spoken”: it is through a brief conversation with a reporter, a politician, or a scientist that subscribers

scientists, learn the news of the day. Furthermore, each subscriber owns a phonograph, and to this instrument he leaves the task of gathering the news whenever he happens not to be in a mood to listen directly himself. As for purchasers of single copies, they can at a very trifling cost learn all that is in the paper of the day at any of the innumerable phonographs set up nearly everywhere.

Fritz Napoleon Smith's innovation galvanized the old newspaper. In the course of a few years the number of subscribers grew to be 85,000,000, and Smith's wealth went on growing, till now it reaches the almost unimaginable figure of \$10,000,000,000. This lucky hit has enabled him to erect his new building, a vast edifice with four *façades* each 3,250 feet in length, over which proudly floats the hundred-starred flag of the Union. Thanks to the same lucky hit, he is to-day king of newspaperdom; indeed, he would be king of all the Americans, too, if Americans could ever accept a king. You do not believe it? Well, then, look at the plenipotentiaries of all nations and our own ministers themselves crowding about his door, entreating his counsels, begging for his approbation, imploring the aid of his all-powerful organ. Reckon up the number of scientists and artists that he supports, of inventors that he has under his pay.

Yes, a king is he. And in truth his is a royalty full of burdens. His labors are incessant, and there is no doubt at all that in earlier times any man would have succumbed under the overpowering stress of the toil which Mr. Smith has to perform. Very fortunately for him, thanks to the progress of hygiene, which, abating all the old sources of unhealthfulness, has lifted the mean of human life from 37 up to 52 years, men have stronger constitutions now than heretofore. The discovery of nutritive air is still in the future, but in the meantime men today consume food that is compounded and

learn about what might be of interest to them. As for those who wish to buy an individual copy for a few cents, they know that they can access that day's content in one of the countless phonographic offices [8].

This innovation by Francis Benett invigorated the old newspaper. In a few months, its customer base grew to around 85 million subscribers, and the director's personal fortune increased to 300 billion dollars, and today it is even higher. Thanks to this income, he was able to build this new office building, a colossal edifice of with four *façades* each measuring two miles long and whose sheltering roof is topped off with a glorious flag displaying the seventy-five stars of the Confederation [9].

Today, Francis Benett, king of journalism, would be king of the two Americas if the Americans could ever accept the idea of a monarch. Do you doubt this? Every day the plenipotentiaries of every nation and our own ministers crowd around his door asking for his advice, begging for his approbation, seeking the support of his all-powerful enterprise. Count up the number of scientists that he helps, the artists that he supports, the inventors that he subsidizes.

A hard-working member of royalty he is, laboring without respite, and certainly nobody from an earlier period would have been able to keep up such an arduous daily grind. Fortunately, today's men have a more robust constitution, thanks to progress made in hygiene and exercise, which has resulted in an increase of the average human lifespan from 37 to 58 years. And thanks also to the preparation of scientifically enhanced foods—while we await the next discovery of nutritious air, which will allow people to nourish

prepared according to scientific principles, and they breathe an atmosphere freed from the micro-organisms that formerly used to swarm in it; hence they live longer than their forefathers and know nothing of the innumerable diseases of olden times.

Nevertheless, and notwithstanding these considerations, Fritz Napoleon Smith's mode of life may well astonish one. His iron constitution is taxed to the utmost by the heavy strain that is put upon it. Vain the attempt to estimate the amount of labor he undergoes; an example alone can give an idea of it. Let us then go about with him for one day as he attends to his multifarious concerns. What day? That matters little; it is the same every day. Let us then take at random September 25th of this present year 2889.

This morning Mr. Fritz Napoleon Smith awoke in very bad humor. His wife having left for France eight days ago, he was feeling disconsolate. Incredible though it seems, in all the ten years since their marriage, this is the first time that Mrs. Edith Smith, the professional beauty, has been so long absent from home; two or three days usually suffice for her frequent trips to Europe. The first thing that Mr. Smith does is to connect his phonotelephote, the wires of which communicate with his Paris mansion. The telephote! Here is another of the great triumphs of science in our time. The transmission of speech is an old story; the transmission of images by means of sensitive mirrors connected by wires is a thing but of yesterday. A valuable invention indeed, and Mr. Smith this morning was not niggard of blessings for the inventor, when by its aid he was able distinctly to see his wife notwithstanding the distance that separated him from her. Mrs. Smith, weary after the ball or the visit to the theater the preceding night, is still abed, though it is near noontide at Paris. She is asleep, her head sunk in the lace-covered pillows. What? She stirs? Her lips move. She is dreaming perhaps? Yes, dreaming. She is talking, pronouncing a name

themselves simply by breathing [10].

And now, if you would like to know everything that happens in a day in the life of the director of the *Earth Herald*, let's take the time to follow him as he tends to his many business affairs on this day, the 25th of July, in the year 2890 [11].

This morning, Francis Benett awoke in a rather gloomy mood. It was eight days that his wife had been in France, and he was feeling a bit lonely. Can it be believed? In the ten years that they had been married, this was the first time that Mrs. Edith Benett, the professional Beauty, had been away for so long. Two or three days normally sufficed for her frequent trips to Europe, and especially to Paris where she often went to buy her hats.

So the first thing that Francis Benett did after getting up was to activate his phonotelephote, which had a direct connection to a mansion he owned on the Champs-Élysées. The telephone, then enhanced by the telephote, is another conquest of modern times. If the transmission of spoken words by electrical lines has been possible for many years, it is only since yesterday that images can also be transmitted. A wonderful discovery, and one for which Francis Benett was not alone in blessing the inventor when, despite the great distance that separated them, he saw his wife's likeness appear on the telephotic screen [12].

his name—Fritz! The delightful vision gave a happier turn to Mr. Smith's thoughts. And now, at the call of imperative duty, light-hearted he springs from his bed and enters his mechanical dresser.

A lovely vision! A little tired from her dancing or theater of the night before, Mrs. Benett was still in bed. Although it was nearly noon over there, she was still asleep, her charming head buried in the lace of her pillow.

But now she stirs a little, her lips are moving... She is no doubt dreaming? Yes! She is dreaming, and a name slips from her mouth: "Francis... my dear Francis...!"

His name, spoken by that sweet voice, turned Francis Benett's mood into a happier one. Not wanting to wake the lovely sleeper, he springs from his bed and enters his mechanized dressing room.

Two minutes later the machine deposited him all dressed at the threshold of his office. The round of journalistic work was now begun. First he enters the hall of the novel-writers, a vast apartment crowned with an enormous transparent cupola. In one corner is a telephone, through which a hundred *Earth Chronicle* *littérateurs* in turn recount to the public in daily installments a hundred novels. Addressing one of these authors who was waiting his turn, "Capital! Capital! my dear fellow," said he, "your last story. The scene where the village maid discusses interesting philosophical problems with her lover shows your very acute power of observation. Never have the ways of country folk been better portrayed. Keep on, my dear Archibald, keep on! Since yesterday, thanks to you, there is a gain of 5000 subscribers."

Two minutes later, without needing the help of a personal valet, the machine deposited him washed, shaved, shod, dressed, and buttoned from top to bottom on the doorstep of his office. The day's work was about to begin [13].

It was into the hall of the serial novelists that Francis Benett first entered. It was a very large, this room, surmounted by a great translucent dome. In one corner, there are several telephonic devices through which a hundred authors of the *Earth Herald* read a hundred chapters from a hundred novels to their fervent public.

Catching sight of one writer who was taking a five-minute break, Francis Benett said:

"Very fine, my dear fellow, very fine that last chapter of yours! That scene where the young village girl is discussing with her gallant some of the problems of transcendental philosophy shows keen observation. Country manners have never been so clearly portrayed. Carry on, my dear Archibald, and good luck to you! Ten thousand new subscribers since yesterday, thanks to you!" [14]

“Mr. John Last,” he began again, turning to a new arrival, “I am not so well pleased with your work. Your story is not a picture of life; it lacks the elements of truth. And why? Simply because you run straight on to the end; because you do not analyze. Your heroes do this thing or that from this or that motive, which you assign without ever a thought of dissecting their mental and moral natures. Our feelings, you must remember, are far more complex than all that. In real life every act is the resultant of a hundred thoughts that come and go, and these you must study, each by itself, if you would create a living character. ‘But,’ you will say, ‘in order to note these fleeting thoughts one must know them, must be able to follow them in their capricious meanderings.’ Why, any child can do that, as you know. You have simply to make use of hypnotism, electrical or human, which gives one a two-fold being, setting free the witness-personality so that it may see, understand, and remember the reasons which determine the personality that acts. Just study yourself as you live from day to day, my dear Last. Imitate your associate whom I was complimenting a moment ago. Let yourself be hypnotized. What’s that? You have tried it already? Not sufficiently, then, not sufficiently!”

Mr. Smith continues his round and enters the reporters’ hall. Here 1500 reporters, in their respective places, facing an equal number of telephones, are communicating to the subscribers the news of the world as gathered during the night. The organization of this matchless service has often been described. Besides his telephone, each reporter, as the reader is aware, has in front of him a set of commutators, which enable him to communicate with any desired telephotic line. Thus the subscribers not only hear the news but see the occurrences. When an incident is described that is already past, photographs of its main features are transmitted with the narrative. And there is no confusion withal. The reporters’ items, just like the different stories and all the other component parts of the

“Mr. John Last,” he continued, turning toward another of his colleagues, “I’m less satisfied with you. Your story is not lifelike! You move too quickly to the end! And what about the documentation? You must dissect! It is not with a pen that one writes nowadays, but with a scalpel! Every action in real life is the result of successive and fleeting thoughts, which must be carefully enumerated to create a living being! And what’s easier than using electric hypnotism, which splits a man in two and brings out his personality. Watch yourself living, my dear fellow John Last! Imitate your colleague whom I was complimenting a moment ago. Get yourself hypnotized! What? You’re having it done, you say? Well, not enough, not enough!” [15]

Having given this little lesson, Francis Bennett continues his inspection and enters the reporters’ hall. His 1500 reporters, placed before an equal number of telephones, were communicating to the subscribers the news that had come in during the night from the four corners of the world. The organization of this incomparable service has often been described. In addition to his telephone, each reporter has before him a series of switches that permit him to establish contact with this or that telephotic line. Thus the subscribers not only hear the story but can also see the events unfold. When it is a question of “news briefs,” which have already happened by the time they are reported, the device transmits the principal parts of the story,

journal, are classified automatically according to an ingenious system, and reach the hearer in due succession. Furthermore, the hearers are free to listen only to what specially concerns them. They may at their pleasure give attention to one editor and refuse it to another.

Mr. Smith next addresses one of the ten reporters in the astronomical department—a department still in the embryonic stage, but which will yet play an important part in journalism.

"Well, Cash, what's the news?"

"We have phototelegrams from Mercury, Venus, and Mars."

"Are those from Mars of any interest?"

"Yes, indeed. There is a revolution in the Central Empire."

"And what of Jupiter?" asked Mr. Smith.

"Nothing as yet. We cannot quite understand their signals. Perhaps ours do not reach them."

"That's bad," exclaimed Mr. Smith, as he hurried away, not in the best of humor, toward the hall of the scientific editors.

With their heads bent down over their electric computers, thirty scientific men were absorbed in transcendental calculations. The coming of Mr. Smith was like the falling of a bomb among them.

"Well, gentlemen, what is this I hear? No answer from Jupiter? Is it always to be thus? Come, Cooley, you have been at work now twenty years on this problem, and yet—"

obtained by high-definition photography [16].

Francis Benett questions one of the ten astronomical reporters assigned to this service, which will grow in size with the new ongoing discoveries in the world of the stars.

"Well, Cash, what have you got?"

"Phototelegrams from Mercury, Venus, and Mars, sir."

"Interesting, that last one?"

"Yes! a revolution in the Central Empire, in support of the liberal Democrats against the conservative Republicans."

"Just like here, then. And on Jupiter?" [17]

"Nothing so far! We haven't been able to understand the signals from the Jovians. Perhaps ours haven't reached them?..."

"That's your job, and I hold you responsible, Mr. Cash!" answered Francis Benett who, very dissatisfied, then went to the scientific editorial room.

Bent over their calculators, thirty scientists were absorbed in equations with a degree of 95. Some were even playing with formulae of algebraic infinity and 24 dimensional spaces, like an elementary school child with the four rules of arithmetic [18].

Francis Benett fell among them like a bombshell.

"Well, gentlemen, what's this I've been told? No response from Jupiter? Will it always be the same? Look here, Corley, for twenty years you've been studying this

“True enough,” replied the man addressed. “Our science of optics is still very defective, and though our mile-and-three-quarter telescopes...”

“Listen to that, Peer,” broke in Mr. Smith, turning to a second scientist. “Optical science defective! Optical science is your specialty. But,” he continued, again addressing William Cooley, “failing with Jupiter, are we getting any results from the moon?”

“The case is no better there.”

“This time you do not lay the blame on the science of optics. The moon is immeasurably less distant than Mars, yet with Mars our communication is fully established. I presume you will not say that you lack telescopes?”

“Telescopes? O no, the trouble here is about—inhabitants!”

“That’s it,” added Peer.

“So, then, the moon is positively uninhabited?” asked Mr. Smith.

“At least,” answered Cooley, “on the face which she presents to us. As for the opposite side, who knows?”

“Ah, the opposite side! You think, then,” remarked Mr. Smith, musingly, “that if one could but—”

“Could what?”

“Why, turn the moon about-face.”

“Ah, there’s something in that,” cried the two men at once. And indeed, so confident was their air, they seemed to have no doubt as to the possibility of success in such an undertaking.

planet, it seems to me that...” [19]

“What do you expect, sir?” the scientist replied. “Our optics still leave a lot to be desired, and even with our telescopes three kilometers long...” [20]

“Do you hear that, Peer?” interrupted Francis Bennett, addressing himself to Corley’s neighbor, “your optics leave a lot to be desired! That’s your specialty, my dear fellow! Put on your glasses, for heaven’s sake, put on your glasses!”

Then, returning to Corley:

“But, if not Jupiter, are you at least getting some results from the Moon?”

“No better, Mr. Bennett!”

“Well! This time you cannot blame the optics. The Moon is 600 times nearer to us than Mars, with whom we have had regular correspondence service. It cannot be for the lack of telescopes...” [21]

“No, it’s the inhabitants” Corley replied with the thin smile of a scientist brimming with “X”s [22].

“You dare to affirm that the Moon is uninhabited?”

“On the face turned toward us, in any case, Mr. Bennett. Who knows about the other side?”

“Well then, Corley, there is one simple way to find out...”

“Which is...?”

“By turning the Moon around!”

And that very day, the scientists of the Bennett factory began working out the mechanical means for turning around our satellite [23].

"Meanwhile," asked Mr. Smith, after a moment's silence, "have you no news of interest to-day'?"

"Indeed we have," answered Cooley. "The elements of Olympus are definitively settled. That great planet gravitates beyond Neptune at the mean distance of 11,400,799,642 miles from the sun, and to traverse its vast orbit takes 1311 years, 294 days, 12 hours, 43 minutes, 9 seconds."

"Why didn't you tell me that sooner?" cried Mr. Smith. "Now inform the reporters of this straightaway. You know how eager is the curiosity of the public with regard to these astronomical questions. That news must go into to-day's issue."

On the whole, Francis Benett had reason to be satisfied. One of the *Earth Herald's* astronomers had just determined the attributes of the new planet Gandini. Its orbit around the Sun, at a distance of 1,600,348,284.5 kilometers, takes 272 years, 94 days, 12 hours, 43 minutes, and 9.18 seconds.

Francis Benett was delighted with this precision [24].

"Good!" he exclaimed. "Hurry and inform the reporting service about this. You know how passionate the public can be about these astronomical matters. I really want this news to appear in today's issue!"

Before leaving the reporters' hall, Francis Benett headed toward a special group of interviewers and approached the one who was in charge of celebrities.

"You have interviewed President Wilson?" he asked.

"Yes, Mr. Benett, and I'm publishing in our column the news that he is suffering from a distended stomach and is undergoing some serious gastric irrigations."

"Perfect. And what about this matter of the murderer Chapmann? Have you interviewed the members of the jury?"

"Yes, and they have all agreed that he is guilty, so the case will not even be presented to them. The accused will be executed before he is sentenced."

"Executed... electrically?"

"Electrically, Mr. Benett, and without pain...at least insofar as we assume since this detail is still undetermined." [25]

Then, the two men bowing to him, Mr. Smith passed into the next hall, an enormous gallery upward of 3200 feet in length, devoted to atmospheric advertising. Everyone has noticed those enormous advertisements reflected from the clouds, so large that they may be seen by the populations of whole cities or even of entire countries. This, too, is one of Mr. Fritz Napoleon Smith's ideas, and in the Earth Chronicle building a thousand projectors are constantly engaged in displaying upon the clouds these mammoth advertisements.

When Mr. Smith to-day entered the sky-advertising department, he found the operators sitting with folded arms at their motionless projectors, and inquired as to the cause of their inaction. In response, the man addressed simply pointed to the sky, which was of a pure blue. "Yes," muttered Mr. Smith, "a cloudless sky! That's too bad, but what's to be done? Shall we produce rain? That we might do, but is it of any use? What we need is clouds, not rain. Go," said he, addressing the head engineer, "go see Mr. Samuel Mark, of the meteorological division of the scientific department, and tell him for me to go to work in earnest on the question of artificial clouds. It will never do for us to be always thus at the mercy of cloudless skies!"

Mr. Smith's daily tour through the several departments of his newspaper is now finished. Next, from the advertisement hall he passes to the reception chamber, where the ambassadors accredited to the American government are awaiting him, desirous of

The adjacent room, a huge hall about a half-kilometer long, was devoted to advertising, and it is easy to imagine what advertising in a newspaper such as the *Earth Herald* must be. It brings in, on average, three million dollars a day. Moreover, thanks to an ingenious system, one portion of this advertising takes an absolutely new form, courtesy of a patent bought for three dollars from a poor devil who died of hunger. They are gigantic billboard signs projected onto the clouds and whose dimensions are such that they can be seen by the entire country. From this gallery, a thousand projectors were continuously running, sending to the clouds these oversized ads, reproduced in color [26].

But, this day, when Francis Benett entered the advertising hall, he saw that the technicians were standing with their arms crossed next to their idle projectors. He asks them about it. Their only reply is to point to a clear blue sky.

"Yes! Some fine weather," he mutters, "and no possibility for aerial advertising! What's to be done? If it were simply a question of rain, we could produce that! But it's not rain but clouds that we need!"

"Yes, some nice white clouds!" replied the chief technician.

"Well then! Mr. Samuel Mark, get in touch with the scientific editors in the meteorological department. You can tell them on my behalf that they need to get busy on creating artificial clouds. We really can't remain at the mercy of fair weather!" [27]

After completing his inspection of the different departments of the newspaper, Francis Benett then went to the reception hall, where awaiting him were ambassadors and plenipotentiary ministers accredited to the American government. These

having a word of counsel or advice from the all-powerful editor. A discussion was going on when he entered. "Your Excellency will pardon me," the French Ambassador was saying to the Russian, "but I see nothing in the map of Europe that requires change. 'The North for the Slavs?' Why, yes, of course; but the South for the Latins. Our common frontier, the Rhine, it seems to me, serves very well. Besides, my government, as you must know, will firmly oppose every movement, not only against Paris, our capital, or our two great prefectures, Rome and Madrid, but also against the kingdom of Jerusalem, the dominion of Saint Peter, of which France means to be the trusty defender."

"Well said!" exclaimed Mr. Smith. "How is it," he asked, turning to the Russian ambassador, "that you Russians are not content with your vast empire, the most extensive in the world, stretching from the banks of the Rhine to the Celestial Mountains and the Kara-Korum, whose shores are washed by the Frozen Ocean, the Atlantic, the Mediterranean, and the Indian Ocean? Then, what is the use of threats? Is war possible in view of modern inventions-asphyxiating shells capable of being projected a distance of 60 miles, an electric spark of 90 miles, that can at one stroke annihilate a battalion; to say nothing of the plague, the cholera, the yellow fever, that the belligerents might spread among their antagonists mutually, and which would in a few days destroy the greatest armies?"

"True," answered the Russian; "but can we do all that we wish? As for us Russians, pressed on our eastern frontier by the Chinese, we must at any cost put forth our strength for an effort toward the west."

"O, is that all? In that case," said Mr. Smith, "the thing can be arranged. I will speak to the Secretary of State about it. The attention of the Chinese government shall be called to the

gentlemen had come to ask for advice from the all-powerful director. At the moment when Francis Benett entered the room, they were carrying on a rather lively discussion.

"Pardon me, your Excellency," the French ambassador was saying to the Russian ambassador, "but I don't see anything that needs to be changed in the map of Europe. The north to the Slavs, agreed! But the south to the Latins! Our common border along the Rhine seems excellent to me. Besides, make no mistake, my government will certainly resist any undertakings that are directed against our prefectures in Rome, Madrid, and Vienna!" [28]

"Well said!" added Francis Benett who intervened in the debate. "What, Mr. Russian ambassador, you are not content with your vast empire which extends from the banks of the Rhine as far as the borders of China, an empire whose immense coastline is bathed by the Arctic Ocean, the Atlantic, the Black Sea, the Bosphorus, and the Indian Ocean? And what is the point of threats? Is war even possible with today's modern weapons such as asphyxiating gas shells that can be sent a distance of a hundred kilometers, these electric flashers twenty leagues long that can annihilate a whole army division at a single blow, or these projectiles loaded with microbes of plague, cholera, and yellow fever that can destroy an entire nation in a few hours?" [29]

"We understand that, Mr. Benett," replied the Russian ambassador. "But we cannot always do what we like. We ourselves are being pushed by the Chinese along our eastern border, and we must, whatever the cost, try to move toward the west..."

"Is that all it is, sir?" Francis Benett answered in a patronizing tone. "Well then! Since the proliferation of the Chinese is a danger for the world, we'll bring pressure to

matter. This is not the first time that the Chinese have bothered us.”

“Under these conditions, of course—” And the Russian ambassador declared himself satisfied.

“Ah, Sir John, what can I do for you?” asked Mr. Smith as he turned to the representative of the people of Great Britain, who till now had remained silent.

“A great deal,” was the reply. “If the *Earth Chronicle* would but open a campaign on our behalf—”

“And for what object?”

“Simply for the annulment of the Act of Congress annexing to the United States the British islands.”

Though, by a just turn-about of things here below, Great Britain has become a colony of the United States, the English are not yet reconciled to the situation. At regular intervals they are ever addressing to the American government vain complaints.

“A campaign against the annexation that has been an accomplished fact for 150 years!” exclaimed Mr. Smith. “How can your people suppose that I would do anything so unpatriotic?”

“We at home think that your people must now be sated. The Monroe doctrine is fully applied; the whole of America belongs to the Americans. What more do you want? Besides, we will pay for what we ask.”

“Indeed!” answered Mr. Smith, without manifesting the slightest irritation. “Well, you English will ever be the same. No, no, Sir John,

bear on the Son of Heaven. He’ll simply have to impose upon his subjects a birth-rate limit, not to be exceeded on pain of death! That will balance things out.” [30]

“And you, sir,” the director of the *Earth Herald* continued, addressing the consul from England, “what can I do to be of service to you?”

“A great deal, Mr. Benett,” that personage replied, bowing humbly. “It would be enough if your newspaper could begin a campaign on our behalf.”

“For what purpose?”

“Merely to protest against the annexation of Great Britain by the United States...”

“Merely that!” exclaimed Francis Benett, shrugging his shoulders. “An annexation that is already 150 years old! Won’t you English ever get used to the idea that, by a just reversal of events, your country has become an American colony? That’s pure folly. How could your government have possibly believed that I would ever take part in such an antipatriotic campaign...”

“Mr. Benett, as you know, the Monroe Doctrine says all America for the Americans, nothing but America, and not...”

“But England is only one of our colonies, sir, and one of the fairest, I agree. Don’t count on us ever agreeing to give her

do not count on me for help. Give up our fairest province, Britain? Why not ask France generously to renounce possession of Africa, that magnificent colony the complete conquest of which cost her the labor of 800 years? You will be well received!" up!" [31]

"You decline! All is over then!" murmured the British agent sadly. "The United Kingdom falls to the share of the Americans; the Indies to that of—"

"The Russians," said Mr. Smith, completing the sentence.

"Australia—"

"Has an independent government."

"Then nothing at all remains for us!" sighed Sir John, downcast.

"Nothing?" asked Mr. Smith, laughing. "Well, now, there's Gibraltar!"

With this sally the audience ended. The clock was striking twelve, the hour of breakfast. Mr. Smith returns to his chamber. Where the bed stood in the morning a table all spread comes up through the floor. For Mr. Smith, being above all a practical man; has reduced the problem of existence to its simplest terms. For him, instead of the endless suites of apartments of the olden time, one room fitted with ingenious mechanical contrivances is enough. Here he sleeps, takes his meals, in short, lives.

He seats himself. In the mirror of the phonotelephote is seen the same chamber at Paris which appeared in it this morning. A table furnished forth is likewise in readiness here, for notwithstanding the difference of hours, Mr. Smith and his wife have arranged to take their meals simultaneously. It is delightful thus to take breakfast *tête-a-tête* with one who is 3000 miles or so away. Just now, Mrs. Smith's chamber has no occupant.

"You refuse?..."

"I refuse. And if you insist, we shall make it a *casus belli*, based on nothing more than an interview with one of our reporters."

"So that's the end of it," muttered the overwhelmed consul. "The United Kingdom, Canada, and New Britain belong to the Americans, India to the Russians, and Australia and New Zealand to themselves! Of all that was once England, what's left? Nothing!" [32]

"Nothing, sir?" retorted Francis Benett. "Well then, what about Gibraltar?" [33]

At that moment the clock struck twelve noon. The director of the *Earth Herald*, ending the audience with a gesture, left the hall. He sat down in a wheeled chair and, in a few minutes, reached his dining room, located a kilometer away at the far end of the office building [34].

The table is set, and he takes his place at it. Within reach of his hand are a series of faucets, and before him is the round glass of a phonotelephote, on which appears the dining room of his mansion in Paris. Despite the difference in hours, Mr. and Mrs. Benett had arranged to have their lunch at the same time. Nothing is more pleasant than to be face to face when separated by a thousand leagues, to see and speak to each other by means of the phonotelephonic device.

“She is late! Woman’s punctuality! Progress everywhere except there!” muttered Mr. Smith as he turned the tap for the first dish. For like all wealthy folk in our day, Mr. Smith has done away with the domestic kitchen and is a subscriber to the Grand Alimentation Company, which sends through a great network of tubes to subscribers’ residences all sorts of dishes, as a varied assortment is always in readiness. A subscription costs money, to be sure, but the *cuisine* is of the best, and the system has this advantage, that it, does away with the pestering race of the *cordons-bleus*. Mr. Smith received and ate, all alone, the *hors-d’oeuvre*, *entrées*, *rôti* and *legumes* that constituted the repast. He was just finishing the dessert when Mrs. Smith appeared in the mirror of the telephote.

“Why, where have you been?” asked Mr. Smith through the telephone.

“What! You are already at the dessert? Then I am late,” she exclaimed, with a winsome *naïveté*. “Where have I been, you ask? Why, at my dress-maker’s. The hats are just lovely this season! I suppose I forgot to note the time, and so am a little late.”

“Yes, a little,” growled Mr. Smith; “so little that I have already quite finished breakfast. Excuse me if I leave you now, but I must be going.”

“O certainly, my dear; good-bye till evening.”

But at this moment, the room in Paris is still empty.

“Edith is running late,” Francis Benett says to himself. “Oh, the punctuality of women! Progress everywhere except there...” And, after making this all-too-true observation, he turns on one of the faucets.

Like everyone else who is comfortably well off in our time, Francis Benett has given up cooking at home and is one of the many subscribers to a large enterprise called The Company of Domestic Food Supply, which distributes meals of a thousand different kinds through a network of pneumatic tubes. The system is expensive, without a doubt, but the food is better, and it has the advantage of doing away with that exasperating race of cooks—of both sexes—from the Cordon Bleu [35].

So Francis Benett was dining alone, not without some regret. He was finishing his coffee when Mrs. Benett, having just come home, appeared on the telephote’s screen.

“Where have you been, my dear Edith?” Francis Benett asked.

“What?” Mrs. Benett replied, “You’ve already finished? Am I late then? Where have I been? At my milliner’s, of course! This year’s hats are so interesting! They are not hats at all; they are like domes, cupolas! I must’ve lost track of the time.”

“Yes, a little, my dear. So much so that I’ve already finished my meal.”

“Well, run along then, my dear. Carry on with your work.” Mrs. Benett replied. “I still have one more appointment today: my fashion designer!”

And this designer was none other than the famous Wormspire, the very man who so judiciously remarked that “Woman is only

a question of forms!" [36]

Francis Benett kissed Mrs. Benett on the cheek through the telephote's screen and headed toward the window where his aero-car was waiting [37].

Smith stepped into his air-coach, which was in waiting for him at a window. "Where do you wish to go, sir?" inquired the coachman.

"What is Monsieur's destination?" asked the aero-coachman.

"Let me see; I have three hours," Mr. Smith mused. "Jack, take me to my accumulator works at Niagara."

"Let's see, I have some time," answered Francis Benett. "Take me to my electric power plant at Niagara."

For Mr. Smith has obtained a lease of the great falls of Niagara. For ages the energy developed by the falls went unutilized. Smith, applying Jackson's invention, now collects this energy, and lets or sells it. His visit to the works took more time than he had anticipated. It was four o'clock when he returned home, just in time for the daily audience which he grants to callers.

The aero-car, a splendid apparatus based on the principle of "heavier-than-air" flight, shot across the sky at a speed of 600 kilometers per hour. Beneath it streamed past cities with their moving sidewalks transporting pedestrians up and down the streets, and by the countryside covered by immense spider-webs of electric power lines [38].

In a half an hour, Francis Benett had reached his power plant at Niagara. It used the force of the falls to generate energy, which he then sold or leased to consumers. When his visit was over, he returned home by way of Philadelphia, Boston, and New York to arrive at Universal City, where his aero-car dropped him off around five o'clock [39].

One readily understands how a man situated as Smith is must be beset with requests of all kinds. Now it is an inventor needing capital; again it is some visionary who comes to advocate a brilliant scheme which must surely yield millions of profit. A choice has to be made between these projects, rejecting the worthless, examining the questionable ones, accepting the meritorious. To this work Mr. Smith devotes every day two full hours.

There was a crowd in the reception room of the *Earth Herald*. They were awaiting Francis Benett's return for the daily audience that he gave to his petitioners, which included inventors seeking financial backing and big businessmen looking for sales—all excellent, to judge by their descriptions. Among these diverse proposals, a choice must be made: to reject the bad ones, to examine the dubious ones, to welcome the good ones.

The callers were fewer to-day than usual—only twelve of them. Of these, eight had only impracticable schemes to propose. In fact,

Francis Benett soon got rid of those who had brought only useless or impracticable schemes. One of them was making claims

one of them wanted to revive painting, an art fallen into desuetude owing to the progress made in color-photography. Another, a physician, boasted that he had discovered a cure for nasal catarrh! These impracticables were dismissed in short order. Of the four projects favorably received, the first was that of a young man whose broad forehead betokened his intellectual power.

to have resurrected the art of painting, an art that had fallen into such obsolescence that Millet's *Angelus* had just sold for fifteen francs. This was due to the progress made in color photography, invented at the end of the nineteenth century by the Japanese Aruziswa-Riochi-Nichome-Sanjukamboz-Kio-Baski-Kû, whose name has become very popular. Another petitioner had supposedly found a bacterium that, once introduced into the human body in a bacillus-laced soup, would make a human being immortal. Then there was the practical chemist who had just discovered a new substance, Nihilium, of which a gram would cost three million dollars. And the audacious physician who affirmed that, if people were still dying, they were at least dying cured. And another, even more audacious, who claimed that he had in his possession a specific remedy for the common head cold [40].

All these dreamers were shown out at once.

A few of the others received a better reception, and among them was a young man whose high forehead suggested much intelligence [41].

"Sir, I am a chemist," he began, "and as such I come to you."

"Well!"

"Once the elementary bodies," said the young chemist, "were held to be sixty-two in number; a hundred years ago they were reduced to ten; now only three remain irresolvable, as you are aware."

"Yes, yes."

"Well, sir, these also I will show to be composite. In a few months, a few weeks, I shall have succeeded in solving the problem. Indeed, it may take only a few days."

"And then?"

"Sir," he began, "although the number of elements used to be estimated at seventy-five, today it has been reduced to three, as you are no doubt aware." [42]

"Perfectly," replied Francis Benett.

"Well, sir, I am on the point of reducing these three elements to one. If I don't run out of money first, in a few weeks I'll have succeeded!"

"And then?"

"Then, sir, I shall simply have determined the absolute. All I want is money enough to carry my research to a successful issue."

"Very well," said Mr. Smith. "And what will be the practical outcome of your discovery?"

"The practical outcome? Why, that we shall be able to produce easily all bodies whatever—stone, wood, metal, fibers—"

"And flesh and blood?" queried Mr. Smith, interrupting him. "Do you pretend that you expect to manufacture a human being out and out?"

"Why not?"

Mr. Smith advanced \$100,000 to the young chemist, and engaged his services for the Earth Chronicle laboratory.

The second of the four successful applicants, starting from experiments made so long ago as the nineteenth century and again and again repeated, had conceived the idea of removing an entire city all at once from one place to another. His special project had to do with the city of Granton, situated, as everybody knows, some fifteen miles inland. He proposes to transport the city on rails and to change it into a watering-place. The profit, of course, would be enormous. Mr. Smith, captivated by the scheme, bought a half-interest in it.

"As you are aware, sir," began applicant No. 3, "by the aid of our solar and terrestrial accumulators and transformers, we are able to make all the seasons the same. I propose to do something better still. Transform into heat a portion of the surplus energy at our disposal; send this heat to the poles; then the polar regions, relieved of their snow-cap, will become a vast territory available for man's use. What think you of the scheme?"

"Then, sir, I'll have discovered the absolute!" [43]

"And the results of this discovery?"

"It will make the creation of all matter easy—stone, wood, metal, fibrin..." [44]

"Are you claiming that you will be able to create a human being?"

"Entirely...the only thing missing will be the soul!..." [45]

"Only that!" Francis Benett ironically answered, nevertheless assigning the young chemist to the scientific editorial department of his newspaper.

A second inventor, basing his work on some old experiments dating from the nineteenth century and often repeated since, had the idea of moving the whole city as a single unit. He suggested, as a demonstration, to transport the town of Staaf, located about fifteen miles from the sea, on rails to the shore where it would then become a sea-side resort. Doing so would add enormous value to the real estate already built upon and to be built upon.

Francis Benett, intrigued by this proposal, agreed to fund half of it [46].

"You know, sir," asked a third petitioner, "that, thanks to our solar and terrestrial energy generators, we have been able to equalize the seasons. Let's now transform into heat a part of the energy we have saved and send it to the polar regions to melt the ice..." [47]

“Leave your plans with me, and come back in a week. I will have them examined in the meantime.”

Finally, the fourth announced the early solution of a weighty scientific problem. Everyone will remember the bold experiment made a hundred years ago by Dr. Nathaniel Faithburn. The doctor, being a firm believer in human hibernation—in other words, in the possibility of our suspending our vital functions and of calling them into action again after a time—resolved to subject the theory to a practical test. To this end, having first made his last will and pointed out the proper method of awakening him; having also directed that his sleep was to continue a hundred years to a day from the date of his apparent death, he unhesitatingly put the theory to the proof in his own person.

Reduced to the condition of a mummy, Dr. Faithburn was confined and laid in a tomb. Time went on. September 25th, 2889, being the day set for his resurrection, it was proposed to Mr. Smith that he should permit the second part of the experiment to be performed at his residence this evening.

“Agreed. Be here at ten o’clock,” answered Mr. Smith; and with that the day’s audience was closed.

Left to himself, feeling tired, he lay down on an extension chair. Then, touching a knob, he established communication with the Central Concert Hall, whence our greatest *maestros* send out to subscribers their delightful successions of accords determined by recondite algebraic formulas. Night was

“Leave me your plans,” replied Francis Benett, “and come back in a week.”

Finally, a fourth scientist brought the news that one of the questions that had excited the entire world was about to be solved that very evening.

It is well known that, a century ago, a daring experiment made by Dr. Nathaniel Faithburn had attracted much public attention. A strong believer in human hibernation—i.e., the possibility of suspending the vital functions and then reawakening them after a certain time—he had decided to test on himself the effectiveness of his proposed method.

After describing, in a holographic will, the operations necessary to restore him to life one hundred years later to the day, he subjected himself to a cold of 172 degrees below zero. Thus reduced to a mummified state, he had then been shut up in a tomb for the agreed period of time [48].

Now it was that very day, July 25th, 2890, that the hibernation period expired, and Francis Benett had just received an invitation to proceed to one of the rooms of the *Earth Herald* to witness this resurrection so impatiently awaited. The public could also be kept in touch with this event on a second-by-second basis.

The proposal was accepted, but since the procedure was not scheduled to happen before nine o’clock that evening, Francis Benett went to relax in an easy chair in the audition room, where, by pressing a button, he was connected to the Central Concert.

approaching. Entranced by the harmony, forgetful of the hour, Smith did not notice that it was growing dark. It was quite dark when he was aroused by the sound of a door opening. "Who is there?" he asked, touching a commutator. Suddenly, in consequence of the vibrations produced, the air became luminous.

"Ah! you, Doctor?"

"Yes," was the reply. "How are you?"

"I am feeling well."

"Good! Let me see your tongue. All right! Your pulse. Regular! And your appetite?"

"Only passably good."

"Yes, the stomach. There's the rub. You are over-worked. If your stomach is out of repair, it must be mended. That requires study. We must think about it."

"In the meantime," said Mr. Smith, "you will dine with me."

As in the morning, the table rose out of the floor. Again, as in the morning, the *potage*, *rôti*, *ragoûts*, and *legumes* were supplied through the food-pipes. Toward the close of the meal,

After such a busy day, what charm he found in listening to the works of the greatest maestros of the time, all of which were based on a series of skillful harmonico-algebraic formulae! [49]

The room had been darkened, and Francis Benett was not even aware that he had fallen into a semi-enraptured sleep. But suddenly a door opened.

"Who's there?" he asked, touching a light switch located beneath his hand. At once the room was illuminated by an electric current traveling through the ether.

"Ah, it's you, doctor!" Francis Benett said.

"Myself!" replied Doctor Sam, who was coming to pay his daily visit as part of his annual subscription.

"How are you feeling?"

"Fine."

"So much the better. Let's see your tongue."

He looked at it through a microscope.

"Good. And your pulse?" He checked it with a seismograph, similar to those used to measure tremors in the earth.

"Excellent. And your appetite?"

"Ugh!"

"Oh, your stomach! It isn't doing too well, your stomach! It's getting old, your stomach is! But surgery has made so much progress! We'll have to get you a new one! You know, we have some fine replacement stomachs available, with a two-year guarantee!" [50]

"We'll see," answered Francis Benett. "In the meanwhile, Doctor, dine with me."

During the meal, the phonotelephotic link with Paris had been reestablished. This time Mrs. Benett was seated at her table, and the dinner, interspersed with Doctor Sam's

phonotelephotic communication was made with Paris. Smith saw his wife, seated alone at the dinner-table, looking anything but pleased at her loneliness.

“Pardon me, my dear, for having left you alone,” he said through the telephone. “I was with Dr. Wilkins.”

“Ah, the good doctor!” remarked Mrs. Smith, her countenance lighting up.

“Yes. But, pray, when are you coming home?”

“This evening.”

“Very well. Do you come by tube or by air-train?”

“Oh, by tube.”

“Yes; and at what hour will you arrive?”

“About eleven, I suppose.”

“Eleven by Centropolis time, you mean?”

“Yes.”

“Good-by, then, for a little while,” said Mr. Smith as he severed communication with Paris.

Dinner over, Dr. Wilkins wished to depart. “I shall expect you at ten,” said Mr. Smith. “To-day, it seems, is the day for the return to life of the famous Dr. Faithburn. You did not think of it, I suppose. The awakening is to take place here in my house. You must come and see. I shall depend on your being here.”

“I will come back,” answered Dr. Wilkins.

Left alone, Mr. Smith busied himself with examining his accounts—a task of vast magnitude, having to do with transactions which involve a daily expenditure of upward of

witticisms, was delightful.

It had barely ended when Francis Benett asked: “When do you expect to return to Universal City, my dear Edith?”

“I’m leaving right away.”

“By tube or aero-train?”

“By tube.”

“Then you’ll arrive...?”

“At eleven fifty-nine this evening.”

“Paris time?”

“No, no! Universal City time.”

“See you soon, then! And above all don’t miss the tube!”

These submarine tubes, by which one could travel from Europe in 295 minutes were much preferable to the aero-trains which did only 1000 kilometers per hour [51].

The doctor departed, after promising to return in time to attend the resurrection of his colleague Nathaniel Faithburn.

Francis Benett went into his private office, wishing to go over his daily accounts. An enormous undertaking, since each day’s expenses amount to 1500 dollars.

\$800,000. Fortunately, indeed, the stupendous progress of mechanic art in modern times makes it comparatively easy. Thanks to the Piano Electro-Reckoner, the most complex calculations can be made in a few seconds. In two hours Mr. Smith completed his task. Just in time. Scarcely had he turned over the last page when Dr. Wilkins arrived. After him came the body of Dr. Faithburn, escorted by a numerous company of men of science. They commenced work at once. The casket being laid down in the middle of the room, the telephote was got in readiness. The outer world, already notified, was anxiously expectant, for the whole world could be eye-witnesses of the performance, a reporter meanwhile, like the chorus in the ancient drama, explaining it all *viva voce* through the telephone.

"They are opening the casket," he explained. "Now they are taking Faithburn out of it—a veritable mummy, yellow, hard, and dry. Strike the body and it resounds like a block of wood. They are now applying heat; now electricity. No result. These experiments are suspended for a moment while Dr. Wilkins makes an examination of the body. Dr. Wilkins, rising, declares the man to be dead. 'Dead!' exclaims every one present. 'Yes,' answers Dr. Wilkins, 'dead!' 'And how long has he been dead?' Dr. Wilkins makes another examination. 'A hundred years,' he replies."

Fortunately, the progress made in modern technology greatly facilitates such work. Aided by the electric piano-calculator, Francis Benett had soon completed his task in twenty-five minutes [52].

It was well timed. He had hardly struck the last key on the mechanical totalizer when his presence was requested in the experimental hall. He went there right away and was greeted by a large group of scientists, joined by Doctor Sam.

The body of Nathaniel Faithburn is there, in its casket, placed on trestle table in the center of the room.

The telephote is activated, and the entire world will be able to follow the various phases of the operation.

The coffin is opened, and Nathaniel Faithburn's body is taken out. It is still like a mummy: yellow, hard, and dry. It sounds like wood. It is heated...electrified...no result. It is exposed to hypnosis...to psychic suggestion... nothing can overcome his ultra-cataleptic state.

"Well, Doctor Sam?" asks Francis Benett.

Doctor Sam leans over the body, he examines it with the utmost care. Using a hypodermic needle, he administers a few drops of the famous Brown-Séquard elixir, which was again in fashion. The mummy remains more mummified than ever [53].

"Oh well," Doctor Sam replies, "I believe the hibernation was prolonged too much..."

"And?"

"And Nathaniel Faithburn is dead."

"Dead?"

"As dead as anybody can be!"

"And how long has he been dead?"

"How long?" answers Doctor Sam. "Well, since he had the unfortunate idea of having

The case stood just as the reporter said. Faithburn was dead, quite certainly dead! “Here is a method that needs improvement,” remarked Mr. Smith to Dr. Wilkins, as the scientific committee on hibernation bore the casket out. “So much for that experiment. But if poor Faithburn is dead, at least he is sleeping,” he continued. “I wish I could get some sleep. I am tired out, Doctor, quite tired out! Do you not think that a bath would refresh me?”

“Certainly. But you must wrap yourself up well before you go out into the hall-way. You must not expose yourself to cold.”

“Hall-way? Why, Doctor, as you well know, everything is done by machinery here. It is not for me to go to the bath; the bath will come to me. Just look!” and he pressed a button. After a few seconds a faint rumbling was heard, which grew louder and louder. Suddenly the door opened, and the tub appeared.

Such, for this year of grace 2889, is the history of one day in the life of the editor of the *Earth Chronicle*. And the history of that one day is the history of 365 days every year, except leap-years, and then of 366 days—for as yet no means has been found of increasing the length

himself frozen for the love of science!”

“Obviously,” replied Francis Benett, “this is a method that needs to be perfected!” [54]

“Perfected is the word,” added Doctor Sam, while the scientific commission on hibernation carried away its funereal bundle.

Francis Benett, followed by Doctor Sam, returned to his room. Since he seemed to be very tired after such a full day, the physician advised him to take a bath before going to bed.

“You’re quite right, doctor. That will make me feel better.”

“It will, Mr. Benett and, if you wish, I can arrange one for you on my way out.”

“There’s no need for that, doctor. There’s always a bath ready for me in my office, and I don’t even need to leave the room to take it. Look, simply by pressing this button, the tub will begin moving towards me. You’ll soon see it appear on its own, filled with water at a temperature of thirty-seven degrees.” [55]

Francis Benett had just pressed the button. A rumbling sound began, got louder, and grew in volume. Then one of the doors opened, and the bathtub appeared, sliding across the floor on its rails.

Heavens! While Doctor Sam covers his eyes, little screams of frightened modesty burst from the tub. Having arrived a half-hour before after her trip home via transoceanic tube, Mrs. Benett was in it! [56]

The next day, July 26th, 2890, the director of the *Earth Herald* began once again his twenty-kilometer tour across his offices. And, that evening, when his mechanical totalizer had finished its calculations, the daily profits amounted to \$250,000 dollars,

of the terrestrial year.

\$50,000 more than the day before.

A fine job, that of a journalist at the end of the twenty-ninth century! [57]

Text Notes

1. Jules recycles much of Michel’s opening paragraph but animates it with exclamatory injections (“It’s unbelievable!”) and concrete geographical and biographical references (“those Parises, Londons, Berlins, or New Yorks,” “Morse and Hughes”). It is also interesting to note that Jules—no doubt with French readers in mind—has changed the standard of measurement from “feet” to “meters.” His use of the techno-neologisms “aero-cars” and “aero-buses” in place of Michel’s more generic term of “aërial transportation” (as well as his reference here and later in the story to the “telephote”) strongly recalls Albert Robida’s popular 1882 illustrated science-fiction novel *Le Vingtième Siècle* [The Twentieth Century]. When editing his father’s text for inclusion in the 1910 volume *Hier et demain*, Michel dropped mention of “Morse and Hughes” and returned to a sentence closer to his original phrase: « Enfin ne jouirait-on pas mieux du téléphone et du telephote, en se disant que nos pères en étaient réduits à cet appareil antédiluvien qu’ils appelaient le ‘télégraphe’? » [And would they not enjoy the telephone and the telephote even more if they remembered that our forefathers were limited to that antediluvian apparatus called the ‘telegraph’?]. This is what Michel meant in his title-page footnote of that edition when he said « Dans la version actuelle, on s’est parfois référé au texte primitif anglais » [In the present version, the original English text was sometimes referred to]—in other words, these are the places where Michel reverted back to his original text of “In the Year 2889” instead of using his father’s modified “2890” version.
2. Notice how Jules simplifies Michel’s prose here. Not only does he delete the superfluous references of “3000” and “1100” years ago and the dubious claim of scientists knowing about the “vibration of etheric particles” as “early as ten centuries ago,” but he also reattributes this knowledge to his readers’ own time “At the end of the nineteenth century,” strengthening the phatic dimension of his narrative.
3. It is unclear why Jules changed “Oswald Nier” to “Oswald Nyer” here, but it was probably to make the name seem more “Yankee” in origin (in French, “nier” means “to deny”).
4. Similarly, why change “Joseph Jackson” to “James Jackson” here except perhaps to underscore the Anglo-Saxon ethnicity of this imaginary engineer?
5. Again, Jules streamlines Michel’s wandering prose. And he also deletes the hyperbolic sentence “They have put into the hands of man a power that is almost infinite”—a sentence that Michel would reinstate in the 1910 version of the story.
6. Jules made several important changes to Michel’s text here. Locating the newspaper’s office on 16823rd Avenue instead of Michel’s more modestly extrapolated 253rd Avenue was both a humorous touch and an indication of just how large the city had become by 2890. Choosing to rename the “Chronicle” the *New York Herald* and then the *Earth Herald* was a flash of genius on Jules’ part; it anchored the futuristic story to contemporary reality (the *New York Herald* was the largest and most prestigious New York newspaper of the nineteenth century and, in 1887, had just launched a new European edition in Paris) and was also the employer of the journalist-reporter Gideon Spilett in Jules’ earlier 1875 masterpiece *L’Île mystérieuse* [The Mysterious Island]. James Gordon Bennett founded *The New York Herald* in 1835, and his son James Gordon Bennett Jr.

took control of the newspaper in 1867, continuing its international success. Among his other achievements, Gordon Bennet Jr. subsidized the African explorations of Henry Stanley in search of missionary David Livingstone in 1879-81 as well as the ill-fated expedition of George Washington De Long to the Arctic in 1880-81 (and whose name may have been the source for “George Washington Smith” in Michel’s original version of “2889”). Verne consistently misspelled Gordon Bennett’s last name as “Benett” in all versions of the story published in 1891 as well as in the 1910 posthumous version edited by Michel. (It was perhaps not entirely coincidental that Jules’ most prolific illustrator of his *Voyages extraordinaires* was also named [Léon] Benett.) The 1965 English translation by I. O. Evans of the 1910 version corrects the name to “Bennett,” as does the 1994 French edition of “2890” edited by Daniel Compère. Finally, in the 1910 posthumous version Michel replaced all his father’s references to “Universal City” with the toponym “Centropolis,” as used in his original story.

7. Note how Jules did not follow Michel’s lead in portraying the newspaper as having fallen on hard times. In doing so, Jules makes the narrative more consistent with the previous paragraph where the *Earth Herald’s* headquarters are praised as a Versailles-like “palace of marble and gold.”
8. Again, more streamlining by Verne père. He drops Michel’s sentence which explains how every subscriber has a phonograph—perhaps feeling that it might lead to some confusion on the reader’s part about how this phonograph might also function as a kind of recording device. When trying to learn the trade of journalist, Hélène makes use of a similar broadcast apparatus in Robida’s *Le Vingtième Siècle*.
9. The amounts were increased in this passage from a personal fortune of 10 billion dollars to 300 billion and from building façades of 3250 feet in length to two miles (10,560 feet). In contrast, the number of stars on the flag of the USA was decreased from 100 to 75. It is notable that, a few years later in his 1895 novel *L’île à hélice* [Propeller Island], Jules would again describe the (future) United States as extending from Canada to the Panama Canal and its national flag as having « doublé de nombre des étoiles » [doubled the number of stars] up to 67.
10. Jules changes Michel’s “hygiene” to “hygiene and exercise” and increases the average human lifespan from “52 years” to “58 years.” (In the 1910 version, Michel increases it again to “68.”) He keeps Michel’s reference to “nutritive air”—an old idea, dating back to Cyrano de Bergerac in 1657—but no longer mentions “an atmosphere freed from micro-organisms that formerly used to swarm in it” or the “innumerable diseases of olden times,” perhaps because Michel did not identify and explain the atmosphere-cleaning technology that would have been used to make this happen.
11. Jules drops Michel’s emphasis on Smith/Benett’s “iron constitution” and the “heavy strain” that his job as directory of the *Earth Herald* puts on his health. Instead, the narrator addresses the reader directly, saying “if you would like to know everything that happens in a day in the life of the director... let’s take the time to follow him,” inviting the reader to experience (vicariously) the “lifestyles of the rich and famous.” Although it is unclear why Jules changed the month from September to July, it seems obvious that he changed the year (in the story and in its title) from “2889” to “2890” in order to preserve the chronology of the narrative’s timeframe: exactly 1000 years in the readers’ future.
12. All versions of this story show Smith/Benett repeatedly speaking to his wife via the “telephote,” a piece of technology strongly reminiscent of Robida’s “telephonoscope” in *Le Vingtième Siècle*. Jules mentions the telephote again in his 1892 novel *Le Château des Carpathes* [The Castle of the Carpathians]. By the early 1880s—following closely on the heels of the 1876 invention of the telephone by Alexander Graham Bell and the 1879 invention of the incandescent light by Thomas Alva Edison—both the word and concept of the telephote were rapidly taking root in scientific circles in France, England, and America. For more on the history of the telephote, see Stephen R. Wilk, *How the Ray Gun Got Its Zap* (Oxford: Oxford University Press, 2013).

13. Compared to Michel’s mechanical dresser, Jules’ valet machine seems to be much more multi-talented: it can wash and shave Smith/Benett in addition to putting on his shoes and clothes.
14. Jules transforms the village girl’s “lover” into her “gallant” (in French: *son galant*), and their topic of conversation is changed from “philosophical problems” to the more intellectual (and even more tongue-in-cheek) “problems of transcendental philosophy.”
15. As he has done in several other parts of Michel’s narrative, here Jules simplifies and animates with exclamation points. And he adds the powerful metaphorical observation that “It is not with a pen that one writes nowadays, but with a scalpel!”—a comment that is reminiscent of similar dissection-room comparisons by 19th-century literary critics when discussing the realist works of Gustave Flaubert or the naturalist novels of Emile Zola. See, for example, the noted critic Charles Sainte-Beuve who, after reading *Madame Bovary*, proclaimed that « M. Gustave Flaubert tient la plume comme d’autres le scalpel » [M. Gustave Flaubert wields the pen like others wield the scalpel] (in his *Causeries du lundi* [1857], vol. 13, p. 363). Also interesting in this passage is that Jules opts for “electric hypnotism” alone, replacing Michel’s “electrical or human” hypnotism.
16. The final sentence of this description is missing from the two Compère editions of « 2890 ».
17. Note how Jules—who had been elected to the city council in Amiens on the Republican list in 1888—adds a humorous “inside” political jab here.
18. In contrast to Michel’s original text, Jules includes some specific examples of the complex mathematical calculations which the scientists found so absorbing. The four rules of arithmetic are addition, subtraction, multiplication, and division. Incidentally, all three French versions say that these mathematicians were « penchés sur leurs compteurs » [bent over their calculators]—not their “computers” as it is incorrectly rendered in I. O. Evans’s 1965 English translation of the 1910 French version.
19. It is unclear why Jules chose to change “Cooley” to “Corley.”
20. Both Michel and his father were probably aware of plans (begun in 1886) to construct the world’s largest refracting telescope, which would serve as the centerpiece for the Paris Exposition Universelle of 1900. The completed telescope ended up being 60 meters long, a far cry from telescopes of a “mile-and-three-quarter” (Michel) or « trois kilomètres » (Jules) described in this story.
21. In 1869, the French poet and inventor Charles Cros published a book titled *Études sur les moyens de communication avec les planètes* [Studies on Ways of Communicating with the Planets] in which he proposed using giant mirrors to transmit messages to the Martians or Venusians. Before he died in 1888, he had repeatedly petitioned the French government for money to build such a mirror. The 1880s and 1890s were also notable for the rapid rise in Europe and America of what might be called “Mars mania,” the widespread belief that intelligent life lived (or had lived) on the planet Mars. This idea originated in the (mistranslated) “canal” theories of Italian astronomer Giovanni Schiaparelli and other influential works such as Camille Flammarion’s *Astronomie populaire* [Popular Astronomy], first published in 1879, as well as his 1892 study *La Planète Mars* [The Planet Mars]. The belief was further proliferated by the American amateur astronomer Percival Lowell, who penned several best-selling books on the topic, beginning with his 1895 *Mars*. It was not long before Martians of every imaginable description—some friendly but most warlike—were appearing in the pages of science-fiction novels such as Kurd Lasswitz’s 1897 *Auf zwei Planeten* [On Two Planets], H. G. Wells’s 1898 *The War of the Worlds*, Robert Cromie’s 1890 *A Plunge into Space* (which carries a—probably apocryphal—preface by Jules Verne, in English), Gustave Le Rouge’s two-volume 1908-09 *Le Prisonnier de la planète Mars* [The Prisoner of the Planet Mars] and *La Guerre des vampires* [The War of the Vampires], and Edgar Rice Burroughs’s 1912 *A Princess of Mars*, the first of his many John Carter stories.

22. This remark, added by Jules, recalls Mrs. Evangéline Scorbitt's description of mathematicians in his novel *Sans dessus dessous* [Topsy-Turvy], also published in 1889. She considers them to be « des êtres d'une espèce particulière et supérieure. Songez donc ! Des têtes où les 'x' ballottent comme des noix dans un sac... » (chap. 4) [beings of a special and superior species. Just think of it! Heads in which 'x's bounce around like walnuts in a sack...].
23. Toward the end of his novel *Le Vingtième Siècle*, Robida explains how scientists had successfully pulled the Moon closer to the Earth. They discovered that it was indeed inhabited and were planning to send a scientific expedition to explore it.
24. Since the 1846 discovery of the planet Neptune, astronomers have speculated that another planet might well exist beyond it. (Pluto—if it can be counted as a planet—was discovered in 1930.) It is unclear why Michel and Jules would suggest the names of "Olympus" and "Gandini" for such a planet. The orbital numbers cited here are quite different in the three versions of the story. As a result, I tend to agree with the assessment of this passage made by Daniel Fondanèche in his *La Littérature d'imagination scientifique* (Amsterdam: Rodopi, 2012, p. 192): « Dans l'abondance vétilleuse et comique de chiffres... Tout donne à penser que nous n'avons pas affaire à un Verne sérieux... mais à une pochade » [In its punctilious and comical profusion of numbers... Everything leads us to believe that we are not dealing with a serious Verne here... but with a farce]. Jules' additional remark that « Francis Benett fut enchanté de cette précision » [Francis Benett was delighted with this precision] reinforces this tone of ironic playfulness.
25. This passage, a conversation with one of the newspaper's "celebrity interviewers," does not exist in Michel's original "2889"; it was added by Jules in his "2890" version and was (partially) kept by Michel in the posthumous 1910 *Hier et demain* version. First, Jules makes mention of the stomach problems suffered by the USA president Wilson—a scene which seems rather odd, and a little obsessive, given Verne's own gastrointestinal issues and the fact that he returns again to the same topic (Smith/Benett's stomach problems) later in the story. Jules' humor then turns very black as he describes the accelerated legal case of the murderer Chapman who, after the jury unanimously agreed to his guilt before the trial, will be « exécuté avant d'avoir été condamné » [executed before he is sentenced]. The method of execution—not included Michel's 1910 version—will be by electric chair, described as « sans douleur... à ce qu'on suppose, parce qu'on n'est pas encore fixé sur ce détail » [without pain... at least insofar as we assume since this detail is still undetermined]. For this scene, it may be that Jules was making indirect reference to current events. For example, one of the early victims of London's Jack the Ripper was Annie Chapman, murdered in 1888, and the electric chair was developed in the Thomas Alva Edison labs in West Orange, New Jersey, during the late 1880s and was first used in 1890 in New York to execute a murderer named William Kemmler. Also, given this chronology, it is even more astounding that Jules was portraying (and expressing his horror of) the use of electricity to execute criminals as early as 1863 in his unpublished dystopian novel *Paris au XX^e siècle* [Paris in the 20th Century].
26. One possible source: Villiers de l'Isle-Adam, "L'Affichage celeste," [Celestial Advertising] first published in 1873 and reprinted in his collection *Contes cruels* (Paris: Calmann Lévy, 1893, pp. 52-58). One obvious difference between Michel's version and his father's is the latter's focus on the value of commercial advertising and the ironies of unequal wealth—i.e., how the company's publicity department « rapporte en moyenne 3 millions de dollars par jour » [brings in, on average, 3 million dollars a day] and how the patent for this new type of advertising was « acheté au prix de 3 dollars à un pauvre diable qui est mort de faim » [bought for 3 dollars from a poor devil who died of hunger].
27. All three versions of the story include this ironically humorous scene. Climate control by humans has obviously been achieved (in part due to the *Earth Herald's* "meteorological department"), but Smith/Benett is now confronted with a new problem: weather that is consistently too nice, with too

few clouds for his aerial advertising. The otherwise oxymoronic phrase of “being at the mercy of fair weather” seems perfectly appropriate here.

28. Interestingly, Jules deleted Michel’s mention of Jerusalem and of France being “its trusty defender” and replaced it with Vienna.
29. The “asphyxiating gas shells that can be sent a distance of a hundred kilometers” recall Jules’ villain Herr Schultze in his 1879 novel *Les 500 millions de la Béguine* [The Begum’s Millions] who builds a giant cannon that can fire shells containing liquid carbon dioxide. When speaking of the other high-tech weapons of war, Michel is probably referencing Albert Robida’s *La Guerre au vingtième siècle* [War in the 20th Century], first published in a periodical in 1883 and then as a novel in 1887. In it, Robida imagines a fanciful assortment of heavily armed flying machines, attack submarines, frogmen, tank-like “rolling blockhouses” (forerunners of H. G. Wells’s “land ironclads”), a host of bio-chemical weapons, and even mind-benders, mesmerists, and mediums. All these are integrated into a fast-moving narrative focused on a young French draftee and his various military (and amorous) adventures. Despite its grim subject-matter where thousands are slaughtered, both the narrative voice of the story and its many comedic episodes infuse it with a light-hearted tone. Future-war historian I. F. Clarke once explained that, during the final decades of the 19th century, military planners strongly believed that the many technological advancements made in military weaponry would “lead to shorter, even better wars” (“Future War Fiction, 1871-1900,” *Science Fiction Studies* 24.3 [1997]: 398). The horrors of World War I soon proved them to be terribly wrong. But this growing belief in the impracticality of war because both sides would be losers—a predecessor to the mid-20th-century Cold War military philosophy of MAD (mutual assured destruction)—was quite widespread at the time. In fact, Jules himself had expressed this very idea in 1863 in his unpublished novel *Paris au XXe siècle* when his protagonist Jacques observes: « la France, l’Angleterre, la Russie, l’Italie ont renvoyé leurs soldats, c’est vrai ; on avait au siècle dernier poussé si loin le perfectionnement des engins de guerre, cela était devenu si ridicule... » [It’s true that France, England, Russia, and Italy have dismissed their soldiers; during the last century the weapons of war had been perfected to such a degree that the whole thing had become ridiculous...] (91).
30. Jules seems more explicit than Michel about the nature of the “Chinese problem”—i.e., their growing population. His proposed solution is to convince the Chinese government and their emperor (referred to here as the “Son of Heaven”) to impose a strict birth-rate limit on its citizenry. It is interesting that in 1979 China did just that, instituting a strict policy of “one child per family.” But the Chinese government began to phase out the policy in 2015, mostly because of adverse economic pressures resulting from too many older people and too few younger.
31. Note how Jules (wisely) deleted Michel’s description of the continent of Africa as a French colony.
32. In Robida’s *Le Vingtième Siècle*, the United States is carved up between the Chinese republic in the west and the German empire in east, and with a narrow strip of Mormons in the middle. These Mormons, squeezed on both sides, eventually decide to emigrate to and then to take over Great Britain after the British move their own government to India.
33. This comical retort is part of Jules’ ongoing satire of British colonization and their stubborn occupation of the rock of Gibraltar, as evidenced not only in the short story “Gil Braltar” (1887) but also in his earlier novel *Hector Servadac* (1877).
34. Jules’ text features a motorized scooter which carries Benett to his dining room located a kilometer away. This arrangement emphasizes the immense size of building and the ease with which the protagonist is able to move around in it, similar to the trams criss-crossing Amiens in Jules’ 1875 speech « Une ville idéale » [An Ideal City] or the moving sidewalks and electric cars in Milliard City in *L’Île à hélice*. In contrast, Michel’s version features a multi-functional room in which Smith “sleeps, takes his meals, in short, lives.” This arrangement is based on a more compact,

sedentary living space that automatically adapts to one's diverse needs (similar to the "hive" rooms of E. M. Forster's "The Machine Stops" [1909]).

35. Although this "all-too-true" generalization about women is meant to be humorous (in a misogynistic sort of way), it can only be viewed today as profoundly sexist. But it does prove that both Michel and his father were men of their times. Food delivery to homes via pneumatic tubes—and the sometimes messy accidents that can occur when using them—are portrayed with great humor in Robida's *Le Vingtième Siècle*. Although the Cordon Bleu cooking school was not founded until 1895 (by a woman, Marthe Distel), the term had been applied to France's top chefs at least since the eighteenth century.
36. Another of Jules' rather misogynistic generalizations about women, attributed to the celebrated (fictional) Parisian fashion designer Wormspire—probably patterned on the character Worms in Émile Zola's novel *La Curée* (1871, *The Kill*), who was no doubt inspired by the real-life "father of high fashion" Charles Frederick Worth (1825-1895). My thanks to Volker Dehs for this reference. This same fashion "principle" is repeated verbatim in Verne's *L'Île à hélice* when speaking about the fashion preferences of some of the billionaire's wives aboard Standard Island.
37. Although both their wives are named Edith, Francis Benett's rapport with his spouse seems decidedly more affectionate than the more stand-offish rapport the grumpy Fritz Napoleon Smith seems to have with his.
38. Jules offers a more detailed description of the "aero-car" used by Benett, identifying it as a "heavier-than-air" aircraft. This immediately calls to mind two things: Jules' membership in Nadar's « Société d'encouragement pour la locomotion aérienne au moyen d'appareils plus lourds que l'air » [Society for the Encouragement of Aerial Locomotion by Means of Heavier-than-Air Machines] and Jules' helicopter airship "Albatross" in his 1886 novel *Robur-le-conquérant* [*Robur the Conqueror*]. Verne's Albatross could fly at a top speed of 124 mph, and the top speed of today's turboprop propeller aircraft averages between 400 and 500 mph. So Jules' description of Benett's aero-car flying at a speed of 600 kph (373 mph) seems quite reasonable.
39. Niagara Falls was visited briefly by Jules Verne and his brother in April 1867. The site appears in several of Jules' other works: *Une ville flottante* (1871, *A Floating City*), *Robur-le-conquérant* (1886, *Robur the Conqueror*), *Famille-sans-nom* (1889, *Family Without a Name*), *Le Testament d'un excentrique* (1899, *The Will of an Excentric*), and *Maître du monde* (1904, *Master of the World*).
40. Notice how Jules took Michel's text and then embroidered upon it with some colorful examples. Millet's *Angelus* was not chosen at random. This painting was purchased in 1865 for 1,000 francs. Then, after changing hands several times over the next 25 years, it was sold for approximately 750,000 francs in 1890. This was one of the most striking examples of price inflation in the French art market during the late 19th century, and Verne probably read about this high-priced sale in the local newspapers. Verne was no doubt being playful with his mention of the new element Nihilium; in Latin, "nihilum" means nothing, nothingness, or something without value. For the 1910 version of the story, Michel changed the date of the invention of color photography from the end of 19th century to the end of the 20th, increased a gram of Nihilium to a kilogram, and simplified this paragraph by deleting Verne's reference to a « bouillon bacillaire » [bacillus-laced soup] and by eliminating his first doctor who claimed that « si les gens mouraient encore, du moins ils mouraient guéris » [if people were dying, they were at least dying cured].
41. The idea that a high forehead signifies intelligence was quite prevalent during the 19th century. Although he was not really a believer in phrenology, Jules often described his fictional characters according to their physiological attributes. Consider, for example, the following portrait of Michel Ardan in *De la Terre à la Lune* (1865, *From the Earth to the Moon*): « Les disciples de Lavater ou de Gratiolet eussent déchiffré sans peine sur le crâne et la physionomie de ce personnage les signes indiscutables de la combativité, c'est-à-dire du courage dans le danger et de la tendance à

briser les obstacles ; ceux de la bienveillance et ceux de la merveilleosité, instinct qui porte certains tempéraments à se passionner pour les choses surhumaines ; mais, en revanche, les bosses de l'acquisivité, ce besoin de posséder et d'acquérir, manquaient absolument ». [From his cranium and physiognomy, disciples of Lavater or Gratiolet would have easily detected the incontestable signs of combativeness, which is to say courage when facing danger and a need to overcome obstacles. They would have also seen signs of kindness and a lively imagination, a temperament that leads to a passion for impossible undertakings. On the other hand, they would have noticed that bumps indicating acquisitiveness, the need to possess and acquire, were totally lacking.]

42. Notice how Jules corrects Michel's chemistry reference. In the late 1880s, the periodic table contained a total of 75 elements, not 62.
43. This dream of discovering a common source for all matter has obsessed chemists for centuries, from the medieval alchemists searching for a “philosopher's stone” to the mad scientist Balthazar Claës in Balzac's 1834 novel *La Recherche de l'absolu* [The Quest for the Absolute].
44. Jules replaces Michel's “fibers” with the biochemical term “fibrine” [fibrin], a protein found in the blood which helps in the clotting process.
45. In responding to Smith/Bennett's question about if he could manufacture a human being, the scientist in Michel's text answers simply “Why not?” In Jules' version, he answers yes but then immediately adds the stipulation that such a created human would not possess a soul. It is possible to see in this reply an expression of Verne's more mainstream Catholic beliefs.
46. Such “movable cities” were first imagined by Cyrano de Bergerac in his 1657 science-fictional novel *Histoire comique des états et empires de la lune* [Comical History of the States and Empires of the Moon].
47. The notion of melting the Earth's polar icecap to open up a “vast territory for man's use” (as Michel expressed it) calls to mind a novel that Jules had just published in 1889, *Sans dessus dessous*. In this satiric work Barbicane and the other members of the Baltimore Gun Club seek to accomplish the same goal by using a gigantic cannon to alter the Earth's axis.
48. Although the word itself was not coined until the 1960s, what Michel and Jules are both referring to here is a procedure very similar to “cryonics”—the deep-freezing of a human body for preservation and future revival. Perhaps in response to the progress made in refrigeration systems in the late 19th century as well as the 1883 discovery of how to produce liquid nitrogen (at minus 196 degrees Celsius), the possibility of freezing and then resuscitating a human was probably the subject of serious debate among scientists of the time.
49. Jules' depiction of futuristic music here is very different from the one contained in his vision of Amiens in the year 2000 that can be found in his speech « Une Ville idéale », given on December 12, 1875. In that story, Verne's narrator hears a local orchestra playing a piece of music and dismisses it as « Du Wagner quintessencié ! De l'algèbre sonore ! Le triomphe des dissonances ! » [A quintessence of Wagner! An algebra of sound! The triumph of discord!]. And he is dismayed at a billboard announcing an upcoming concert titled « Rêverie en la mineur sur le Carré de l'hypoténuse ! » [Reverie in a Minor Key on the Square of the hypotenuse!] This latter (very tongue-in-cheek) musical composition recalls Quinsonnas's own cacophonous *La Thilorienne, grande fantaisie sur la liquéfaction de l'acide carbonique* [After Thilorier: a Grand Fantasy on the Liquefaction of Carbonic Acid] in Verne's unpublished novel *Paris au XXe siècle*.
50. Jules has added some interesting high-tech biomedical devices to Michel's text (a tongue microscope, a pulse seismograph). And he has also injected some fantasy and commercial humor into it with his mention of “replacement stomachs... with a two-year guarantee!” Given Jules' own gastrointestinal problems over the years, it is not surprising that he would fantasize about having stomach replacement surgery if it were available. For the 1910 version, Michel changes

“sismographe” to “pulsographe,” drops the phrase about replaceable stomachs and their guarantees, and (as mentioned) changes Jules’ “Universal City” back to his original “Centropolis.”

51. On September 1, 1888, Michel published in *Le Figaro* a short story called « Un Express de l’avenir » [An Express of the Future] about an imaginary trans-Atlantic pneumatic tube connecting Boston and Liverpool. Often mistakenly attributed to his father, this story describes how the tube-train can make the 4000-kilometer trip in 2 hours 14 minutes, travelling at a speed of 1800 kilometers per hour. Passengers who leave London at 12:00 noon can arrive in Boston at 9:34 in the morning—in other words, they arrive before they leave! This curious quirk of travel across time zones was depicted not only in Verne’s own 1873 novel *Le Tour du monde en 80 jours* [Around the World in 80 Days] but also in Edgar Allan Poe’s earlier “Three Sundays in a Week” (1850).
52. This « piano-compteur électrique » [electric piano-calculator] closely parallels the many « appareils à calculer » [calculating machines] owned by the Casmodge et Cie bank in Jules’ unpublished dystopia *Paris au XXe siècle*. They are described as follows: « ses instruments ressemblaient, en effet, à de vastes pianos ; en pressant les touches d’un clavier, on obtenait instantanément des totaux, des restes, des produits, des quotients, des règles de proportion, des calculs d’amortissement et d’intérêts composés pour des périodes infinies et à tous les taux possibles » (68) [instruments which indeed resembled huge pianos; by pressing the keys on the keyboard, one could instantaneously obtain sums, remainders, products, quotients, rules of proportion, calculations of amortization and of interest compounded for infinite periods and at all possible rates]. For the posthumous 1910 version of the story, Michel changes “1500 dollars” back to “800,000 dollars” and opts for « eut bientôt achevé sa besogne » [had soon completed his task] without including either of the two different time references that appeared in version #1 (“In two hours”) or in version #2 (« en 25 minutes »).
53. Charles-Édouard Brown-Séquard was a Mauritian endocrinologist who in 1878 succeeded Claude Bernard as professor of experimental medicine at the Collège de France. His specialty was the study of the human spinal cord (the “Brown-Séquard Syndrome”), the adrenal glands, and the aging process. On June 1, 1889, he reported to the Société de Biologie in Paris that an injection of a fluid prepared from the testicles of guinea pigs and dogs seemed to rejuvenate human vitality and cure impotence. News of this “elixir of life” (no doubt a form of testosterone, a hormone not discovered until 1935) excited people on both sides of the Atlantic. By the end of 1889 thousands of doctors on both continents were administering injections of this “elixir” to their (mostly senior) patients. Many of Brown-Séquard’s scientific colleagues mocked his work, but it did help to give birth to a new medical specialization: gerontology.
54. It is fair to say that today the “science” of cryonics remains very far from “perfected.” According to Wikipedia, the first person was cryopreserved in 1967; as of 2014, there existed 250 bodies already cryopreserved in the United States and another 1500 people who had made formal arrangements to become so. To date, no one has ever been successfully resuscitated.
55. In contrast to Michel, Jules stipulates the exact temperature of the bath water, equivalent to 98.6 degrees Fahrenheit (normal body temperature). Remember that Jules’ very demanding Englishman Phileas Fogg once fired his personal valet for bringing him water for his morning shave that had been heated to 84 degrees Fahrenheit instead of 86, as he had been instructed.
56. The British Vernian I. O. Evans, who first translated into English the 1910 posthumous version of this story, pointed out the difference between the original ending in “In the Year 2889” (version #1) and the one published in *Hier et demain* (version #3). In his introduction to the translation, he postulated that “The somewhat dramatic incident related on page 124 was omitted in the original English version, possibly because Verne feared that in contemporary Transatlantic eyes it might be considered ‘shocking’” (107). In other words, he theorizes that Verne may have been afraid that the scene with Mrs. Bennett in the bathtub would be too risqué for the puritanical morality of Americans, and so it was omitted from the version published in *The Forum*.

57. Jules' conclusion—emphasizing the hugeness of both the *Earth Herald* building and the company's daily profits as well as the (strongly phatic) exclamatory comment about Benett's "fine job"—seems much more lively than Michel's rather flat calendar/astronomic description of the newspaper editor's day at work.

Arthur B. Evans (aevals.sfs@gmail.com) is Professor Emeritus of French at DePauw University and managing editor of the scholarly journal *Science Fiction Studies*. He has published numerous books and articles on Verne and early French science fiction, including the award-winning *Jules Verne Rediscovered* (Greenwood, 1988). He is the general editor of Wesleyan University Press's "Early Classics of Science Fiction" series.

