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lever. The kettle did not move.

Harlan did not expect it to. He expected no movement; neither up nor down, left nor right, forth nor back. Yet the spaces between the rods had melted into a gray blankness which was solid to the touch, though nonetheless immaterial for all that. And there was the little stir in his stomach, the faint (psychosomatic?)touch of dizziness, that told him that all the kettle contained, including himself, was rushing upwhen through Eternity.

He had boarded the kettle in the 575th Century, the base of operations assigned him two years earlier. At the time the 575th had been the farthest upwhen he had ever traveled. Now he was moving upwhen to the 2456th Century.

Under ordinary circumstances he might have felt a little lost at the prospect. His native Century was in the far downwhen, the 95th Century, to be exact. The 95th was a Century stiffly restrictive of atomic power, faintly rustic, fond of natural wood as a structural material, exporters of certain types of distilled potables to nearly everywhen

Onder ordinary circumstances all this would be so.

But right now Harlan was in poor mood to think of anything but the fact that his documents were heavy in his pocket and his plan heavy on his heart. He was a little frightened, a little tense, a little confused.

It was his hands acting by themselves that brought the kettle to the proper halt at the proper Century.

Strange that a Technician should feel tense or nervous about anything. What was it that Educator Yarrow had once said:

"Above all, a Technician must be dispassionate. The Reality Change he initiates may affect the lives of as many as fifty billion people. A million or more of these may be so drastically affected as to be considered new individuals. Under these conditions, an emotional make-up is a distinct handicap."

Harlan put the memory of his teacher 's dry voice out of his mind with an almost savage shake of his head. In those days he had never imagined that he himself would have the peculiar talent for that very position. But emotion had come upon him after all. Not for fifty billion

He did not worry about that any more than any Eternal would. To concern oneself with the *mystique* of Time-travel, rather than with the simple fact of it, was the mark of the Cub and newcomer to Eternity.

He paused again at the infinitely thin curtain of non-Space and non-Time which separated him from Eternity in one way and from ordinary Time in another.

This would be a completely new section of Eternity for him. He knew about it in a rough way, of course, having checked upon it in the *Temporal Handbook*. Still, there was no substitute for actual appearance and he steeled himself for the initial shock of adjustment.

He adjusted the controls, a simple matter in passing into Eternity (and a very complicated one in passing into Time, a type of passage which was correspondingly less frequent). He stepped through the curtain and found himself squinting at the brilliance. Automatically he threw up his hand to shield his eyes. Only one man faced him. At first Harlan could see him only blurrily.

but had said nothing of *such* an insane riot of light reflection.

Harlan felt his annoyance to be quite reasonable. The 2456th Century was matter-oriented, as most Centuries were, so he had a right to expect a basic compatibility from the very beginning. It would have none of the utter confusion (for anyone born matter-oriented)of the energy vortices of the 300 's, or the field dynamics of the 600 's. In the 2456th, to the average Eternal 's comfort, matter was used for everything from walls to tacks.

To be sure, there was matter and matter. A member of an energy oriented Century might not realize that. To him all matter might seem minor variations on a theme that was gross, heavy, and barbaric. To matter-oriented Harlan, however, there was wood, metal (subdivisions, heavy and light), plastic, silicates, concrete, leather, and so on.

But matter consisting entirely of mirrors! That was his first impression of the 2456th. Every surface reflected and glinted light. Everywhere was the illusion of complete smoothness; the effect of a molecular film. And in the ever-repeated reflection of himself, of Soci-

beneath the floor, who matched

him stride for stride.He reached to move a hair-contact indicator down a spiral scale to point of origin.

The reflections died; extraneous light faded. Harlan felt his world settle.

"If you'll come with me now," said Voy..

Harlan followed through empty corridors that, Harlan knew, must moments ago have been a riot of

made light and reflection,up a ramp,through an anteroom,into an office.

In all the short journey no human being had been visible.Harlan was so used to that,took it so for granted,that he would have been surprised,almost shocked,if a glimpse of a human figure hurrying away had

glimpse of a human figure hurrying away had caught his eyes.No doubt the news had spread that a Technician was coming through.Even Voy kept his Noÿs!

Sociologist Kantor Voy leaned forward toward the Technician in what seemed a friendly enough

table.

fashion, but Harlan noted automatically that they were seated on opposite sides of the long axis of a fairly large

Voy said,"I am pleased to have a Technician of your reputation interest himself in our little problem

here."

"Yes," said Harlan with the cold impersonality people would expect of him.."It has its points of interest." ((Was he impersonal enough? Surely his real motives must

be apparent, his guilt be spelled out in

beads of sweat on his forehead.)

He removed from an inner pocket the foiled summary of the projected Reality Change. It was the very

The molecular film that covered the table was subdued but was not

zero. The motion of his arm fixed his

paramagnetic field marian paused a spill moment.

eye and for an instant the reflection of his own face seemed to stare somberly up at him from the table top. He

was thirty-two, but he looked older. He needed no one to tell him that. It might be partly his long face and dark

eyebrows over darker eyes that gave him the lowering expression and cold glare associated with the caricature

of the Technician in the minds of all Eternals. It might be just his

own realization that he was a Technician. But then he flicked the foil out across the table and turned to the

matter at hand.

"I am not a Sociologist, sir."

Voy smiled. "That sounds formidable. When one begins by expressing lack of competence in a given

field, it usually implies that a flat opinion in that field will follow almost immediately."

feelings in any way.

Ever since the whole orientation of his life had so changed itself,he had been watching the summaries

of projected Reality Changes as they passed through the grinding administrative gears of the Allwhen Council.

As Senior Computer Twissell 's personally assigned Technician,he could arrange that by a slight bending of

professional ethics. Particularly with Twissell 's attention caught ever more tightly in his own overwhelming project. (Harlan 's nostrils flared. He knew now a little of the nature

of that project.). Harlan had had no assurance that he would ever find what he was looking for in a reasonable time.

When he had first glanced over projected Reality Change 2456--2781, Serial Number V-5, he was half inclined

to believe his reasoning powers were warped by wishing. For a full day he had checked and rechecked

Harlan said,"I refer you particularly to the matter of the courtship characteristics of the society of the

current Reality of this Century. That 's sociology and your responsibility, I believe. It 's why I arranged to see

you when I arrived, rather than someone else."

that those assigned to this project have

is taken properly into consideration?"

Techy in order.

Voy was now frowning. He was still polite, but with an icy touch now. He said. "The Observers

now.He said, "The Observers $assigned \ to \ our \ Section \ are \ highly \ competent. I \ have \ every \ certainty$

given accurate data. Have you evidence to the contrary?"

"Not at all, Sociologist Voy. I accept their data. It is the development

of the data I question. Do you not have an alternate tensor complex at this point, if the courtship data

Voy stared,and then a look of relief washed over him visibly. "Of course, Technician, of course, but it

forking of the road, as we might say,

is non-significant. The forks join up again and it is a single road. There was not even any need to mention it in our recommendations."

"If you say so, sir, I will defer to your better judgment. However, there is still the matter of the M.N.C."

The Sociologist winced at the initials as Harlan knew he would.M.N.C.--Minitnum Necessary Change.

There the Technician was master. A Sociologist might consider himself above criticism by lesser beings in

anything involving the mathematical analysis of the infinite possible Realities in Time, but in matters of M.N.C.

the Technician stood supreme.

Mechanical computing would not do. The largest Computaplex ever built, manned by the cleverest and

most experienced Senior Computer ever born, could do no better than to indicate the ranges in which the

Intertemporal Language in precise syllables), by your Section in-

Intertemporal Language in precise syllables), by your Section involves induction of an accident in space and

the immediate death by fairly horrible means of a dozen or more men."

"Unavoidable," said Voy,,shrugging.

"On the other hand," said Harlan,,"I suggest that the M.N.C.can be reduced to the mere displacement of

a container from one shelf to another. Here!" His long finger pointed. His white, well-cared-for index nail made

the faintest mark along one set of perforations.

Voy considered matters with a painful but silent intensity..Harlan said, "Doesn't that alter the situation with regard to your unconsidered fork? Doesn't it take

advantage of the fork of lesser probability, changing it to near-certainty, and does that not then lead to----"

"--to virtually the M.D.R." whispered Voy..

"To exactly the Maximum Desired Response," said Harlan..

of this. At least, the projected

Reality Change was passed over to me without comment." He did not

explain the word "passed," nor did Voy

question it.

"You discovered this error, then?"

"Yes."

"And you did not report it to the Allwhen Council?"

"No,I did not."

Relief first, then a hardening of countenance. "Why not?"

"Very few people could have avoided this error.I felt I could correct it before damage was done.I have

done so. Why go any further?"

"Well--thank you, Technician Harlan. You have been a friend. The Section's error which, as you say,

was practically unavoidable, would have looked unjustifiably bad in the record."

he il resent il even more, this being saved a downstroke in rating by

a Technician.If I were a Sociologist,he

would shake my hand, but he won 't shake the hand of a Technician. He defends condemning a dozen people to

asphyxiation, but he won't touch a Technician.

And because waiting to let resentment grow would be fatal, Harlan said without waiting, "I hope your

gratitude will extend to having your Section perform a slight chore for me."

"A chore?"

"A matter of Life-Plotting. I have the data necessary here with me. I have also the data for a suggested

Reality Change in the 482nd.I want to know the effect of the Change on the probability-pattern of a certain

individual."

"I am not quite sure," said the Sociologist slowly,,"that I understand you. Surely you have the facilities

for doing this in your own Section?"

want it done confidentially. I want a confidential answer.

"Well,now,that 's very irregular.I can 't agree to it."

Harlan frowned. "No more irregular than my failure to report your error to the Allwhen Council. You

raised no objection to that. If we 're going to be strictly regular in one case, we must be as strict and as regular in

the other. You follow me, I think?"

The look on Voy's face was proof positive of that.He held out his hand. "May I see the documents?"

Harlan relaxed a bit. The main hurdle had been passed. He watched eagerly as the Sociologist's head

bent over the foils he had brought.

Only once did the Sociologist speak. "By Time, this is a small Reality

Change."

Harlan seized his opportunity and improvised. "It is. Too small, I think. It's what the argument is about.

It 's below critical difference, and I 've picked an individual as a test case. Naturally, it would be undiplomatic to

"And if you don 't mind,I 'd like to watch the Reality Change take place.I trust you will honor us by

Harlan nodded."I will take full responsibility."

conducting the M.N.C.personally."

Of course not.

Two of the screens in the viewing chamber were in operation when

they entered. The engineers had focused them already to the exact co-ordinates in Space and Time and then had left. Harlan and Voy were alone

in the glittering room. (The molecular film arrangement was perceptible and even a bit more than perceptible,

but Harlan was looking at the screens.)

Both views were motionless. They might have been scenes of the dead, since they pictured mathematical

instants of Time.

One view was in sharp,natural color; the engine room of what Harlan knew to be an experimental

stant, that engine room will remain
empty. In the current Reality, that is."

"I know," murmured Harlan..He was putting on his gloves and already

his quick eyes were memorizing

the position of the critical container on its shelf measuring the

the position of the critical container on its shelf,measuring the steps to it,estimating the best position into

which to transfer it. He cast one quick look at the other screen. If the engine-room, being in the range described as "present" with respect to that Section of Eternity in

which they now stood, was clear and in natural color, the other

scene, being some twenty-five Centuries in the

"future," carried the blue luster all views of the "future" must..

It was a space-port. A deep blue sky, blue-tinged buildings of naked

metal on blue-green ground. A blue cylinder of odd design, bulgebottomed, stood in the foreground. Two others like it were in the background. All

pity." His eyes fixed themselves on Harlan with distinct disapproval.

Harlan's lips compressed.Disapproval of course!Why not?He was the

Technician.

To be sure, it had been some Observer who had brought in the details of drug addiction. It had been

some Statistician who had demonstrated that recent Changes had increased the addiction rate until now it was

the highest in all the current Reality of man. Some Sociologist, probably Voy himself, had interpreted that into

the psychiatric profile of a society. Finally, some Computer had worked out the Reality Change necessary to

decrease addiction to a safe level and found that, as a side effect, electro-gravitic space-travel must suffer. A dozen a hundred men of every rating in Eternity had had a hand in

dozen,a hundred men of every rating in Eternity had had a hand in this.

But then,at the end,a Technician such as himself must step in. Following the directions all the others

Their own guilt to his shoulders and

scorn him.

Harlan said harshly, "Ships aren 't what count. We 're concerned with those things."

The "things" were people,,dwarfed by the space-ship,as Earth and Earth's society is always dwarfed by

the physical dimensions of spaceflight.

They were little puppets in clusters, these people. Their tiny arms and legs were in raised, artificial-

looking positions, caught in the frozen instant of Time.

Voy shrugged.

Harlan was adjusting the small field-generator about his left wrist. "Let's get this job done."

"One minute.I want to get in touch with the Life-Plotter and find out how long his job for you will take.

I want to get that job done, too."

His hands worked cleverly at a little movable contact and his ear listened astutely to the pattern of clicks

a slow smile. "Sounds interesting. I'd like to meet her, sight unseen. Haven't had

any women in this Section for months."

Harlan didn't trust himself to answer. He stared a moment at the Sociologist and turned abruptly.

If there was a flaw in Eternity, it involved women. He had known the flaw for what it was from almost

his first entrance into Eternity, but he felt it personally only that day he had first met Noÿs. From that moment it had been an easy path to this one, in which he stood false to his oath

as an Eternal and to everything in which he

had believed.

For what?

For Noÿs.

And he was not ashamed. It was that which really rocked him. He was not ashamed. He felt no guilt for

he knew that, having once come, it would return.

The thought was simply this: That he would ruin Eternity, if he had to.

The worst of it was that he knew he had the power to do it.. 2 Observer

Harlan stood at the gateway to Time and thought of himself in new ways. It had been very simple once.

There were such things as ideals, or at least catchwords, to live by and for. Every stage of an Eternal's life had a

"The life of an Eternal may be divided into four parts ..."

reason. How did "Basic Principles" start??

It all worked out neatly, yet it had all changed for him, and what was broken could not be made whole

again.

Yet he had gone faithfully through each of the four parts of an Eternal's life. First, there was the period

of fifteen years in which he was not an Eternal at all,but only an inhabitant of Time. Only a human being out of

pened he would never return. The true reason

Once within Eternity,he spent ten years in school as a Cub,and then graduated to enter his third period

as Observer.It was only after that that he became a Specialist and a true Eternal.The fourth and last part of the

Eternal's life:Timer,Cub,Observer and Specialist.

for that he was not to learn till long afterward.)

He,Harlan,had gone through it all so neatly.He might say,successfully.

He could remember, so clearly, the moment that Cubhood was done, the moment they became

independent members of Eternity, the moment when, even though un-Specialized, they still rated the legal title

of "Eternal."

He could remember it. School done, Cubhood over, he was standing with the five who completed

roots, the unadmitted and unadmittable longing for

the one Century he could never see.)

Harlan could not remember Yarrow's exact words, of course, but the substance of it remained sharp.

Yarrow said,in substance,"You will be Observers now.It isn 't a highly regarded position.Specialists

look upon it as a boy 's job. Maybe you Eternals" ((he deliberately paused after that word to give each man a

chance to straighten his back and brighten at the glory of it)"think so too. If so, you are fools who don't deserve

to be Observers.

"The Computers would have no Computing to do,Life-Plotters no lives

to Plot, Sociologists no societies

to profile; none of the Specialists would have anything to do, if it
weren 't for the Observer. I know you 've heard

this said before, but I want you to be very firm and clear in your mind about it.

this, too. Your period as Observer is not something to get through with as quickly and

as unobtrusively as possible. It is as an Observer that you will make your mark. Not what you did in school, but

what you will do as an Observer will determine your Specialty and how high you will rise in it. This will be

your post-graduate course, Eternals, and failure in it, even small failure, will put you into Maintenance no

matter how brilliant your potentialities now seem. That is all."

He shook hands with each of them, and Harlan, grave, dedicated, proud in his belief that the privileges

of being an Eternal contained its greatest privilege in the assumption of responsibility for the happiness of all

the human beings who were or ever would be within the reach of Eternity, was deep in self-awe.

Harlan's first assignments were small and under close direction, but he sharpened his ability on the

Section.

That was Assistant Computer Hobbe Finge, whose pursed, suspicious mouth and frowning eyes seemed

ludicrous in such a face as his.He had a round button of a nose,two larger buttons of cheeks.He needed only a

touch of red and a fringe of white hair to be converted into the picture of the Primitive myth of St.Nicholas.

(--or Santa Claus or Kriss Kringle.Harlan knew all three names.He doubted if one Eternal out of a

hundred thousand had heard of any one of them. Harlan took a secret, shamefaced pride in this sort of arcane

knowledge.From his earliest days in school he had ridden the hobbyhorse of Primitive history,and Educator

Yarrow had encouraged it. Harlan had grown actually fond of those odd, perverted Centuries that lay, not only

before the beginning of Eternity in the 27th, but even before the invention of the Temporal Field, itself, in the

tered histories. Best of all there was a

complete set of bound volumes of a Primitive news weekly that took up inordinate space but that he could not,

out of sentiment,bear to reduce to micro-film.

Occasionally he would lose himself in a world where life was life and death.death:where a man made

his decisions irrevocably; where evil could not be prevented, nor good promoted, and the Battle of Waterloo,

having been lost, was really lost for good and all. There was even a scrap of poetry he treasured which stated

that a moving finger having once written could never be lured back to unwrite.

And then it was difficult, almost a shock, to return his thoughts to Eternity, and to a universe where

Reality was something flexible and evanescent, something men such as himself could hold in the palms of their

hands and shake into better shape.)

"Yes, Computer," said Harlan..He decided as early as that that he and

Assistant Computer Hobbe Finge

perforations direct.

morning.601 11?

would not get along, and he regretted it.

The next morning Harlan got his chart in intricately punched patterns as they emerged from the

Computaplex. He used a pocket decoder to translate them into Standard Intertemporal in his anxiety to make not even the smallest mistake at the very beginning. Of course, he had reached the stage where he could read the

The chart told him where and when in the world of the 482nd Cen-

tury he might go and where he might not; what he could do and what be could not; what he must avoid at all costs. His presence must impinge only

upon those places and times where it would not endanger Reality.

The 482nd was not a comfortable Century for him. It was not like his own austere and conformist

ovaria.Marriage was made and unmade by mutual consent

and was not recognized legally as anything more than a personal agreement without binding force. Union for

Dirin by merely contributing a fertilized ovum to the

the sake of childbearing was, of course, carefully differentiated from the social functions of marriage and was arranged on purely eugenic principles.

In a hundred ways Harlan thought the society sick and therefore hungered for a Reality Change. More

than once it occurred to him that his own presence in the Century, as

a man not of that time, could fork its
history. If his disturbing presence could only be made disturbing

enough at some key point, a different branch
of possibility would become real, a branch in which millions of pleasure-seeking women would find themselves

transformed into true, pure-hearted mothers. They would be in another Reality with all the memories that

could properly pin-point the nature of a

Reality Change.

Outwardly, whatever his private opinions, Harlan remained an Observer, and the ideal Observer was

merely a set of sense-perceptive nerve patches attached to a report-writing mechanism.Between perception and

Harlan's reports were perfection itself in that respect.

report there must be no intervention of emotion.

Assistant Computer Finge called him in after his second weekly report.

"I congratulate you, Observer," he said in a voice without warmth,, "on the organization and clarity of your reports. But what do you really think?"

Harlan sought refuge in an expression as blank as though chipped painstakingly out of native 95th

Century wood. He said, "I have no thoughts of my own in the matter."

Answer my question.

Harlan said, "Sociologically, many facets of the Century represent an extreme. The last three Reality

Changes in the aboutwhen have accentuated that. Eventually, I suppose the matter should be rectified. Extremes are never healthy."

"Then you took the trouble to check the past Realities of the Cen-

It was a standoff.Harlan,of course,did have the right and the duty

tury."."As an Observer, I must check all pertinent facts."

to check those facts. Finge must know that. Every Century was continually being shaken by Reality

Changes.No Observations,however painstaking,could ever stand for long without rechecking.It was

standard procedure in Eternity to have every

Century in a chronic state of being Observed. And to Observe properly, you must be able to present, not only

the facts of the current Reality, but also of their relationship to those of previous Realities.

Harlan paused, uncertain, then mumbled, "Thank you."

"All agree that you show an uncommon degree of penetration."

"I do my best."

Council.

Finge asked suddenly, "Have you ever met Senior Computer Twissell?"

"Computer Twissell?" Harlan 's eyes widened. "No, sir. Why do you ask?"

cheeks drew downward sulkily and he changed the subject. "To me it seems that you have worked out a

"He seems particularly interested in your reports." Finge 's round

philosophy of your own,a viewpoint of history."

Temptation tugged hard at Harlan. Vanity and caution battled and the former won." I 've studied

Primitive history, sir."

"Primitive history? At school?"

we would see a great deal we would miss it we just scanned the film

as it went past. I think that helps me a

great deal with my work."

Finge stared at him in amazement, widened his eyes a little, and left with no further remark.

Occasionally, thereafter, he brought up the subject of Primitive history and accepted Harlan's reluctant

comments with no decisive expression on his own plump face.

Harlan was not sure whether to regret the whole matter or to regard it as a possible way of speeding his

own advancement.

He decided on the first alternative when passing him one day in Corridor A, Finge said abruptly and in

the hearing of others, "Great Time, Harlan, don't you ever smile?"

The thought came, shockingly, to Harlan that Finge hated him. His own feeling for Finge approached

ious to export more cellulose-base textiles to

Centuries which were deforested, such as the 1174th, but were unwilling to accept smoked fish in return. A long

list of such items was contained in due order and with due analysis.

He took the draft of the summary with him.

But no mention of the 482nd was made. Instead Finge introduced him to a withered and wrinkled little

man, with sparse white hair and a gnomelike face that throughout the interview was stamped with a perpetual

smile. It varied between extremes of anxiety and joviality but never

quite disappeared.Between two of his yellow-stained fingers lay a burning cigarette.

It was the first cigarette Harlan had ever seen,otherwise he would

have paid more attention to the man,

less to the smoking cylinder, and been better prepared for Finge 's introduction.

Finge said, "Senior Computer Twissell, this is Observer Andrew Harlan."

my m. Laban i wissell was a man ne

should have recognized at once. He was the outstanding Computer in

saying he was the most eminent Eternal alive.He was the dean of the

Allwhen Council.He had directed more

Reality Changes than any man in the history of Eternity.He was----He had----

Harlan's mind failed him altogether. He nodded his head with a doltish grin and said nothing.

Twissell put his cigarette to his lips,puffed quickly,and took it away."Leave us,Finge.I want to talk to

Finge rose, murmured something, and left.

the boy."

Eternity, which was another way of

Twissell said, "You seem nervous, boy. There is nothing to be nervous about."

But meeting Twissell like that was a shock. It is always disconcerting to find that someone you have

what small scrabble of intelligence

he could collect. He flinched visibly as a puff of smoke reached him.

Twissell's eyes narrowed as though he were trying to peer through the smoke haze and he said in

horribly accented tenth-millennial dialect, "Will you petter feel if I in your yourself dialect should speech,

poy?"

Harlan, brought to the sudden brink of hysterical laughter, said carefully, "I speak Standard

Intertemporal quite well, sir." He said it in the Intertemporal he and all other Eternals in his presence had used

ever since his first months in Eternity.

poral. My speech of ten-millennial is

"Nonsense," said Twissell imperiously.."I do not bother of Intertem-

over than perfect.".Harlan guessed that it had been some forty years since Twissell had had to make use of localwhen dialects.

is all very sad.Last week,I was stuck in

the 123rd for two days.No smoking.I mean,even in the Section of

Eternity devoted to the 123rd. The Eternals

there have picked up the \emph{mores} .If I had lit a cigarette it would

have been like the sky collapsing. Sometimes I

think I should like to calculate one great Reality Change and wipe

out all the no-smoking taboos in all the

Centuries, except that any Reality Change like that would make for wars in the 58th or a slave society in the

1000th. Always something."

Harlan was first confused, then anxious. Surely these rattling irrelevancies must be hiding something.

His throat felt a little constricted. He said, "May I ask why you 've arranged to see me, sir?"

"I like your reports,boy."

There was a veiled glimmer of joy in Harlan's eyes, but he did not smile. "Thank you, sir."

cigarette, produced another in his

left hand by some unnoted feat of legerdemain and lit it. He said be-

tween puffs, "For Time 's sake, boy, you talk as though you rehearsed lines. Great honor, bah. Piffle. Trash. Say

what you feel in plain language.You 're glad,

"Yes,sir," said Harlan cautiously..

hey?"

"All right. You should be. How would you like to be a Technician?"

"A Technician!" cried Harlan,,leaping from his seat.

"Sit down.Sit down.You seem surprised."

"I hadn't expected to be a Technician, Computer Twissell."

"No," said Twissell dryly,, "somehow no one ever does. They expect anything but that. Yet Technicians

are hard to find, and are always in demand. Not a Section in Eternity has what it considers enough."

"I don 't think I 'm suited."

By you, sir 2 By you particularly?

"Yes." An element of shrewdness entered the old man 's smile."You are not to be just a Technician.

You will be my personal Technician. You will have special status. How does that sound now?"

Harlan said, "I don't know, sir. I may not qualify.". Twissell shook his head firmly. "I need you. I need just you. Your reports assure me you have what I

need up here." He tapped his forehead quickly with a ridge--nailed forefinger. "Your record as Cub is good; the

Sections for which you have Observed reported favora-

bly. Finally, Finge 's report was most suitable of all."

Harlan was honestly startled. "Computer Finge 's report was favor-

able?"

"You didn 't expect that?"

"I--don't know."

"Well,boy,I didn 't say it was favorable.I said it was suitable.As a matter of fact,Finge 's report was

breathing, inhaled a cloud of smoke and

coughed helplessly.

Twissell regarded the young Observer's coughing spell benignly and said, "Isn't that so?"

Harlan began, "Computer Finge had no right--"

"Now,now.I told you what was in the report because it hinges on the purpose I need you most for.

Actually, the report was confidential and you are to forget I told you what was in it. Permanently, boy."

"But what 's wrong with being interested in Primitive history?"

"Finge thinks your interest in it shows a strong Wish-to-Time.You understand me,boy?"

Harlan did.It was impossible to avoid picking up psychiatric lingo.That phrase above all.Every

member of Eternity was supposed to have a strong drive, the stronger for being officially suppressed in all its

said, it 's why I want you. I want you

to teach a Cub I shall bring to you all you know and all you can learn about Primitive history. In between, you

will also be my personal Technician. You'll start in a few days. Is that agreeable?" $\begin{tabular}{ll} \hline \end{tabular}$

Agreeable? To have official permission to learn all he could about the days before Eternity? To be

personally associated with the greatest Eternal of them all? Even the nasty fact of Technician's status seemed bearable under those conditions.

His caution, however, did not entirely fail him. He said, "If it's necessary for the good of Eternity, sir----

"For the *good* of Eternity?" cried the gnomish Computer in sudden excitement..He threw his cigarette

butt from him with such energy that it hit the far wall and bounced off in a shower of sparks. $^{\circ}$ I need you for the

hidden against a wall or was covered by the interposition of some object he was carrying.

worse by standing so that the insighe was

Others smiled disdainfully when that was done and turned colder as though they suspected an attempt to invade their friendship on false pretenses.

Senior Computer Twissell brought him problems daily.Harlan studied them and wrote his analyses in

drafts that were four times rewritten, the last version being handed in reluctantly even so.

Twissell would appraise them and nod and say, "Good, good." Then his

old blue eyes would dart quickly at Harlan and his smile would narrow a bit as he said,"I 'll

quickly at Harlan and his smile would narrow a bit as he said,"I test this guess on the Computaplex."

He always called the analysis a "guess." He never told Harlan the result of the Computaplex check, and

Harlan dared not ask.He was despondent over the fact that he was never asked to put any of his own analyses

One day Twissell came in with an abashed individual who seemed

One day I wissell came in with an abashed individual who seemed scarcely to dare raise his eyes to meet

Harlan 's.

Twissell said, "Technician Harlan, this is Cub B.S.Cooper."

Automatically Harlan said, "Hello," weighed the man 's appearance, and was unimpressed. The fellow

was on the shortish side, with dark hair parted in the middle. His chin was narrow, his eyes an indefinite light

brown, his ears a little large, and his fingernails bitten.

Twissell said "This is the boy to whom you will be teaching Pain

Twissell said,"This is the boy to whom you will be teaching Primitive history."

"Great Time," said Harlan with suddenly increased interest.." *Hello!*" He had almost forgotten..

Twissell said, "Arrange a schedule with him that will suit you, Harlan. If you can manage two afternoons a week, I think that would be fine. Use your own method

of teaching him.I 'll leave that to you.If

ous that the latter would have done the same

had he dared.

After Twissell left, Harlan said, "Well, sit down "--he hesitated a moment, then added determinedly--

"Son.Sit down,son.My office isn't much,but it's yours whenever we're together."

Harlan was almost flooded with eagerness. This project was his! Primitive history was something that

was all his own..The Cub raised his eyes (for the first time, really) and said stumblingly, "You are a Technician."

A considerable part of Harlan's excitement and warmth died."What of it?"

"Nothing," said the Cub.."I just----"

"You heard Computer Twissell address me as Technician,didn't you?"
"Yes,sir."

"Did you think it was a slip of the tongue? Something too bad to be true?"

"No ,sir."

Less than one year, sir.

"One year?How old are you,for Time 's sake?"

"Twenty-four physioyears,sir."

Harlan stared. "Are you trying to tell me that they took you into

Eternity at twenty-three?"

"Yes,sir."

Harlan sat down and rubbed his hands together. That just wasn 't done. Fifteen to sixteen was the age of

entrance into Eternity. What was this? A new kind of testing of himself on the part of Twissell?

He said, "Sit down and let's get started. Your name in full and your homewhen."

The Cub stammered, "Brinsley Sheridan Cooper of the 78th, sir."

Harlan almost softened. That was close. It was only seventeen Centuries downwhen from his own

 $homewhen. Almost\ a\ Temporal\ neighbor.$

He said, "Are you interested in Primitive history?"

"Computer Twissell asked me to learn.I don't know much about it."

interested.

He said, "Do you know anything about history? Any kind of history?"

"I studied European history."

"Your particular political unit,I take it."

"I was born in Europe. Yes. Mostly, of course, they taught us modern history. After the revolutions of

'54;7554,that is."."All right.First thing you do is to forget it.It doesn't mean anything. The history they try to teach

Timers changes with every Reality Change.Not that they realize that.In each Reality,their history is the only

history. That 's what 's so different about Primitive history. That 's the beauty of it. No matter what any of us does, it exists precisely as it has always existed. Columbus and

Washington, Mussolini and Hereford, they all

exist."

Cooper smiled feebly.He brushed his little finger across his upper lip and for the first time Harlan

I m hearly that myself. I m 90th.

"That 's another thing. You 're older than I am and yet I 'm seventeen

Centuries older than you in another

way.I can be your great-great-great-and-so-on-grandfather."

"What 's the difference? Suppose you are?"

"Well,it takes getting used to." There was a trace of rebellion in the Cub's voice.

"It does for all of us," said Harlan callously,,and began talking about the Primitives.By the time three

hours had passed, he was deep in an explanation concerning the reasons why there were Centuries before the

ns wny there were centuries before the first Century.

("But isn't the 1st Century first?" Cooper had asked plaintively..)

Harlan ended by giving the Cub a book, not a good one, really, but one that would serve as a beginning.

"I'll get you better stuff as we go along," he said..

By the end of a week Cooper's mustache had become a pronounced dark bristle that made him look ten

again. Parts of the later Primitive was

something like the 78th.It made me think of home, you know. Twice, I dreamed about my wife."

Harlan exploded."Your wife?"

"I was married before I came here."

"Great Time!Did they bring your wife across too?"

Cooper shook his head. "I don't even know if she's been Changed in the last year. If she has, I suppose

she's not really my wife now."

Harlan recovered.Of course,if the Cub were twenty-three years old when he was taken into Eternity,it

was quite possible that he might have been married. One thing un-

precedented led to another..What was going on?Once modifications were introduced into the rules, it wouldn't be a long step to the point where everything would decline into a mass of incoher-

ency.Eternity was too finely balanced an

arrangement to endure modification.

anyone you knew in Time."

Cooper's lips thinned, and his accent stood out sharply in his quick

words. "You 're speaking like a Technician."

Harlan 's fists clenched along the sides of his desk.He said hoarsely, "What do you imply? I 'm a

Technician so I make the Changes? So I defend them and demand that you accept them? Look, kid, you haven 't

been here a year;you can 't speak Intertemporal;you 're all misgeared on Time and Reality,but you think you

know all about Technicians and how to kick them in the teeth."
"I'm sorry," said Cooper quickly;;"I didn't mean to offend you."

"No,no,who offends a Technician?You just hear everyone else talking,is that it?They say,'Cold as a

Technician 's heart,' don 't they? They say,'A trillion personalities changed--just a Technician 's yawn.' Maybe

never induced a Reality Change. Now let's get on with business.

Senior Computer Twissell called Andrew Harlan to his office the next day.

He said, "How would you like to go out on an M.N.C., boy?"

It was almost too apposite. All that morning Harlan had been regretting his cowardly disclaimer of

personal involvement in the Technician 's work; his childish cry of:I

haven 't done anything wrong yet, so don 't

blame me.

It amounted to an admission that there was something wrong about a Technician's work and that he

himself was blameless only because he was too new at the game to

have had time to be a criminal.

He welcomed the chance to kill that excuse now.It would be almost a penance.He could say to Cooper:

Yes, because of something I have done, this many millions of people are new personalities, but it was necessary

and I am proud to have been the cause.

Your statement that a jammed vehicle clutch would supply the nec-

essary fork without undesirable side effects is

perfectly correct. Will you jam it?"

"Yes,sir."

That was Harlan's true initiation into Technicianhood. After that he was more than just a man with a

rose-red badge.He had handled Reality.He had tampered with a mechanism during a quick few minutes taken

out of the 223rd and,as a result,a young man did not reach a lecture on mechanics he had meant to attend. He

never went in for solar engineering, consequently, and a perfectly simple device was delayed in its development

a crucial ten years. A war in the 224th, amazingly enough, was moved out of Reality as a result.

Wasn 't *that* good?What if personalities were changed?The new personalities were as human as the old

Yet that night Harlan spent hours in a hot agony of wakefulness, and when he finally drowsed groggily,
he did something he hadn 't done in years.
He dreamed of his mother.

Despite the weakness of such a beginning a physioyear was sufficient to make Harlan known throughout

Eternity as "Twissell 's Technician," and,, with more than a trace of

ill-humor as "The Wonder Boy " and "The

Never-Wrong."

His contact with Cooper became almost comfortable. They never grew completely friendly. (If Cooper

could have brought himself to make advances, Harlan might not have known how to respond.) Nevertheless they worked well together, and Cooper's interest in Primitive history

grew to the point where it nearly rivaled Harlan's.

"Sure.I 've never been in a kettle except when they brought me

here from the 78th and I didn 't know

Do you want 10?

what was happening at the time."

Harlan was accustomed to using the kettle in Shaft C, which was, by unwritten custom, reserved for

Technicians along its entire immeasurable length through the Centuries. Cooper showed no embarrassment at

being led there. He stepped into the kettle without hesitation and took his seat on the curved molding that

When Harlan, however, had activated the Field, and kicked the kettle

completely circled it.

into upwhen motion, Cooper's

face consumed up into an almost comic expression of cumpnics

face screwed up into an almost comic expression of surprise.

"I don 't feel a thing," he said.."Is anything wrong?"."Nothing 's

wrong. You 're not feeling anything because you 're not really moving. You 're being kicked

Cooper's mouth suighted a hit and Henley thought upgeth with

Cooper's mouth quirked a bit and Harlan thought uneasily: The kid's taking temporal engineering and

knows more about this than I do.Why don 't I shut up and stop making a fool of myself?

He retreated into silence, and stared somberly at Cooper. The younger man's mustache had been full-

grown for months.It drooped,framing his mouth in what Eternals called a Mallansohn hairline,because the

only photograph known to be authentic of the Temporal Field inventor (and that a poor one and out of focus) showed him with just such a mustache. For that reason it maintained

a certain popularity among Eternals even though it did few of them justice.

Cooper's eyes were fixed on the shifting numbers that marked the passing of the Centuries with respect to themselves. He said, "How far upwhen does the kettle shaft go?"

"Haven 't they taught you that?"

150,000th Century."

·,····,

"What's that like?"

"Like nothing at all," said Harlan morosely.."Lots of life but none of it human. Man is gone."

"Dead?Wiped out?"

"I don't know that anyone exactly knows."

"Can 't something be done to change that?"

"Well, from the 70,000 's on----" began Harlan,, then ended abruptly. "Oh, to Time with it. Change the

subject."

If there was one subject about which Eternals were almost superstitious,it was the "Hidden Centuries,"

the time between the 70,000th and the 150,000th.It was a subject that was rarely mentioned.It was only

Harlan's close association with Twissell that accounted for his own small knowledge of the era. What it

our adequate Observation beyond the

70,000th not much could be done.

Twissell had laughed a bit one time and said, "We'll get through someday. Meanwhile, 70,000 Centuries

is quite enough to take care of.".It did not sound wholly convincing.

"What happens to Eternity after the 150,000th?" asked Cooper..

Harlan sighed. The subject, apparently, was not to be changed. "Nothing," he said.. "The Sections are

there but there are no Eternals in it anywhere after the 70,000th. The Sections keep on going for millions of

Centuries till all life is gone and past that, too, till the sun becomes a nova, and past that, too. There isn 't any

end to Eternity. That 's why it 's called Eternity."

"The sun *does* become a nova,then?"

"It certainly does. Eternity couldn't exist if that weren't so. Nova Sol is our power supply. Listen, do

you know how much power is required to set up a Temporal Field?Mallansohn's first Field was two seconds

Cooper sighed. "I wish they would get to the point where they stopped making me learn equations and

field mechanics and start telling me some of the interesting stuff. Now if I had lived in Mallansohn's time----"

"You would have learned nothing. He lived in the 24th, but Eternity didn't start till late in the 27th.

Inventing the Field isn 't the same as constructing Eternity, you know, and the rest of the 24th didn 't have the

slightest inkling of what Mallansohn's invention signified."

"He was ahead of his generation,then?"

"Very much so. He not only invented the Temporal Field, but he described the basic relationships that

made Eternity possible and predicted almost every aspect of it except for the Reality Change. Quite closely, too-

-but I think we 're pulling to a halt,Cooper.After you."

They stepped out.

enough to hold a man.

pocket had taken its place.

Twissell did nothing to deny these rumors. In fact most people guessed that he believed them himself.

So even while Harlan bent before the force of the angry blast that struck him,he had room in his mind to

be amazed at the fact that Twissell could display anger. He wondered if Twissell would be mortified in some

calmer aftermath to realize that his hand-computer heart had be-

trayed him by exposing itself as only a poor

thing of muscle and valves subject to the twists of emotion.

Twissell said, in part, his old voice creaking, "Father Time, boy, are you on the Allwhen Council? Do

you give the orders around here?Do you tell me what to do or do I tell you what to do?Are you making

arrangements for all kettle trips this Section? Do we all come to you for permission now?"

told that Cub Cooper was not to

ora mar dab deeper was nor n

be taken on the kettle."

The explanation did not act as an emollient. "What kind of an excuse is a double negative, boy? You

were never told not to get him drunk. You were never told not to shave him bald. You were never told not to

skewer him with a fine-edged Tav curve.Father Time,boy,what were you told to do with him?"

"I was told to teach him Primitive history."

rette and ground it savagely

underfoot as though it were the face of a lifelong enemy.

"I 'd like to point out, Computer," said Harlan,, "that many Centuries under the current Reality somewhat

"Then do so.Do nothing more than that." Twissell dropped his ciga-

resemble specific eras of Primitive history in one or more respects. It had been my intention to take him out to

Harlan licked his dry lips with a dry tongue, muttered a resentful ac-

quiescence, and, eventually, was

allowed to leave.

It took weeks for his hurt feelings to heal over somewhat.. 4 Com-

puter

Harlan had been two years a Technician when he re-entered the

482nd for the first time since leaving

with Twissell. He found it almost unrecognizable.

It had not changed. He had.

Reality just to show him how.

Two years of Technicianhood had meant a number of things. In one sense it had increased his feeling of

stability. He had no longer to learn a new language, get used to new

styles of clothing and new ways of life with

every new Observation project. On the other hand, it had resulted in

a withdrawal on his own part. He had

almost forgotten now the camaraderie that united all the rest of the Specialists in Eternity.

Tamputan Fines for tampagan

Computer Finge for temporary

assignment to the 482nd," disregarding the quick glance from the middle-aged man he faced.

It was what some people called the "Technician glance," a quick,,involuntary sidelong peek at the rose-

red shoulder emblem of the Technician, then an elaborate attempt not to look at it again.

Harlan stared at the other 's shoulder emblem. It was not the yellow of the Computer, the green of the

Life-Plotter, the blue of the Sociologist, or the white of the Observer. It was not the Specialist's solid color at

all.It was simply a blue bar on white.The man was Communications,a subbranch of Maintenance,not a

Specialist at all.

And he gave the "Technician glance " too..

Harlan said a little sadly, "Well?"

Communications said quickly, "I 'm ringing Computer Finge, sir."

of painted metal were almost repulsive.

Even Finge seemed different,less than life-size,somewhat. Two years earlier, to Observer Harlan,

Finge 's every gesture had seemed sinister and powerful.

Now, from the lofty and isolated heights of Technicianhood, the man seemed pathetic and lost. Harlan

watched him as he leafed through a sheaf of foils and got ready to look up, with the air of someone who is

beginning to think he has made his visitor wait the duly required amount of time.

Finge was from an energy-centered Century in the 600 's. Twissell had told him that and it explained a

good deal. Finge 's flashes of ill temper could easily be the result of the natural insecurity of a heavy man used to

the firmness of field-forces and unhappy to be dealing with nothing more than flimsy matter. His tiptoeing walk. (Harlan remembered Finge

Harlan thought, with a pleasant condescension: The man is poorly adjusted to the Section. Reassignment

is probably the only thing that would help him.

Finge said, "Greetings, Technician Harlan."

"Greetings, Computer," said Harlan..

under his weight.

Finge said, "It seems that in the two years since----"

"Two physioyears," said Harlan..

Finge looked up in surprise. "Two physioyears,of course."

In Eternity there was no Time as one ordinarily thought of Time in the universe outside, but men's

bodies grew older and that was the unavoidable measure of Time

even in the absence of meaningful physical phenomena. Physiologically Time passed, and in a physioyear within

Eternity a man grew as much older as he would have in an ordinary year in Time.

Vot and the most and other frame.

Yet even the most pedantic Eternal remembered the distinction only rarely. It was too convenient to say,

solemn assumption of day and highlitoday and tomorrow.

Finge said, "In the two physioyears since you left, a crisis has gradually gathered about the 482nd.A

rather peculiar one. A delicate one. Almost unprecedented. We need

accurate Observation now as we never

have needed it before."

"And you want me to Observe?"

"Yes.In a way,it 's a waste of talent to ask a Technician to do a job of Observation, but your previous

Observations, for clarity and insight, were perfect. We need that again. Now I 'll just sketch in a few details...

What those details were Harlan was not to find out just then. Finge spoke, but the door opened, and

Harlan did not hear him.

He stared at the person who entered.

It was not that Harlan had never seen a girl in Eternity before. Never was too strong a word. Rarely, yes,

In Elernity a girl was a different matter. And one like this!

She was dressed in the style of the upper classes of the 482nd, which meant transparent sheathing and

not very much else above the waist, and flimsy, knee-length trousers below. The latter, while opaque enough,

hinted delicately at gluteal curves..Her hair was glossily dark and shoulder length,her lips redly penciled thin above and full below in an exaggerated pout.Her upper eyelids and her ear lobes were tinted a

pale rose and the rest of her youthful

(almost girlish)face was a startlingly milky white. Jeweled pendants

descended forward from mid-shoulder to

tinkle now this side, now that of the graceful breasts to which they

drew attention.

She took her seat at a desk in the corner of Finge 's office, lifting her eyelashes only once to sweep her

dark glance across Harlan's face.

When Harlan heard Finge 's voice again, the Computer was saying, "You'll get all this in an official

rime ,ringe ought not to be allowed

to do this.It was bad for morale.It made a mockery----

He stopped himself,unclenched his fist,unclamped his jaw.Let 's see,now!His footsteps sounded

sharply in his own ear as he strode firmly toward the Communications man behind the desk.

Communications looked up, without quite meeting his eye, and said cautiously, "Yes, sir."

fice.Is she new here?"

Harlan said, "There 's a woman at a desk in Computer Finge 's of-

He had meant to ask it casually. He had meant to make it a bored, in different question. It rangout,

instead,like a pair of cymbals clashing.

But it roused Communications. The look in his eye became something that made all men kin. It even

embraced the Technician, drew him in as a fellow. Communications said, "You mean the babe? Wow! Isn't she

built like a force-field latrine, though?"

"All right." Harlan turned on his heel and left..

Harlan's first Observation trip into the 482nd came the next

day, but it lasted for thirty minutes only. It was obviously only an orientation trip, intended to get him into the

feel of things. He entered it for an hour and a

secretary. Her hame is moys Lambern.

half the next day and not at all on the third.

He occupied his time in working his way through his original reports, relearning his own knowledge,

brushing up on the language system of the time, accustoming himself to the local costumes again.

One Reality Change had hit the 482nd, but it was very minor. A political clique that had been In was

now Out, but there seemed no change in the society otherwise.

Without quite realizing it he slipped into the habit of searching his old reports for information on the

aristocracy. Surely he had made Observations.

was impatient with himself at feeling curiosity concerning that now.

During those three days he had caught glimpses of the girl, Noÿs

Lambent,four times.At first he had

been aware only of her clothes and her ornaments. Now he noticed that she was five feet six in height, half a

head shorter than himself, yet slim enough and with a carriage erect and graceful enough to give an impression

of height. She was older than she first seemed, approaching thirty perhaps, certainly over twenty-five.

She was quiet and reserved, smiled at him once when he passed her in the corridor, then lowered her eyes. Harlan drew aside to avoid touching her, then walked on feeling

angry.

By the close of the third day Harlan was beginning to feel that his duty as an Eternal left him only one

course of action. Doubtless her position was a comfortable one for herself. Doubtless Finge was within the letter

permission to see Finge privately.He

walked in with a determined step and, to his own surprise, made his point instantly. "Computer Finge, I suggest

that Miss Lambent be returned to Time."

Finge 's eyes narrowed.He nodded toward a chair,placed clasped hands under his soft,round chin,and

showed some of his teeth. "Well, sit down. Sit down. You find Miss Lambert incompetent? Unsuitable?"

depends on the uses to which she is put, and I have put her to none. But you must realize that she is

"As to her incompetence and unsuitability, Computer, I cannot say. It

is put,and I have put her to none. But you must realize that she bad for the morale of this Section." $\begin{tabular}{ll} \hline \end{tabular}$

Finge stared at him distantly as though his Computer 's mind were weighing abstractions beyond the

reach of an ordinary Eternal."In what way is she hurting morale, Technician?"

fault to find, though I'll say right

now that her costume is extreme even for the 482nd. You 'll allow me

to be the judge of that. Here in Eternity, a

person such as she is certainly out of place."

Finge nodded his head slowly. He actually seemed to be enjoying himself. Harlan stiffened.

Finge said, "She is here for a deliberate purpose. She is performing an essential function. It is only

temporary.Try to endure her meanwhile."

not be allowed to pass."

Harlan 's jaw quivered.He had protested and was being fobbed off.To hell with caution.He would

speak his mind.He said,"I can imagine what the woman 's 'essential function' is..To keep her so openly will

He turned stiffly, walked to the door. Finge 's voice stopped him. "Technician," Finge said,, "your relationship with Twissell may have given you a distorted notion about

interest of avoiding emotional

entanglements with family,an Eternal may not have children."

The Computer said gravely, "I didn 't ask about marriage or children."

Harlan quoted further: "Temporary liaisons may be made with Timers only after application with the

Central Charting Board of the Allwhen Council for an appropriate Life-Plot of the Timer concerned.Liaisons

may be conducted thereafter only according to the requirements of specific spatio-temporal charting."

"Quite true. Have you ever applied for temporary liaison, Technician?"

"No,Computer."

"Do you intend to?"

"No,Computer."

"Perhaps you ought to.It would give you a greater breadth of view.You would become less concerned

He was upset, and he knew why. Finge! Finge, and his coarse advice concerning liaisons with Timers.

period remaining something under two nours.)

Liaisons existed. Everyone knew that. Eternity had always been aware of the necessity for

compromising with human appetites (to Harlan the phrase carried a quivery repulsion), but the restrictions

involved in choosing mistresses made the compromise anything but lax, anything but generous. And those who

were lucky enough to qualify for such an arrangement were ex-

pected to be most discreet about it, out of common decency and consideration for the majority.

permanent basis for the obvious reasons.

Among the lower classes of Eternals, particularly among Maintenance, there were always the rumors

nance, there were always the rumors

(half hopeful, half resentful) of women imported on a more or less

Always rumor pointed to the Computers and Life-Plotters as the benefiting groups. They and only they could

of cooking, cleaning, and neavy labor.

But a Timer, and *such* a Timer, employed as "secretary," could only mean that Finge was thumbing a

nose at the ideals that made Eternity what it was.

Regardless of the facts of life to which the practical men of Eternity made a perfunctory obeisance it

remained true that the ideal Eternal was a dedicated man living for the mission he had to perform, for the betterment of Reality and the improvement of the sum of human happiness. Harlan liked to think that Eternity

was like the monasteries of Primitive times.

He dreamed that night that he spoke to Twissell about the matter, and that Twissell, the ideal Eternal,

shared his horror.He dreamed of a broken Finge,stripped of rank.He dreamed of himself with the yellow

Computer 's insigne, instituting a new regime in the 482nd, ordering Finge grandly to a new position in

But she remained standing, looking at him, until he had to look up and meet her eyes. She was all color

and life and Harlan was conscious of a faint perfume about her.

She said, "You're Technician Harlan, aren't you?"

His impulse was to snub her, to force his way past, but, after all, he told himself, all this wasn 't her fault.

Besides, to move past her now would mean touching her.

So he nodded briefly."Yes."

"I 'm told you 're quite an expert on our Time."

"I have been in it."

"I would love to talk to you about it someday."

"I am busy.I wouldn't have time."

"But Mr.Harlan, surely you could find time someday."

She smiled at him.

avertea, to let her pass.

Harlan said in a desperate whisper, "Will you pass, please? Or will you stand aside to let me pass?

Please!"

intricacy of which told Harlan at once that this concerned no halfhour excursion into Time.

of perforated filmsy the length and

Finge said, "Would you sit down, Harlan, and scan this thing right now? No, not by eye. Use the

machine.".Harlan lifted indifferent eyebrows, and inserted the sheet carefully between the lips of the scanner on

Finge 's desk. Slowly it passed into the intestines of the machine and, as it did so, the perforation pattern was

translated into words that appeared on the cloudy-white rectangle that was the visual attachment.

Somewhere about midpoint, Harlan's hand shot out and disconnected

the scanner.He yanked the flimsy out with a force that tore its tough cellulite structure.

Finge said calmly, "I have another copy."

But Harlan was holding the remnants between thumb and forefinger as though it might explode.

No personal problem at all, interposed Harian notis..

"Some kind of problem, certainly. In the circumstances, I will go as far as to explain certain aspects of

the Observational problem. This is not to be taken as a precedent, of course."

Harlan sat motionless. He was thinking hard and fast. Ordinarily professional pride would have forced

Harlan to disdain explanation. An Observer, or Technician, for that matter, did his job without question. And

Here, however, was something unusual. Harlan had complained con-

ordinarily a Computer would never dream of offering explanation.

cerning the girl, the so-called secretary. Finge was afraid the complaint might go further. ("The

guilty fleeth when no man pursueth, "thought

Harlan with grim satisfaction and tried to remember where he had read that phrase.)

Finge 's strategy was obvious, therefore. By stationing Harlan in the woman 's dwelling place he would

tence of Eternity. They know that

we supervise intertemporal trade. They consider that to be our chief function, which is good. They have a dim

knowledge that we are also here to prevent catastrophe from striking mankind. That is more a superstition than

anything else, but it is more or less correct, and good, too. We supply the generations with a mass father image

and a certain feeling of security. You see all that, don 't you?"

Harlan thought: Does the man think I 'm still a Cub?

But he nodded briefly.

Finge went on. "There are some things, however, they must not

know.Prime among them,of course,is
the manner in which we alter Reality when necessary.The insecurity

the manner in which we alter Reality when necessary. The insecurity such knowledge would arouse would be

most harmful.It is always necessary to breed out of Reality any factors that might lead to such knowledge and

we have never been troubled with it.

Harlan to offer some comment or ask some question. Harlan did neither.

Finge continued. "Ever since the Reality Change 433-486, Serial Number F-2, which took place about a

year--a physioyear ago, there has been evidence of the bringing into Reality of such an undesirable belief. I

have come to certain conclusions about the nature of that belief and have presented them to the Allwhen

Council. The Council is reluctant to accept them since they depend

upon the realization of an alternate in the

Computing Pattern of an extremely low probability.

"Before acting on my recommendation, they insist on confirmation by direct Observation. It's a most

delicate job, which is why I recalled you, and why Computer Twissell allowed you to be recalled. Another thing

I did was to locate a member of the current aristocracy, who

thought it would be thrilling or exciting to work in

return her to her time. Using

her dwelling as a base, you will be able to study the social life of her

circle. Do you understand now the reason I

had the girl here and the reason I want you in her house?"

Harlan said with an almost open irony, "I understand quite well, I assure you."

"Then you will accept this mission."

Harlan left with the fire of battle burning inside his chest. Finge was

not going to make a fool of him.

not going to outsmart him. He was

Surely it was that fire of battle, the determination to outwit

Finge, that caused him to experience an

eagerness, almost an exhibaration, at the thought of this next excursion into the 482nd.

Surely it was nothing else.. 5 Timer

Noys Lambent's estate was fairly isolated, yet within easy reach of one of the larger cities of the

growing, with its catastrophes and recoveries, its gaieties and troubles. Now he was in a given week of Time in

that city,in a moment of suspended animation of its slow life of steel and concrete.

More than that, his preliminary explorations had centered themselves more and more closely about the

"perioeci," the inhabitants who were the most important of the city,,yet who lived outside the city,in room and relative isolation.

The 482nd was one of the many Centuries in which wealth was unevenly distributed. The Sociologists

had an equation for the phenomenon (which Harlan had seen in print, but which he understood only vaguely). It worked itself out for any given Century to three relationships, and

for the 482nd those relationships stood near
the limits of what could be permitted. Sociologists shook their heads

over it and Harlan had heard one say at

badly off, as long as the leisure classes did

not entirely forget their responsibilities while enjoying their privileges, as long as their culture took no obviously unhealthy turn, there was always the tendency in Eternity to forgive the departure from the ideal

wealth-distribution pattern and to search for other, less attractive maladjustments.

Against his will Harlan began to understand this. Ordinarily his overnight stays in Time involved hotels

in the poorer sections, where a man might easily stay anony-

mous,where strangers were ignored,where one $presence \ more \ or \ less \ was \ nothing \ and \ therefore \ did \ not \ cause \ the$

fabric of Reality to do more than tremble.

When even that was unsafe, when there was a good chance that the trembling might pass the critical point and bring down a significant part of the card house of Reality, it was not unusual to have to sleep under a particular

economic levels of this society. Throughout

economic levels of this society. Inroughout

Time it was less common than pure matter but more common than pure energy. In any case it molded itself to

peculiar welaing of matter and energy that entered only the highest

his body as he lay down, firm when he lay still, yielding when he moved or turned.

Reluctantly he confessed the attraction of such things, and he accepted the wisdom which caused each

Section of Eternity to live on the *median* scale of its Century rather than at its most comfortable level. In that

way it could maintain contact with the problems and "feel" of the ${\it Century.,}$ without succumbing to too close an

 $identification\ with\ a\ sociological\ extreme.$

It is easy, thought Harlan, that first evening, to live with aristocrats.

And just before he fell asleep, he thought of Noÿs...He dreamed he

was on the Allwhen Council, fingers clasped austerely before him. He was looking down

right, and his words faltered.

Did no one else see her? The rest of the members of the Council looked steadily forward, except for

Twissell.He turned to smile at Harlan,looking through the girl as though she weren 't there.

Harlan wanted to order her away, but words were no longer coming out of his mouth. He tried to beat at

the girl,but his arm moved sluggishly and she did not move.Her flesh was cold.

Finge was laughing--louder---louder--

--and it was Noÿs Lambent laughing.

Harlan opened his eyes to bright sunlight and stared at the girl in horror for a moment before he

remembered where she was and where he was.

She said, "You were moaning and beating the pillow. Were you having a bad dream?"

Harlan did not answer.

nope.

"Of course not."

Of course not! Finge would have taken care of that little matter by having her lightly psychoed under

narcosis, if he felt that necessary. He might not have thought it necessary, however. After all, he had given her

"close observation."

The thought annoyed him. He said, "I'd prefer to be left to myself as much as possible."

She looked at him uncertainly a moment or two and left.

Harlan went through the morning ritual of washing and dressing glumly. He had no great hopes of an

exciting evening. He would have to say as little as possible, do as little as possible, be a part of the wall as much

as possible. His true function was that of a pair of ears and a pair of eyes. Connecting those senses with the final

report was his mind, which, ideally, had no other function.

conscientious ne tried to be.

But under the circumstances ignorance was irritating. Harlan suspected strongly that there was nothing

to look for that he was playing Finge's game in some way. Between that and Noÿs.

He stared savagely at the image of himself cast in threedimensional accuracy two feet in front of him by

the Reflector. The clinging garments of the 482nd, seamless and bright in coloring, made him, he thought, look

ridiculous.. Noÿs Lambent came running to him just after he had finished a solitary breakfast brought to him by a

Mekkano. She said breathlessly, "It's June, Technician Harlan."

He said harshly, "Do not use the title here. What if it is June?"

"But it was February when I joined "--she paused doubtfully--"that place, and that was only a month

Harlan frowned. "What year is it now?"

ago."

drew away.

"No mistake. You 've been put here because it 's more suitable. Actually, in Time, you have been here all along."

"But how could I?" She looked more frightened still.."I don 't remember anything about it. Are there two

Harlan was far more irritated than the cause warranted How could

me 's?"

he explain to her the existence of micro-changes induced by every interference with Time which could

alter individual lives without appreciable
effect on the Century as a whole. Even Eternals sometimes forgot
the difference between micro-changes (small

"c ")and Changes (large "c ")which significantly altered Reality.

He said, "Eternity knows what it 's doing. Don 't ask questions." He said it proudly, as though he,

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"Well,have I or haven 't I?"

"Have or haven 't what?"

"Lost three months."

"By Time,woman,I 'm telling
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"By Time,woman,I 'm telling you as plainly as I can.You haven 't lost any time out of your life.You

can 't lose any."

She stepped backward at his shout and then, suddenly, giggled. She

said, "You have the funniest accent.

Especially when you get angry."

He frowned at her retreating back. What accent? He spoke fiftymil-

lennial as well as anyone in the

Section.Better probably.

Stupid girl!.He found himself back at the Reflector staring at his image, which stared back at him, vertical furrows

deep between its eyes.

He smoothed them out and thought: I 'm not handsome. My eyes are too small and my ears stick out and

As always in such cases he made use of a molecular recorder of

55th Century manufacture. In shape it
was a featureless thin cylinder about four inches long by half an
inch in diameter. It was colored a deep but

noncommittal brown. It could be easily held in cuff, pocket, or lining, depending on the style of clothing, or, for

that matter, suspended from belt, button, or wristband.

However held, wherever kept, it had the capacity of recording some

twenty million words on each of

three molecular energy levels. With one end of the cylinder con-

mina.

nected to a transliterator, resonating efficiently
with Harlan 's earpiece, and the other end connected field-wise to
the small mike at his lips, Harlan could listen
and speak simultaneously.

Every sound made during the hours of the "gathering" repeated itself now in his ear, and as he listened,

a report, ne would have, not simply a sound-for sound recording, but an annotated reconstruction.

Noÿs Lambent entered. She did *not* signal her entrance in any way.

Annoyed, Harlan removed lip-piece and earpiece, clipped them to the molecular recorder, placed the

whole into its kit, and clasped that shut.

"Why do you act so angry with me?" asked Noÿs..Her arms and shoulders were bare and her long legs

shimmered in faintly luminescent foamite.

He said, "I am not angry. I have no feeling for you at all." At the moment he felt the statement to be

rigidly true.

She said, "Are you still working? Surely, you must be tired."

"I can 't work if you 're here," he replied peevishly..

"You are angry with me. You did not say a word to me all evening."

"I said as little as I could to anybody. I wasn't there to speak." He waited for her to leave..

past Observations but which (except for fact-searching hibbies)he

had thus far refrained from eating. Against his will he had liked them Against his will

his will,he had liked them. Against his will,he had enjoyed the foaming, light green, peppermint-flavored drink

(not quite alcoholic, something else, rather) that was currently fashionable. It had not existed in the Century two physioyears earlier, prior to the latest Reality Change.

He took the second drink from the Mekkano with an austere nod of thanks to Noÿs.

Now why had a Reality Change which had had virtually no physical

effect on the Century brought a new drink into existence?Well,he wasn 't a Computer,so there was no use

asking himself that question. Besides,
even the most detailed possible Computations could never eliminate
all uncertainty, all random effects. If that

weren 't so, there would be no need for Observers.

They were alone together in the house, Noÿs and himself. Mekkanos were at the height of their

"improper " in their being together alone in the eyes of the 482nd, at least.

Yet Harlan felt compromised.

chilabearing, mere could be nothing

The girl was stretched out on her elbow on a sofa opposite. Its patterned covering sank beneath her as

though avid to embrace her. She had kicked off the transparent shoes she had been wearing and her toes curled

and uncurled within the flexible foamite, like the soft paws of a luxuriant cat.

She shook her head and whatever it was that had kept her hair arranged upward away from her ears in

intricate intertwinings was suddenly loosened. The hair tumbled about her neck and her bare shoulders became

more creamily lovely at the contrast with the black of the hair.

She murmured, "How old are you?"

That he certainly should not have answered. It was a personal question and the answer was none of her

you. I suppose you it be like this when I in an old woman, what made
you decide to be thirty-two? Can you
change if you wish? Wouldn't you want to be younger?"
"What are you talking about?" Harlan rubbed his forehead to clear

She said softly, "You live forever. You 're an Eternal."

his mind..

Was it a question or a statement?

He said, "You 're mad.We grow old and die like anyone else."

millennial language, which he

She said, "You can tell me." Her voice was low and cajoling. The fifty-

had always thought harsh and unpleasant, seemed euphonious after all. Or was it merely that a full stomach and

the scented air had dulled his ears?

Eternity. I waited the longest

She said, "You can see all Times, visit all places. I so wanted to work in

time for them to let me.I thought maybe they 'd make me an Eternal, and then I found there were only men

members of Eternity were chosen with

infinite care since two conditions had to be met. First, they must be equipped for the job; second, their

withdrawal from Time must have no deleterious effect upon Reality.

Reality! That was the word he must not mention under any circumstances. He felt the spinning sensation

in his head grow stronger and he closed his eyes for a moment to stop it.

How many excellent prospects had been left untouched in Time because their removal into Eternity

would have meant the non-birth of children, the non-death of women and men, non-marriage, non-happenings,

non-circumstance that would have twisted Reality in directions the Allwhen Council could not permit.

Could he tell her any of this?Of course not.Could he tell her that women almost never qualified for

association that produced odd,almost grotesque,but not entirely unpleasant,results.Noÿs was closer to him now,smiling.)

He heard her voice like a drifting wind. "Oh, you Eternals. You are so secretive. You won't share at all.

Make me an Eternal."

to the might-be and we have a new is and

Her voice was a sound now that didn 't coalesce into separate words, just a delicately modulated sound

that insinuated itself into his mind.

He wanted,he longed to tell her:There 's no fun in Eternity,lady.We

work!We work to plot out all the details of everywhen from the beginning of Eternity to where Earth

is empty, and we try to plot out all the infinite possibilities of all the might-have-beens and pick out a

might-have-been that is better than what is and decide where in Time we can make a tiny little change to twist the is

torever and torever and torever and ...

He shook his head, but the whirligig of thought went on and on in stranger and more jagged breaks and

leaps until it jumped into a sudden flash of illumination that persisted for a brilliant second, then died.

That moment steadied him. He grasped for it, but it was gone.

The peppermint drink?

Noÿs was still closer,her face not quite clear in his gaze.He could feel her hair against his cheek,the

warm, light pressure of her breath. He ought to draw away, but-strangely, strangely—he found he did not want

to.

"If I were made an Eternal \dots " she breathed,,almost in his ear,though the words were scarcely heard

above the beating of his heart. Her lips were moist and parted. "Wouldn't you like to?". He did not know what she meant, but suddenly he didn't care. He seemed in flames. He put out his arms

revelation, that it wash i repulsive at all.

Even afterward, when she leaned against him with her eyes all soft and smiling a little, he found he had

to reach out and stroke her damp hair with slow and trembling delight.

She was entirely different in his eyes now. She was not a woman, not an individual at all. She was

suddenly an aspect of himself. She was, in a strange and unexpected way, a part of himself.

The spatio-temporal chart said nothing of this, yet Harlan felt no guilt. It was only the thought of Finge

that aroused strong emotion in Harlan's breast. And that wasn't quilt. Not at all.

It was satisfaction, even triumph!

In bed Harlan could not sleep. The lightheadedness had worn off now, but there was still the unusual $\ensuremath{\mathsf{N}}$

fact that for the first time in his adult life a grown woman shared his bed.

he wake her out of whatever areaming she might have. It was as though she were dreaming for the two of them,

dreaming herself and himself and all that had happened, and as though her waking would drive it all from existence.

It was a thought that seemed a piece of those other queer, unusual thoughts he had experienced just before ...

Those had been strange thoughts, coming to him at a moment between sense and nonsense. He tried to recapture them and could not. Yet suddenly it was very important that he recapture them. For although he could

not remember the details, he could remember that, for just an instant, he had understood something.

He was not certain what that something was, but there had been the unearthly clarity of the half-asleep,

when more than mortal eye and mind seems suddenly to come to life.

The Cub!

He stopped there. Why the Cub? Why Cooper? He hadn 't thought of him.

But if he hadn 't, then why should he think of Brinsley Sheridan Cooper now?

He frowned! What was the truth that connected all this? What was it he was trying to find? What made

him so sure there was something to find?.Harlan felt chilled,for with these questions a distant glow of that earlier illumination seemed to break

upon the horizons of his mind and he almost knew.

He held his breath, did not press for it. Let it come.

Let it come.

And in the quiet of that night, a night already so uniquely significant in his life, an explanation and

interpretation of events came to him that at any saner, more normal time he would not have entertained for a moment.

A secret that embraced all Eternity!. 6 Lite-Plotter

A month of physiotime had passed since that night in the 482nd, when he grew acquainted with many

things.Now,if one calculated by ordinary time,he was nearly 2000 Centuries in Noÿs Lambent's future,

attempting by a mixture of bribery and cajolery to learn what lay in store for her in a new Reality.

It was worse than unethical, but he was past caring. In the physiomonth just gone he had, in his own

eyes, become a criminal. There was no way of glossing over that

fact. He would be no more a criminal by compounding his crime and he had a great deal to gain by doing so.

Now, as part of his felonious maneuvering (he made no effort to

choose a milder phrase)he stood at the
barrier before the 2456th.Entry into Time was much more compli-

cated than mere passage between Eternity and
the kettle shafts. In order to enter Time the coordinates fixing the
desired region on Earth's surface had

physiomoment Sociologist Voy would be sitting safely before that screen watching for the Technician's Touch

that was to come.

Harlan felt no hurry. The room would remain empty for the next 156 minutes. To be sure, the spatio-

temporal chart allowed him only 110 minutes, leaving the remaining 46 as the customary 40 per cent "margin."

Margin was there in case of necessity, but a Technician was not expected to have to use it. A "margin-eater" did

not remain a Specialist long.

Harlan,however,expected to use no more than 2 minutes of the

iio.Wearing his wrist-borne field

generator so that he was surrounded by an aura of physiotime (an
effluvium,so to speak,of Eternity)and

therefore protected from any of the effects of Reality Change,he took one step toward the wall,lifted a small

The small container stayed where he put it. It played no immediate

role in world history. A man 's hand,

hours later,reached for it but did not find it.A search revealed it

half an hour later still, but in the interim a

force-field had blanked out and a man's temper had been lost. A de-

cision which would have remained unmade

in the previous Reality was now made in anger. A meeting did not take place; a man who would have died lived

a year longer, under other circumstances; another who would have lived died somewhat sooner.

The ripples spread wider, reaching their maxium in the 2481st, which was twenty-five Centuries upwhen from the Touch. The intensity of the Reality Change declined there-

after. Theorists pointed out that nowhere to
the infinite upwhen could the Change ever become zero, but by fifty
Centuries upwhen from the Touch the

activity of a busy space-port. He barely looked up when Harlan en-

tered.He barely mumbled something that might have been a greeting.

A change had indeed blasted the space-port. Its shininess was gone; what buildings there stood were not

the grand creations they had been. A space-ship rusted. There were no people. There was no motion.

Harlan allowed himself a small smile that flickered for a moment, then vanished. It was M.D.R. all right.

Maximum Desired Response. And it had happened at once. The Change did not necessarily take place at the

precise moment of the Technician 's Touch. If the calculations that went into the Touch were sloppy, hours or

days might elapse before the Change actually took place (counting, of course, by physiotime). It was only when

all degrees of freedom vanished that the Change took place. While there was even a mathematical chance for $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty$

beauty of his own performance. "I

wouldn't regret," he said,,"having spacetravel bred out of Reality altogether."

"No?" said Voy..

"What good is it?It never lasts more than a millennium or two.People get tired.They come back home

and the colonies die out. Then after another four or five millennia, or forty or fifty, they try again and it fails

Voy said dryly, "You 're quite a philosopher."

again. It is a waste of human ingenuity and effort."

Harlan flushed.He thought:What 's the use in talking to any of them?He said,angrily,with a sharp

change of subject, "What about the Life-Plotter?"

"What about him?"

"Would you check with the man?He ought to have made some progress by now."

with Cooper had sharpened his own preoccupation with the Primitive almost feverishly.)

during Frimilive limes. (His weekly discourses

The man, however, resembled neither ruler, as Harlan recalled it. He was almost cadaverously lean, with

skin stretched tightly over a high-bridged nose. His fingers were long and his wrists knobby. As he caressed his

small Summator, he looked like Death weighing a soul in the balance.

Harlan found himself staring at the Summator hungrily. It was the heart and blood of Life-Plotting, the

skin and bones, sinew, muscle and all else. Feed into it the required

data of a personal history, and the equations

of the Reality Change; do that and it would chuckle away in obscene merriment for any length of time from a minute to a day, and then spit out the possible companion lives for the person involved (under the new Reality),

each neatly ticketed with a probability value.

The point of open rudeness.

Voy said, "Take it easy, Life-Plotter."

Ferugue had eyebrows which were light almost to invisibility. It heightened the resemblance of his face

to a skull. His eyes rolled in what should have been empty sockets as

he said, "Killed the spaceships?"

Voy nodded. "Cut it down a Century."

Ferugue's lips twisted softly and formed a word.

Harlan folded his arms and stared at the Life-Plotter, who looked away in eventual discomfiture.

Harlan thought: He knows it 's his guilt too.

Feruque said to Voy, "Listen, as long as you're here, what in Time am I going to do about the anti-

cancer serum requests? We 're not the only Century with anticancer. Why do we get all the applications?"

"All the other Centuries are just as crowded. You know that."

"Then they 've got to stop sending in applications altogether."

"How do we go about making them?"

man, he knew,,would be the computer in

charge of the Section.

"I 've talked to the old man," said the Sociologist,,"and he 's talked to the Council."

"Nuts.He 's just sent through a routine tape-strip.He has to fight for this.It 's a matter of basic policy."

"The Allwhen Council isn 't in the mood these days to consider changes in basic policy. You know the

rumors going round."

"Oh, sure. They 're busy on a big deal. Whenever there 's dodging to do, the word gets round that

Council's busy on some big deal."

(If Harlan could have found the heart for it,he would have smiled at that point.)

Feruque brooded a few moments, and then burst out, "What most people don't understand is that anti-

cancer serum isn 't a matter of tree seedlings or field motors. I know that every sprig of spruce has to be watched

governments in every century are forever forwarding applications to

Eternity to 'please, pretty please ship them

seventy-five thousand ampules of serum on behalf of the men critically stricken who are absolutely vital to the

cultures, enclosed see biographical data."

Voy nodded rapidly,"I know.I know."

But Feruque was not to be denied his bitterness. "So you read the biographical data and it's every man a

hero. Every man an insupportable loss to his world. So you work it through. You see what would happen to

Reality if each man lived, and for Time 's sake, if different *combinations* of men lived.

them, seventeen Life-Plots came out
to involve no undesirable Reality Changes. Mind you there wasn't on

"In the last month, I 've done 572 cancer requests. Seventeen, count

to involve no undesirable Reality Changes. Mind you, there wasn 't one case of a possible *desirable* Reality

Change, but the Council says neutral cases get the serum. Humanity, you know. So exactly seventeen people in

one man we cure kicks his agea mother all

around the block whenever he can spare the time from beating his

kids.They don't know about Reality Changes

and we can 't tell them.

"We 're just making trouble for ourselves, Voy, unless the Allwhen

Council decides to screen all

applications and approve only those which result in a desirable Real-

ity Change.That 's all.Either curing them

does some good for humanity,or else it 's out. Never mind this business of saying: 'Well, it does no harm.'"

The Sociologist had been listening with a look of mild pain on his face, and now he said, "If it were you

with cancer ..."

"That 's a stupid remark, Voy. Is that what we base decisions on? In that case there 'd never be a Reality

Change. Some poor sucker always gets it in the neck, doesn 't he? Suppose you were that sucker, hey?

cases.Remember that."

Harlan lost even the faintest interest. This was the type of griping that went with the business. The

Psychologists and Sociologists, in their rare introvertive studies of

Eternity,called it identification.Men

identified themselves with the Century with which they were associated professionally. Its battles, all too often,

became their own battles.

Eternity fought the devil of identification as best it could. No man could be assigned to any Section

within two Centuries of his homewhen, to make identification harder. Preference was given to Centuries with

thought of Finge and the 482nd.)What was

more, their assignments were shifted as often as their reactions grew suspect. (Harlan wouldn't give a 50th

cultures markedly different from that of their homewhen. (Harlan

investigated and would be but for Eternity's chronic reluctance to turn its eyes inward.. A month earlier Harlan might have despised

Feruque as a blustering sentimentalist, a petulant oaf who eased the pain of watching the electro-gravitics lose intensity in a new Reality by railing against those of other

Centuries who wanted anti-cancer serum.

He might have reported him. It would have been his duty to do so. The man's reactions obviously could

no longer be trusted.

He could not do so, now. He even found sympathy for the man. His own crime was so much greater.

How easy it was to slip back to thoughts of Noÿs.

Eventually he had fallen asleep that night, and he awoke in day-light, with brightness shining through

translucent walls all about until it was as though he had awakened on a cloud in a misty morning sky.

Noÿs was laughing down at him." Goodness, it was hard to wake you."

ı ime!

"It 's only eleven. You 've got breakfast waiting and lots of time."

"Thanks," he mumbled..

"The shower controls are all set and your clothes are all ready."

What could he say?"Thanks," he mumbled..

He avoided her eyes during the meal. She sat opposite him, not eating, her chin buried in the palm of

one hand, her dark hair combed thickly to one side and her eyelashes preternaturally long.

She followed every gesture he made while he kept his eyes lowered and searched for the bitter shame he

knew he ought to feel.

She said, "Where will you be going at one?"

"Aeroball game," he muttered,,"I have the ticket."

"That 's the rubber game. And I missed the whole season because of just skipping the time, you know.

Who 'll win the game, Andrew?"

lot of Space and Time to cover.I wouldn't know little precise things like game scores."

"Oh,you just don't want to tell me."

Harlan said nothing to that. He inserted the pene-prong into the small, juicy fruit and lifted it, whole, to

his lips..After a moment Noÿs said, "Did you see what happened in this neighborhood before you came?"

"No details, N--Noÿs." ((He forced her name past his lips.)

The sink gold gofth: "Didn 't you goe us? Didn 't you know all close

The girl said softly, "Didn 't you see us? Didn 't you know all along that--"

'm not here till I come. I can 't
explain." He was doubly flustered. First, that she should speak of

Harlan stammered, "No, no, I couldn't see myself. I'm not in Rea----I

explain." He was doubly flustered.. First, that she should speak of it. Second, that he had almost been trapped

into saying, "Reality," of all the words the most forbidden in conversation with Timers..

IT ETERMAIS WEREN TAHOWEA TO EAT. "Don't use the word," said Harlan.." As a matter of fact, we're not, in

a way."

"Well, then, don't tell them. I won't."

And she walked about the table and sat down on his lap, pushing the small table out of the way with a

smooth and flowing motion of her hip.

Momentarily he stiffened, lifted his hands in a gesture that might have been intended to hold her off. It

didn't succeed. She bent and kissed him on his lips, and nothing seemed shameful any

more. Nothing that involved

Noÿs and himself.

He wasn 't sure when first he began to do something that an Observer, ethically, had no right to do. That

is, he began to speculate on the nature of the problem involving the current Reality and of the Reality Change

that would be planned.

involve the group he was Observing.

So much seemed obvious.

It would involve the aristocracy, the well-to-do, the upper classes, the beneficiaries of the system.

What bothered him was that it would most certainly involve Noÿs.

He got through the remaining three days called for in his chart in a gathering cloud that dampened even

his joy in Noÿs's company.

She said to him, "What happened? For a while, you seemed all different from the way you were in Eter--

in that place. You weren 't stiff at all. Now, you seem concerned. Is it

because you have to go back?"

Harlan said, "Partly."

"Do you have to?"."I have to."

"Well, who would care if you were late?"

Harlan almost smiled at that. "They wouldn't like me to be late," he said, yet thought longingly just the

same of the two-day margin allowed for in his chart.

Through the hypnosis of sound Harlan gazed at Noÿs and his thoughts wound tightly about her. What

would she be in the new dispensation? A fishwife, a factory girl, the mother of six, fat, ugly, diseased?

Whatever she was, she would not remember Harlan. He would have been no part of her life in a new Reality.

And whatever she would be then, she would not be Noÿs.

He did not simply love a *girl* .(Strangely,he used the word "love " in his own thoughts for the first time

and did not even pause long enough to stare at the strange thing and

wonder at it.)He loved a complex of factors;her choice of clothes,her walk,her manner of speech,her

and could no more fall of beauty.

and experience in a given Reality had gone into the manufacture of

all that. She had not been his Noÿs in the previous Reality of a physioyear earlier. She would not be his Noÿs in the next Reality.

Several things occurred to him, all illegal. One of them was to learn

the nature of the Change and find

out definitely how it would affect Noÿs.One could not,after all,be certain that ...

A dead silence wrenched Harlan out of his reverie. He was in the Life-Plotter's office once more.

Sociologist Voy was watching him out of the corner of his eye. Feruque 's death 's-head was lowering at him.

And the silence was piercing.

clucking.

It took a moment for the significance to penetrate. Just a moment. The Summator had ceased its inner

Harlan jumped up. "You have the answer, Life-Plotter."

Feruque looked down at the flimsies in his hand. "Yeah. Sure. Sort of funny."

"May I have it?" Harlan held out his hand..It was trembling visibly.

"There 's nothing to see. That 's what 's funny."

"--and he reached up to rub his cheek with long, spare fingers--"with the combination

of factors you handed me I don't quite see how she fit in the old Reality."

Harlan hardly heard "But--but the Change was such a small one."

"I know.A funny combination of factors.Here,you want the flimsies?" Harlan 's hand closed over them,unfeeling.Noÿs gone?Noÿs nonexist-

ent?How could that be?

He felt a hand on his shoulder and Voy 's voice clashed on his ear." Are you ill, Technician?" The hand

drew away as though it already regretted its careless contact with a Technician's body.

Harlan swallowed and with an effort composed his features. $^{\circ}$ I 'm quite well. Would you take me to the

kettle?"

He *must not* show his feelings.He must act as though this were what he represented it to be,a mere

gist Voy was not watching. In these last weeks

it had grown to be a habit with him, an automatic twitch; there was

always the quick backward glance across the shoulder to make sure no one was behind him in the kettle shafts.

And then, though already in the 2456th, it was for upwhen that

And then, though aiready in the 2456th, it was for upwhen that

watched the numbers on the temporometer rise. Though they moved with blurry quickness, there would be

considerable time for thought.

Harlan set the kettle controls.He

How the Life-Plotter's finding changed matters! How the very nature of his crime had changed!

And it had all hinged on Finge. The phrase caught at him with its ridiculous rhyme and its heavy beat

circled dizzyingly inside his skull:It hinged on Finge.It hinged on Finge ...

Harlan had avoided any personal contact with Finge on his return to Eternity after those days with Noÿs Finge did not permit it. He was in communication with Harlan less

than an hour after the report had been

The Computer 's image stared out of the vision plate. His voice said, "I expected you to be in your

coded for proper direction and inserted into the chute.

office."

Harlan said, "I delivered the report, sir. It doesn't matter where I wait for a new assignment."

"Yes?"Finge scanned the roll of foil he held in his hands, holding it up, squint-eyed, and peering at its perforation pattern.

"It is scarcely complete," he went on.. "May I visit your rooms?"

the self-invitation at this moment would have a flavor of insubordination. It would advertise his guilt, it

Harlan hesitated a moment. The man was his superior and to refuse

dared not permit that.

seemed, and his raw, painful conscience

grained into the appearance of wood (though not very successfully). In one corner of the room was a small piece

of furniture that represented an even wider departure from the customs of the times..It caught Finge's eye almost at once.

The Computer put a pudgy finger on it,as though to test its texture. "What is this material?"

"Wood,sir," said Harlan..

"The real thing?Actual wood?Amazing!You use wood in your homewhen,I believe?"

"We do."

dusted the finger with which he had touched the object against the side seam of his trouser leg--"but I don't know that it's advisable to allow the

"I see. There 's nothing in the rules against this, Technician "--he

culture of the homewhen to affect one. The true Eternal adopts whatever culture he is surrounded by. I doubt,

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11? What is its purpose?
   "It 's a bookcase," said Harlan..He had the impulse to ask Finge how
he felt now that his hands rested
   firmly upon the small of his back. Would he not consider it cleaner to
have his clothes and his own body
   constructed of pure and undefiled energy fields?
   Finge 's eyebrows lifted." A bookcase. Then those objects resting
upon the shelves are books. Is that
  right?"
   "Yes,sir."
   "Authentic specimens?"
   "Entirely, Computer. I picked them up in the 24th. The few I have
here date from the 20th. If -- if you
   intend to look at them, I wish you 'd be careful. The pages have been
restored and impregnated, but they 're not
  foil. They take careful handling."
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"I won 't touch them. I have no intention of touching them. Original

20th Century dust is on them, I

to feet a star apon them to be a star apon himself.

"I dare say," said Finge,,still on the subject,"that the whole content of those books could be placed on

two meters of film and stored in a finger 's end. What do the books contain?"

Harlan said, "They are bound volumes of a news magazine of the 20th."

"You read that?"

Harlan said proudly, "These are a few volumes of the complete collection I have. No library in Eternity

can duplicate it."

"Yes,your hobby.I remember now you once told me about your inter-

est in the Primitive. I'm amazed

your Educator ever allowed you to grow interested in such a thing.A complete waste of energy."

Harlan's lips thinned. The man, he decided, was deliberately trying to irritate him out of possession of

calm reasoning faculties. If so, he must not be allowed to succeed.

"Nothing,sir." And though he said it firmly,,he stood there,hangdog.
"Come,Technician.You spent several periods of time in the society of the young lady.Or you did if
you followed the spatio-temporal chart.You did follow it,I suppose?"

Harlan's guilt riddled him to the point where he could not even rise to the bait of this open assault upon

his professional competence.

He could only say, "I followed it."

with the woman."

"Nothing of importance happened," said Harlan,,dry-lipped.

"That is ridiculous. At your time of life and with your experience, I don't have to tell you that it is not

"And what happened? You include nothing of the private interludes

for an Observer to judge what is important and what is not."

Finge 's eyes were keenly upon Harlan. They were harder and more eager than quite befitted his soft line

of questioning.

had no individuality of his own, he was not really a man.

Almost automatically Harlan began his narration of the events he had left out of his report. He did it

with the trained memory of the Observer, reciting the conversations with word-for-word accuracy, re

constructing the tone of voice and cast of countenance. He did it lovingly, for in the telling he lived it again, and

almost forgot, in the process, that a combination of Finge 's probing and his own healing sense of duty was

It was only as he approached the end result of that first long conversation that he faltered and the shell of

his Observer 's objectivity showed cracks.

driving him into an admission of guilt.

He was saved from further details by the hand that Finge suddenly raised and by the Computer's sharp,

edgy voice. Thank you. It is enough. You were about to say that you made love to the woman."

Harlan would have sworn was obvious.

Harlan had succeeded in taking away a girl that Finge had meant to have.

Harlan felt the triumph in that and found it sweet. For the first time in his life he knew an aim that meant

more to him than the frigid fulfillment of Eternity.He was going to keep Finge jealous,because Noÿs Lambent

was to be permanently his.

In this mood of sudden exaltation he plunged into the request that originally he had planned to present

only after a wait of a discreet four or five days..He said,"It is my intention to apply for permission to form a liaison with a Timed individual."

Finge seemed to snap out of a reverie. "With Noÿs Lambent, I presume."

"Yes,sir.As Computer in charge of the Section,it will have to go through you...."

Computer 's desires, but Harlan was sure he could count on Twissell 's backing, and Finge had a long way to go before he could buck Twissell.

Finge, however, seemed tranquil. "It would seem," he said,, "that you have already taken illegal possession of the girl."

Harlan flushed and was moved to a feeble defense. "The spatiotemporal chart insisted on our remaining alone together. Since nothing of what happened was specifically for-

bidden, I feel no guilt."

Which was a lie, and from Finge 's half-amused expression one could feel that he knew it to be a lie.

He said, "There will be a Reality Change."

Harlan said, "If so,I will amend my application to request liaison with

Miss Lambent in the new

Reality."

contact? That it will survive all

external changes?Have you been reading novels out of Time?"

Harlan was goaded into indiscretion. For one thing, I don 't believe you.,,

Finge said coldly,"I beg pardon."

"You 're lying." Harlan didn 't care what he said now. "You 're jealous. It 's all it amounts to. You 're

jealous. You had your own plans for Noÿs but she chose me."

Finge said, "Do you realize--"

"I realize a great deal.I 'm no fool.I may not be a Computer,but neither am I an ignoramus.You say she

won 't want me in the new Reality. How do you know? You don 't even know yet what the new Reality will be.

You don't know if there must be a new Reality at all. You just received my report. It must be analyzed before a

Reality Change can be computed,let alone submitted for approval. So when you affect to know the nature of

angrily as Harlan;he might put in an immediate call to Twissell,lodging a formal complaint;he might--he

He said gently, "Sit down, Harlan. Let's talk about this."

And because that response was completely unexpected, Harlan 's jaw

confusion. His resolution faltered. What was this?

ality toward Eternity.. You do remember that,

a somewhat backward student, yet Harlan

superaination, he might shoul back, yelling as

might Finge did none of this.

sagged and he sat down in

problem with the 482nd involved an undesirable attitude on the 'part of the Timers of the current Re-

"You remember, of course," said Finge,, "that I told you that our

don 't you?" He spoke with the mild urging of a schoolmaster toward

thought he could detect a kind of hard glitter in his eye.

Harlan said, "Of course."

"You remember, too, that I told you that the Allwhen Council was reluctant to accept my analysis of the you told me orally moments ago."

"I don't understand you."

Eternals are really Eternal, literally so; that

"Look,Harlan,let me tell you what is wrong with the 482nd.Among the upper classes of this Century,

particularly among the women, there has grown up the notion that

they live forever....Great Time,man,Noys Lambent told you as

much. You repeated her statements to me not

twenty minutes ago."

Harlan stared blankly at Finge.He was remembering Noÿs 's soft,caressing voice as she leaned toward

him and caught at his eyes with her own lovely,dark glance: You live forever. You 're an Eternal .

Finge went on, "Now a belief like that is bad, but, in itself, not too bad. It can lead to inconveniences,

increase difficulties for the Section, but ${\it Computation}$ would show that only in a minority of cases would

persuaded the soft aristocrat to

fall into the arms of an unimportant Technician?Come,Harlan,be realistic about this."

Harlan's lips grew stubborn. He said nothing.

Finge said, "Can 't you guess the additional superstition which these people have added to their belief in

the actual eternal life of the Eternals?Great Time,Harlan!Most of the women believe that intimacy with an

Eternal will enable a mortal woman (as they think of themselves)to live forever!"

Harlan swayed.He could hear Noÿs 's voice again so clearly: If I were made an Eternal ...

And then her kisses..Finge went on. "The existence of such a superstition was hard to believe, Harlan. It was unprecedented.

It lay within the region of random error so that a search through the Computations for the previous Change

Harlan stared at him.

Finge had the grace to squirm a bit under that wordless stare.He said, "Don't you see?No,you still

don 't.Look,Harlan,you 're a coldfish product of Eternity.You won 't look at a woman.You consider women

and all that concerns them unethical.No,there 's a better word.You consider them *sinful* .That attitude shows

all over you,and to any woman you 'd have all the sex appeal of a month-dead mackerel. Yet here we have a

woman,a beautiful pampered product of a hedonistic culture, who ardently seduces you on your first evening together, virtually begging for your embrace. Don 't you understand

that that is ridiculous,impossible,unless-well,unless it is the confirmation we were looking for."

well, unless it is the confirmation we were looking for."

Harlan struggled for words. "You say she sold herself----"

"Why that expression? There is no shame attached to sex in this Century. The only strange thing is that

Century. The only strange thing is that

quick, trembling gesture. Don't touch me!

Back!"

Harlan had just enough sanity to halt his rush. His hair was matted. His shirt was stained with

perspiration. His breath whistled through pinched white nostrils.

Finge said shakily, "I know you very well, you see, and I thought your reaction might be violent. Now

I'll shoot if I have to."

Harlan said, "Get out."

"I will.But first you 'll listen.For attacking a Computer,you can be declassified,but we'll let that go.

You will understand, however, that I did not lie. The Noÿs Lambent of the new Reality, whatever else may be or not be, will lack this superstition. The whole purpose of the Change

will be to wipe out the superstition. And

without it,Harlan "--his voice was almost a snarl--"how could a woman

like Noÿs want a man like you?"

her. What a pity, the now does not last, even in

or twitter a priny, me now accome har last, even in

Eternity,eh,Harlan?"

Harlan no longer looked at him. Finge had won after all and was leaving in clear and leering possession

of the field. Harlan stared unseeingly at his own toes, and when he looked up Finge was gone--whether five

seconds earlier or fifteen minutes Harlan could not have said..Hours had passed nightmarishly and Harlan felt trapped in the prison of his

mind.All that Finge had
said was so true, so transparently true. Harlan's Observer mind could
look back upon the relationship of himself

and Noÿs,that short,unusual relationship,and it took on a different texture.

It wasn't a case of instant infatuation. How could he have believed it was? Infatuation for a man like

himself?

distorted view of Eternity and what it means.

unseeingly, opened it.

Automatically Harlan 's long fingers caressed the volumes in his small bookshelf. He took one out and,

The print blurred. The faded colors of the illustrations were ugly, meaningless blotches.

Why had Finge troubled to tell him all this? In the strictest sense he ought not to have. An Observer, or

anyone acting as Observer, ought never to know the ends attained by his Observation. It removed him by so

much from the ideal position of the objective non-human tool.

It was to crush him, of course; to take a mean and jealous revenge!

Harlan fingered the open page of the magazine. He found himself staring at a duplication, in startling

red,of a ground vehicle, similar to vehicles characteristic of the 45th,182nd,590th, and 984th Centuries, as well as of late Primitive times. It was a very common sort of affair

with an internal-combustion motor.In the

ache within Harlan.

ache within Harian

"These advertisements," he had said,, "tell us more of Primitive times than the so-called news articles in

the same magazine. The news articles assume a basic knowledge of the world it deals with. It uses terms it feels

no necessity of explaining. What is a 'golf ball,' for instance??"

Cooper had professed his ignorance readily.

Harlan went on in the didactic tone he could scarcely avoid on occasions such as this. "We could deduce

that it was a small pellet of some sort from the nature of the casual mentions it receives. We know that it is used

in a game,if only because it is mentioned in an item under the heading 'Sport.' We can even make further

deductions that it is hit by a long rod of some sort and that the object of the game is to drive the ball into a hole

in the ground.But why bother with deduction and reasoning?Observe this advertisement!The object of it is

these people blow their own horn? Who would be fool enough to believe a person's boastings about his own

products? Would he admit defects? Is he likely to stop at any exaggeration?". Harlan, whose homewhen was middling fruitful in advertisement, raised tolerant eyebrows and merely

said, "You'll have to accept that. It's their way and we never quarrel with the ways of any culture as long as it

does not seriously harm mankind as a whole."

But now Harlan 's mind snapped back to his present situation and he

said, ish i ii rainer disgusting the way

and back to Noÿs?

was back in the present, staring at
the loudmouthed, brassy advertisements in the news magazine. He
asked himself in sudden excitement: Were

the thoughts he had just experienced really irrelevant?Or was he tortuously finding a way out of the blackness

Advertisement! A device for forcing the unwilling into line. Did it matter to a ground-vehicle

long enough and she would grow to love him. He would make her love him and, in the end, love and not its

motivation was what counted. He wished now he had read some of the novels out of Time that Finge had mentioned scornfully.

Harlan 's fists clenched at a sudden thought. If Noÿs had come to him ,to Harlan ,for immortality, it

that gift. She could have made love to no

could only mean that she had not yet fulfilled the requirement for

Eternal previously. That meant that her relationship to Finge had been nothing more than that of secretary and

employer.Otherwise what need would she have had for Harlan?

Yet Finge surely must have tried--must have attempted...(Harlan

could not complete the thought even

in the secrecy of his own mind.) Finge could have proved the superstition 's existence on his own person. Surely one, and that he could never have her.

Yet Noÿs had refused Finge even with eternal life at stake and *had* accepted Harlan. She had that much

of a choice and she had made it in Harlan's favor.'So it wasn't calculation entirely.Emotion played a part.

Harlan's thoughts were wild and jumbled, and grew more heated with every moment.

He $\it must$ have her,and $\it now$.Before any Reality Change.What was it Finge had said to him, jeering: $\it The$

now does not last, even in Eternity .

Doesn 't it, though? Doesn 't it?

Harlan had known exactly what he must do. Finge 's angry taunting

had goaded him into a frame of
mind where he was ready for crime and Finge 's final sneer had,at
least,inspired him with the nature of the

deed he must commit.

He had not wasted a moment after that. It was with excitement and even joy that he left his quarters, at

use.He hesitated,and then decided to stamp his seal on the marker.A sealed door would draw little attention.

An unsealed door in active use would be a nine-day wonder.

errand and wonder why the door was in

Of course, it might be Finge who stumbled upon the door. He would have to chance that.

Noÿs was still standing as he had left her.Wretched hours (physiohours)had passed since Harlan had

left the 482nd for a lonely Eternity, but he returned now to the same Time, within a matter of seconds, that he

had left.Not a hair on Noÿs 's head had stirred.

She looked startled. "Did you forget something, Andrew?"

Harlan stared at her hungrily, but made no move to touch her. He remembered Finge 's words, and he

dared not risk a repulse.He said stiffly, "You 've got to do as I say."

She said, "But is something wrong, then? You just left. You just this minute left."

(He knew the answer to that,really.He had a two-day margin of grace allowed by the spatio-temporal $\protect\end{\protect}$

chart. The earlier portions of that period of grace were safer and yielded least chance of discovery. It was a

natural tendency to crowd it as far downwhen as he could. A foolish risk, too, though. He might easily have

miscalculated and entered Time before he had left it physiohours earlier. What then? It was one of the first rules

atter leaving.

he had learned as an Observer:One person occupying two points in the same Time of the same Reality runs a risk of meeting himself.

Somehow that was something to be avoided. Why? Harlan knew he didn't want to meet himself. He didn't want to be staring into the eyes of another and earlier (or leter). Leter Depend that it would be a

later)Harlan.Beyond that it would be a paradox,and what was it Twissell was fond of saying?"There are no paradoxes in Time,but only because Time

be, she had what she wanted, what

else was there?He seized her wrists and said huskily,"Will you come

with me?Now?Without asking any

questions?Doing exactly as I say?"

"Must I?" she asked.

"You must, Noÿs. It 's very important."

"Then I 'll come." She said it matter--of-factly,as though such a request came to her each day and was

always accepted..At the lip of the kettle Noÿs hesitated a moment,then stepped in.

Harlan said,"We 're going upwhen,Noÿs."

"That means the future, doesn't it?"

The kettle was already faintly humming as she entered it and she was scarcely seated when Harlan

unobtrusively moved the contact at his elbow.

She showed no signs of nausea at the beginnings of that indescribable sensation of "motion" through

Time.He was afraid she might.

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you mean we re a mousand years in the future? Aiready?
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"That 's right."

"It doesn't feel like it."

"I know."

She looked about. "But how are we moving?"

"I don't know, Noÿs."

"You don '+?"

"There are many things about Eternity that are hard to understand."

The numbers on the temporometer *marched*. Faster and faster they moved till they were a blur. With his

elbow Harlan had nudged the speed stick to high. The power drain might cause some surprise in the power

plants, but he doubted it. No one had been waiting for him in Eternity when he returned with Noys, and that was

nine tenths the battle. Now it was only necessary to get her to a safe place.

Again Harlan looked at her. "Eternals don't know everything."

ı you? "Well, they call them Etemals, you know, and everyone says they do." She smiled at him brightly.. "But they don 't, do they?" "You don't think so, then?" "After I was in Eternity a while,I didn 't.People didn 't talk as though they lived forever, and there were

old men there.". "Yet you told me I lived forever--that night."

She moved closer to him along the seat, still smiling. "I thought: who

He said, without being quite able to keep the strain out of his

voice, "How does a Timer go about becoming an Eternal?"

said,"Why do you ask that?"

Her smile vanished and was it his imagination or was there a trace of heightened color in her cheek. She

"To find out."

knows?"

on the angle she held her hands. A clever

girl,one like Noÿs,could produce half a dozen shades out of them,and make it seem as though the colors were

reflecting her moods.Blue for innocence,bright yellow for laughter,violet for sorrow,and scarlet for passion.

He said, "Why did you make love to me?"

She shook her hair back and looked at him out of a pale, grave face. She said, "If you must know, part of the reason was the theory that a girl can become an Eternal that

way. I wouldn't mind living forever."

"I thought you said you didn't believe that"

"I thought you said you didn't believe that."

"I didn 't,but it couldn 't hurt a girl to take the chance.Especially----

He was staring at her sternly, finding refuge from hurt and disappointment in a frozen look of disapproval from the heights of the morality of his homewhen. "Well?"

look at me, but you always looked

at me anyway. You tried to hate me and I could see you wanted me. I was sorry for you a little, I think."

"What were you sorry about?" He felt his cheeks burning..

"That you should have such trouble about wanting me.It 's such a simple thing. You just ask a girl. It 's

so easy to be friendly. Why suffer?"

Harlan nodded. The morality of the 482nd! "Just ask a girl," he muttered.. "So simple. Nothing more

necessary."

"The girl has to be willing, of course. Mostly she is, if she 's not otherwise engaged. Why not? It 's

simple enough."

It was Harlan's turn to drop his eyes. Of course, it was simple enough. And nothing wrong with it,

either. Not in the 482nd. Who in Eternity should know this better? He would be a fool, an utter and unspeakable. fool, to ask her now

There is nothing to smile about, 170ys. "Please .I want to see if your cheeks can crease right.Let 's see."

She put her fingers to the corners of his

mouth and pressed them backward. He jerked his head back in surprise and couldn't avoid smiling.

"See. Your cheeks didn 't even crack. You 're almost handsome. With enough practice--standing in front

of a mirror and smiling and getting a twinkle in your eye--I 'll bet you could be really handsome."

But the smile, fragile enough to begin with, vanished.

Noÿs said, "We are in trouble, aren 't we?"

"Yes,we are,Noÿs.Great trouble."

"Because of what we did? You and I? That evening?"

"Not really."

"That was my fault, you know. I 'll tell them so, if you wish."

"Never,", said Harlan with energy. "Don't take on any fault in this. You

've done nothing, nothing, to be guilty for. It 's something else." whiteness of her skin. Is that right?

Harlan looked at the indicator casually. It was in the 72,000 's. "I 'm sure it is."

"But where are we going?"

"To when are we going. To the far upwhen," he said, "grimly. "Good and far. Where they won't find

you."

And in silence they watched the numbers mount. In silence Harlan told himself over and over that the

girl was innocent of Finge 's charge. She had owned up frankly to its partial truth and she had admitted, just as

frankly, the presence of a more personal attraction.

He looked up,then,as Noÿs shifted position. She had moved to his side of the kettle and, with a resolute

gesture, brought the kettle to a halt at a most uncomfortable temporal deceleration.

Harlan gulped and closed his eyes to let the nausea pass.He said, "What's the matter?"

hand. The lights along the mainways were

on,and the darkened rooms blazed at the touch of a contact. The air was fresh and had a liveliness about it

which, without sensible draft, yet indicated the presence of ventilation.

Noÿs whispered, "Is there no one here?"

"No one," said Harlan..He tried to say it firmly and loudly.He wanted to break the spell of being in a

"Hidden Century," but he said it in only a whisper after all..

He did not even know how to refer to anything so far upwhen. To call it the one-one-three-ninety-

fourth was ridiculous. One would have to say simply and indefinitely, "The hundred thousands."

It was a foolish problem to be concerned with, but now that the exaltation of actual flight was done with,

he found himself alone in a region of Eternity where no human footsteps had wandered and he did not like it. sands and thousands of Centuries."

Noÿs seemed to accept that. "And everything is fixed up so?We passed food stores and a viewing-film

library.Did you see that?"

"I saw that.Oh,it 's fully equipped.They 're all fully equipped.Every Section."

"But why, if no one ever comes here?"

"It 's logical," said Harlan.. Talking about it took away some of the eeriness. Saying out loud what he

already knew in the abstract would pin-point the matter, bring it down to the level of the prosaic. He said,

"Early in the history of Eternity, one of the Centuries in the 300's came up with a mass duplicator. Do you

know what I mean?By setting up a resonating field,energy could be converted to matter with subatomic

particles taking up precisely the same pattern of positions, within the uncertainty requirements, as those in the $\frac{1}{2}$

all unnecessary, we built one new Section

complete with food, power supply, water supply, all the best automatic

features; set up the machine and

duplicated the Section once each Century all along Eternity. I don't know how long they kept it going--millions

of Centuries, probably."

"All like this, Andrew?"

"All exactly like this. And as Eternity expands, we just fill in, adapting the construction to whatever

fashion turns out to be current in the Century. The only troubles come when we hit an energy-centered Century.

We--we haven 't reached this Section yet." ((No use telling her that the Eternals couldn't penetrate into Time

here in the Hidden Centuries. What difference did that make?)

He glanced at her and she seemed troubled. He said hastily, "There 's no waste involved in building the

Sections. It took energy, nothing more, and with the nova to draw on--

". She interrupted. "No.I just don't remember."

demigod of Eternity who must teach her and

He said, "No \ddot{y} s, dear, let 's find a place to sit down and--and I 'll have to explain something."

The concept of a variable Reality, a Reality that was not fixed and

that could be faced casually by anyone.

lead her carefully to the truth.

eternal and immutable was not one

In the dead of the sleep period, sometimes, Harlan would remember the early days of his Cubhood and

recall the wrenching attempts to divorce himself from his Century and from Time.

It took six months for the average Cub to learn all the truth, to discover that he could never go home again in a very literal way. It wasn 't Eternity 's law, alone, that stopped him, but the frigid fact that home as he

knew it might very well no longer exist, might, in a sense, never have existed.

and miserably poor joking.

Someone said with a voice that was tremulous and uncertain, $^{\circ}$ I suppose I never had a mother. If I go

back into the 95th,they 'd say: 'Who are you? We don 't know you. We don 't have any records of you. You

don't exist."

They smiled weakly and nodded their heads, lonely boys with nothing left but Eternity.

They found Latourette at bedtime, sleeping deeply and breathing shallowly. There was the slight

reddening of a spray injection in the hollow of his left elbow and fortunately that was noted too.

Yarrow was called and for a while it looked as though one Cub would be out of the course, but he was

brought around eventually. A week later he was back in his seat. Yet the mark of that evil night was on his personality for as long as Harlan knew him thereafter.

twelve, and there he told her.

He did it as gently as possible, but he scarcely found need for gen-

tleness. She snapped quickly at every concept and before he was half through it was borne in upon him, to

his great amazement, that she wasn 't

reacting badly. She wasn 't afraid. She showed no sense of loss. She only seemed angry. The anger reached her face and turned it a glowing pink while her dark eyes seemed somehow the

darker for it.

"But that 's criminal," she said.. "Who are the Eternals to do this?"

"It 's done for humanity 's good," said Harlan.. Of course, she couldn

't really understand that.He felt

sorry for the Time-bound thinking of a Timer.

"Is it?I suppose that 's how the mass duplicator was wiped out."

"We have copies still.Don't worry about that.We've preserved it."

"You 've preserved it.But what about us?We of the 482nd might have had it." She gestured with little

For a moment she tried to free them, and then she relaxed. She even laughed a bit. "Oh, go ahead, silly,

and don 't look so solemn.I 'm not blaming you."

"You mustn't blame anyone. There is no blame necessary. We do what must be done. That mass

duplicator is a classic case.I studied it in school.When you duplicate mass, you can duplicate persons, too. The

problems that arise are very complicated."

"Isn't it up to the society to solve its own problems?"

"It is, but we studied that society throughout Time and it doesn 't solve the problem satisfactorily.

Remember that its failure to do so affects not only itself but all its descendant societies. In fact, there is no

satisfactory solution to the mass-duplicator problem. It is one of those things like atomic wars and dreamies that

just can 't be allowed. Developments are never satisfactory."

"What makes you so sure?"

that.Naturally, you resent learning that life is

not as solid as you thought. You and the world you lived in might have been only a probability shadow a year

ago, but what 's the difference? You have all your memories, whether they 're of probability shadows or not,

haven 't you?You remember your childhood and your parents,don 't you?"

"Of course."

"Then it 's just as if you lived it, isn 't it? Isn 't it? I mean, whether you did or not?"

"I don't know.I'll have to think about it.What if tomorrow it's a dream world again,or a shadow,or

whatever you call it?"

"Then there would be a new Reality and a new you with new memories. It would be just as though

nothing had happened, except that the sum of human happiness would have been increased again."

are.Exactly as you are.I don't want you changed.Not in anyway."

He came within a hair of blurting out the truth, that without the advantage of the superstition about

Eternals and eternal life she would never have inclined toward him.

She said, looking about with a slight frown, "Will I have to stay here forever, then? It would be--lonely."

"No,no.Don 't think it," he said wildly,,gripping her hands so tight that she winced."I 'll find out what

you will be in the new Reality of the 482nd, and you'll go back in disguise, so to speak. I'll take care of you. I'll apply for permission for formal liaison and see to it that you remain

apply for permission for formal liaison and see to it that you remain safely through future Changes. I'm a

Technician and a good one and I know about Changes." He added grimly,, "And I know a few other things as

well," and stopped there..

and only faith, doubly cast out from Time and Eternity; and only the woman for whom he had forsaken it all left

He said, and he meant it deeply, "No, it is a crime. It is a very great crime, and I am bitterly ashamed.

But I would do it again, if I had to, and any number of times, if I had to."

"For me, Andrew? For me?"

at his side.

He did not raise his eyes to hers. "No, Noÿs, for myself. I could not bear to lose you."

She said, "And if we are caught ..."

Harlan knew the answer to that. He knew the answer since that moment of insight in bed in the 482nd,

with Noÿs sleeping at his side.But,even yet,he dared not think of the wild truth.

He said, "I am not afraid of anyone.I have ways of protecting myself. They don't imagine how much I

course, the hours he could spend with

Noÿs,and that cast a glow over everything else.

Item One:At the 482nd he slowly packed his personal effects;his clothing and films,most of all his

beloved and tenderly handled newsmagazine volumes out of the

Primitive. Anxiously he supervised their return

to his permanent station in the 575th.

Finge was at his elbow as the last of it was lifted into the freight kettle by Maintenance men.

Finge said, choosing his words with unerring triteness, "Leaving us, I see." His smile was broad, but his

lips were carefully held together so that only the barest trace of teeth showed. He kept his hands clasped behind

his back and his pudgy body teetered forward on the balls of his feet.

Harlan did not look at his superior.He muttered a monotoned "Yes,sir."

violence against me." And although his smile remained and his glance remained mild, there was a relish of cruel satisfaction about him.

Harlan looked up sharply and said, "As you wish, Computer."

Item Two:He re-established himself at the 575th.

He met Twissell almost at once.He found himself happy to see that

little body, topped by that lined and gnomelike face. He was even happy to see the white cylinder nestling smokily between two stained fingers and

being lifted rapidly toward Twissell 's lips.

Harlan said, "Computer."

Twissell, emerging from his office, looked for a moment unseeingly

and unrecognizingly at Harlan. His

face was haggard and his eyes squinted with weariness.

tace was naggard and his eyes squinted with weariness.

He said, "Ah, Technician Harlan. You are done with your work in the 482nd?"

"Yes,sir."

make sense of that remark.Now

make sense of that remark. Now he thought he did. Twissell was tired, or he would not have spoken so close to the core of things, perhaps. Or the Computer might have felt the remark to be so cryptic as to feel safe despite

its closeness to the core.

Harlan said, speaking as casually as he could to avoid letting it seem that his remark had any connection

at all with what Twissell had just said, "How's my Cub?"

words. He took a quick puff at the
shortening tube of tobacco indulated in a quick nod of dismissal a

"Fine, fine," said Twissell, , with only half his mind, apparently, on his

shortening tube of tobacco, indulged in a quick nod of dismissal, and hurried off.

Item Three:the Cub.

He seemed older. There seemed to be a greater feeling of maturity to him as he held out his hand and said, "Glad to see you back, Harlan."

creamy porcelain surfaces about him, glad to be out of the ornate splash of the 482nd. Try as he might to

associate the wild baroque of the 482nd with Noÿs,he only succeeded in associating it with Finge. With Noÿs

he associated a pink, satiny twilight and, strangely, the bare austerity of the Sections of the Hidden Centuries.

He spoke hastily, almost as though he were anxious to hide his dangerous thoughts. "Well, Cooper, what

have they been doing with you while I was away?"

Cooper laughed, brushed his drooping mustache self-consciously with one finger and said, "More math.

Always math."

"Yes?Pretty advanced stuff by now,I guess."

"Pretty advanced."

uavancec

"How's it coming?"

"So far it 's bearable.It comes pretty easy,you know.I like it.But now

they 're really loading it on."

City life in the 25rd. Los Angeles, especially.

"Why Los Angeles?"

"It 's an interesting city.Don 't you think so?"

"It is, but let's hit it in the 21st, then. It was at its peak in the 21st."

"Oh,let's try the 23rd."

Harlan said, "Well, why not?". His face was impassive, but if the impassiveness could have been peeled off, there would have been a

grimness about him. His grand, intuitional guess was more than a quess. Everything was checking neatly.

Item Four:research.Twofold research.

For himself, first. Each day, with ferreting eyes, he went through the reports on Twissell's desk. The

reports on Twissell's desk. The
reports concerned the various Reality Changes being scheduled or
suggested. Copies went to Twissell routinely

since he was a member of the Allwhen Council, and Harlan knew he would not miss one. He looked first for the coming Change in the 482nd. Secondly he looked for other Changes, any other Changes, that might have a flaw,

That was one part of his research. The other took place in the 575th Section branch of the library.

For the first time he ventured out of those portions of the library which,ordinarily,monopolized his

attention. In the past he had haunted the section on Primitive history (very poor indeed, so that most of his

references and source materials had to be derived from the far downwhen of the 3rd millennium, as was only

natural,of course). To an even greater extent he had ransacked the

theory,technique,and history;an excellent collection (best in Eter-

to Twissell)of which he had made himself full master.

Now he wandered curiously among the other film-racks. For the first time he Observed (in the capital-O

sense)the racks devoted to the 575th itself;its geographies,which varied little from Reality to Reality,its

shelves devoted to Reality Change, its

nity outside the Central branch itself, thanks

sonai Technician.

memories of tremendous arguments he

had heard of concerning the values of alternate Changes.Would this

masterpiece be altered or not? If so, how?

How did past Changes affect works of art?

For that matter, could there ever be general agreement about art? Could it ever be reduced to quantitative

terms amenable to mechanical evaluation by the Computing machines?

A Computer named August Sennor was Twissell 's chief opponent in these matters. Harlan, stirred by

Twissell's feverish denunciations of the man and his views,had read some of Sennor's papers and found them

startling.

Sennor asked publicly and, to Harlan, disconcertingly, whether a new

Reality might not contain a

personality within itself analogous to that of a man who had been withdrawn into Eternity in a previous Reality.

Changes.

But Twissell would have none of the last. "If the values of art can 't be computed," he would shout at

Harlan, "then what 's the use of arguing about it?". And Twissell 's views, Harlan knew, were shared by the large majority of the Allwhen Council.

Yet now Harlan stood at the shelves devoted to the novels of Eric Linkollew,usually described as the

outstanding writer of the 575th, and wondered. He counted fifteen different "Complete Works" collections,,

each,undoubtedly,taken out of a different Reality. Each was somewhat different, he was sure. One set was

noticeably smaller than all the others, for instance. A hundred Sociologists, he imagined, must have written

analyses of the differences between the sets in terms of the sociological background of each Reality, and earned status thereby. somewhere in Time nuclear technology

veered too close to the dangerous and had to be steered away.

He returned to the library proper and to the shelves on mathematics and mathematical histories. His

fingers skimmed across individual titles, and after some thought he took half a dozen from the shelves and $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{$

signed them out.

Item Five: Noÿs.

That was the really important part of the interlude, and all the idyllic part.

In his off-hours, when Cooper was gone, when he might ordinarily have been eating in solitude, reading

in solitude, sleeping in solitude, waiting in solitude for the next day-he took to the kettles.

With all his heart he was grateful for the Technician's position in society. He was thankful, as he had

never dreamed he could be, for the manner in which he was avoided.

"You 're smiling aren 't vou? That 's one of the ways Don 't

"You 're smiling, aren 't you? That 's one of the ways. Don 't you ever look in a mirror and see yourself

smiling?"

"I 'm afraid to.I 'd say:'I can 't be that happy.I 'm sick.I 'm delirious.I 'm confined in an asylum,living

in daydreams,and unaware of it."

Noÿs leaned close to pinch him. "Feel anything?"

He drew her head toward him,felt bathed in her soft,black hair.

When they separated, she said breathlessly, "You 've changed there, too. You 've become very good at

it."

"I 've got a good teacher," began Harlan,,and stopped abruptly,fearing that would imply displeasure at

the thought of the many who might have had the making of such a good teacher..But her laugh seemed untroubled by such a thought. They had eaten and she looked silky-smooth and

warmly soft in the clothing he had brought her.

"Why shouldn't you have your own clothes and doodads?"

"Because they 're not worth your going to my house in Time and being caught. And what if they make

the Change while you 're there?"

arrangements.

He evaded that uneasily. "It won 't catch me."

Then, brightening, Besides my wrist generator keeps me

in physiotime so that a Change can't affect me,you see."

No $\ddot{y}s$ sighed. "I don't see. I don't think I'll ever understand it all." "There 's nothing to it." And Harlan explained and explained with

great animation and Noÿs listened
with sparkling eyes that never quite revealed whether she was en-

of both.

It was a great addition to Harlan's life. There was someone to talk

to, someone with whom to discuss his life, his deeds, and thoughts. It was as though she were a portion of

himself,but a portion sufficiently separate

tirely interested, or amused, or, perhaps, a little

advance for instance that it would be the passionate interludes that he would later least often associate with the idyl? She snuggled into the crook of his arm and said, "How is your mathematics coming along?" Harlan said, "Want to look at a piece of it?"

"Don't tell me you carry it around with you?"

"Why not? The kettle trip takes time. No use wasting it, you know."

He disengaged himself, took a small viewer from his pocket, inserted

the film, and smiled fondly as she put it to her eyes.

She returned the viewer to him with a shake of her head. "I never saw so many squiggles. I wish I could

read your Standard Intertemporal."

"Actually," said Harlan,, "most of the squiggles you mention aren 't Intertemporal really, just

mathematical notation."

"You understand it, though, don't you?"

hand, and put it on a small end-table.. Noÿs 's eyes followed it hungrily and sudden insight flashed on Harlan.

He said, "Father Time!You can 't read Intertemporal, at that."

"No.Of course not."

"Then the Section library here is useless to you.I never thought of that.You ought to have your own

films from the 482nd."

She said quickly, "No.I don 't want any."

He said, "You 'll have them."

"Honestly,I don't want them.It's silly to risk----"

"You 'll have them!" he said..

For the last time he stood at the immaterial boundary separating Eternity from Noÿs's house in the

ternity from Noys's house in the

Change was nearly upon them now,a fact he

had not told Noÿs out of the decent respect he would have had for anyone 's feelings,let alone those of his love.

482nd. He had intended the time before to be the last time. The

weirdly attractive atmosphere about a doomed house.

He had felt it before, when entering it carefully during the period of grace allowed by the spatio-

temporal charts. He had felt it as he wandered through its rooms, collecting clothing, small *objets d'art*, strange containers, and instruments from Noÿs's vanity table.

There was the somber silence of a doomed Reality that was past merely the physical absence of noise.

There was no way for Harlan to predict its analogue in a new Reality. It might be a small suburban cottage or a

ity.It might be a small suburban cottage or a tenement in a city street.It might be zero with untamed scrubland replacing the parklike terrain on which it now

stood.It might,conceivably,be almost unchanged.And (Harlan touched on this thought gingerly)it might be

inhabited by the analogue of Noÿs or,of course,it might not.

the pantry, then, thankful that the technology of that Reality and

hess during his prowlings. He was in

Century had made servants unfashionable and

removed a problem. He had, he recalled, chosen among the cans of prepared foods, and was just deciding that

he had enough for one trip, and that Noÿs would be pleased indeed to intersperse the hearty but uncolorful basic

diet provided in the empty Section with some of her own dietary.He even laughed aloud to think that not long

before he had thought her diet decadent.

It was in the middle of the laugh that he heard a distinct clapping

noise.He froze!.The sound had come from somewhere behind him,and in the startled moment during which he had not

moved the lesser danger that it was a housebreaker occurred to him first and the greater danger of its being an investigating Eternal occurred second.

It couldn 't be a housebreaker. The entire period of the spatiotemporal chart, grace period and all, had

moving the last millimeter required to bring it flush with the wall.

He repressed the impulse to open that door, to search the

house. With Noys's delicacies in tow he

returned to Eternity and waited two full days for repercussions before venturing into the far upwhen. There were

none and eventually he forgot the incident.

ador benina nim naa just ciosea,

But now, as he adjusted the controls to enter Time this one last time, he thought of it again. Or perhaps it

was the thought of the Change, nearly upon him now, that preyed on him.Looking back on the moment later

on, he felt that it was one or the other that caused him to misadjust the controls. He could think of no other

excuse.

The misadjustment was not immediately apparent. It pin-pointed the proper room and Harlan stepped

directly into Noÿs's library.

prised. The title of one was Social and

Economic History of our Times.

Somehow it was a side of Noÿs to which he had given little thought. She was certainly not stupid and

yet it never occurred to him that she might be interested in weighty things. He had the impulse to scan a bit of

the Social and Economic History, but fought it down. He would find it in the Section library of the 482nd, if he

ever wanted it. Finge had undoubtedly rifled the libraries of this Reality for Eternity's records months earlier.

He put that film to one side, ran through the rest, selected the fiction and some of what seemed light

non-fiction. Those and two pocket viewers. He stowed them carefully into a knapsack.

It was at that point that, once more, he heard a sound in the house. There was no mistake this time. It

time, tweaked Finge 's nose one last time, brought the pitcher to the well one last time. It had to be then that he

Was it Finge who laughed?

was caught.

irony. He had entered time one last

Who else would track him down, lie in wait, stay a room away, and burst into mirth?

Well, then, was all lost? And because in that sickening moment he was sure all was lost it did not occur

to him to run again or to attempt flight into Eternity once more.He would face Finge.

He would kill him,if necessary.

Harlan stepped to the door from behind which the laugh had sounded, stepped to it with the soft, firm

step of the premeditated murderer.He flicked loose the automatic door signal and opened it by hand.Two

inches.Three.It moved without sound.

inch by inch.

profile had not yet come into view when

Harlan, holding back a sudden gust of terror with a last fragment of moral strength, flung himself back out the

Harlan never witnessed the completion of that turn. The other 's

door.Its mechanism,not Harlan,closed it soundlessly.

Harlan fell back blindly. He could breathe only by struggling violently with the atmosphere, fighting air

in and pushing it out, while his heart beat madly as though in an effort to escape his body.

him so much.It was the fear of nothing physical that had unmanned him.Rather it was an almost in-

Finge, Twissell, all the Council together could not have disconcerted

stinctive loathing for the nature of the accident that had befallen him.

He gathered the stack of book-films to himself in a formless lump

and managed,after two futile tries,to

That was fortunate, for he lacked any ability to smooth his face out of the death 's-head grimace he felt

he was wearing,or any power to put the blood back into it.But they didn 't look,and he thanked Time and

Eternity and whatever blind thing wove Destiny for that.

as they are so.

He had not truly recognized the other man in Noÿs's house by his appearance,yet he knew his identity

with a dreadful certainty.

The first time Harlan had heard a noise in the house he,Harlan,had

been laughing and the sound that
interrupted his laugh was of something weighty dropping in the next

room.The second time someone had

laughed in the next room and he,Harlan,had dropped a knapsack of book-films. The first time he,Harlan,had

turned and caught sight of a door closing. The second time he, Harlan, closed a door as a stranger turned. He had met himself!

days Thereafter. He cursed himself

for a coward, but that did not help.

Indeed from that moment matters took a downward trend. He could put his finger on the Great Divide.

The key moment was the instant in which he had adjusted the door controls for his entry into the 482nd for one

last time and somehow had adjusted it wrongly. Since then things went badly, badly.

The Reality Change in the 482nd went through during that period of despondency and accentuated it. In the past two weeks he had picked up three proposed Reality

Changes which contained minor flaws, and now he

chose among them, yet could do nothing to move himself to action.

He chose Reality Change 2456-2781,V-5 for a number of reasons.Of the three,it was farthest upwhen,

the most distant. The error was minute, but was significant in terms of human life. It needed, then, only a quick

The nature of Noys s analogue, what then?

Put Noÿs in her place as charwoman, seamstress, laborer, or whatever. Certainly. But what, then, was to be

done with the analogue herself? With any husband the analogue might have? Family? Children?

He had thought of none of this earlier. He had avoided the thought. "Sufficient unto the day ..."

But now he could think of nothing else.

So he lay skulking in his room, hating himself, when Twissell called him, his tired voice questioning and

a little puzzled.

"Harlan, are you ill? Cooper tells me you 've skipped several discussion periods."

Harlan tried to smooth the trouble out of his face. "No, Computer Twissell. I'm a little tired."

"Well, that 's forgivable, at any rate, boy." And then the smile on his face came about as close as it ever

The communiplate and hard upon

him.He grew uneasy and said, "Yes, Computer?"

"Nothing," said Twissell,,and perhaps it was the cloak of age weighing down upon his shoulders, but his

voice was unaccountably sad."I thought you were about to speak."

"No," said Harlan.." I had nothing to say."

"Well,then,I 'll see you tomorrow at opening in the Computing Room,boy.I have a great deal to say.". "Yes,sir," said Harlan..He stared

for long minutes at the plate after it went dark.

That had almost sounded like a threat. Finge had called Twissell, had he? What had he said that Twissell

did not report.

But an outside threat was what he needed.Battling a sickness of the spirit was like standing in a

quicksand and beating it with a stick. Battling Finge was another thing altogether. Harlan had remembered the

weapon at his disposal and for the first time in days felt a fraction of self-confidence return.

Confidence is rewarded, apparently. There was a homewhen proverb

that went: "Grip the nettle firmly

and it will become a stick with which to beat your enemy."

And more man he sought. Much more.

In short, Noÿs had no analogue in the new Reality. No analogue at all. She could take her position in the

new society in the most inconspicuous and convenient manner possible, or she could stay in Eternity. There

could be no reason to deny him liaison except for the highly theoretical fact that he had broken the law--and he

knew very well how to counter that argument.

So he went racing upwhen to tell Noÿs the great news, to bathe in undreamed-of success after a few days

And at this moment the kettle came to a halt.

horrible with apparent failure.

And at this moment the kettle came to a halt.

It did not slow; it simply halted. If the motion had been one along any of the three dimensions of space,

II WITH FUZZY VISION.II redd 100,000.

Somehow that frightened him. It was too round a number.

He turned feverishly to the controls. What had gone wrong?

That frightened him too, for he could see nothing wrong. Nothing had tripped the drive-lever. It

remained firmly geared into the upwhen drive. There was no short circuit. All the indicator dials were in the

black safety range. There was no power failure. The tiny needle that

megcoulombs of power calmly insisted that power was being consumed at the usual rate.

marked the steady consumption of meg-

What, then, had stopped the kettle?

elever, curled his hand about it. He pushed it to neutral, and the needle on the power gauge declined to zero.

Slowly, and with considerable reluctance, Harlan touched the driv-

He twisted the drive-lever back in the other direction. Up went the power gauge again, and this time the

nt dawnwhan again fanthan Ha nagnad unwhan Smaghl

He went downwhen again,farther.He roared upwhen.Smash!

His teeth were clenched, his lips drawn back, his breath rasping. He felt like a prisoner hurling himself

bloodily against the bars of a prison.

rate, to no purpose.

When he stopped, a dozen smashes later, the kettle rested firmly at 100,000. Thus far, and no farther.

He would change kettles!(But there was not much hope in that thought.)

In the empty silence of the 100,000th Century, Andrew Harlan stepped out of one kettle and chose

another kettle shaft at random.

A minute later, with the drive-lever in his hand, he stared at the marking of 100,000 and knew that here,

too,he could not pass.

He raged!Now!At this time!When things so unexpectedly had broken in his favor,to come to so

what more could they do to him, what more had he to fear,

He carried himself to the 575th and sprang from the kettle with a reckless disregard for his surroundings

that he had never felt before. He made his way to the Section library, speaking to no one, regarding no one. He

took what he wanted without glancing about to see if he were observed. What did he care?

Back to the kettle and downwhen again. He knew exactly what he would do. He looked at the large

clock as he passed, measuring off Standard Physiotime, numbering the days and marking off the three coequal

work shifts of the physioday. Finge would be at his private quarters now, and that was so much the better.

Harlan felt as though he were running a temperature when he arrived at the 482nd. His mouth was dry

and cottony. His chest hurt. But he felt the hard shape of the weapon under his shirt as he held it firmly against

waiting for it to change to fear. He

circled slowly,getting between Finge and the Communiplate.

Finge was partly undressed, bare to the waist. His chest was sparsely haired, his breasts puffy and almost

womanish. His tubby abdomen lapped over his waistband.

and closed it firmly on the grip of his weapon.

He looks undignified, thought Harlan with satisfaction, undignified and unsavory. So much the better. He put his right hand inside his shirt

Harlan said, "No one saw me, Finge, so don 't look toward the door. No one 's coming here. You 've got

to realize, Finge, that you 're dealing with a Technician. Do you know what that means?"

His voice was hollow. He felt angry that fear wasn't entering Finge's eyes, only concern. Finge even

reached for his shirt and, without a word, began to put it on.

Harlan went on, "Do you know the privilege of being a Technician, Finge? You've never been one, so

anyone passing turns out of my way and
will swear later on he saw no one.It 's that automatic.So you see,I

can do what I want to do,go where I want to go.I can walk into the private apartments of the Assistant Computer of a Section and force him to tell the truth

at weapon point and there 'll be no one to stop me."

Finge spoke for the first time. "What are you holding?"

"A weapon," said Harlan, and brought it out. "Do you recognize it?"

Its muzzle flared slightly and ended

in a smooth metallic bulge.

"If you kill me..." began Finge..
"I wan 't kill you" gold Harlan "At a recent meeting.

"I won 't kill you," said Harlan.."At a recent meeting you had a blaster.This is not a blaster.It is an

invention of one of the past Realities of the 575th.Perhaps you are not acquainted with it.It was bred out of

Reality. Too nasty. It can kill, but at low power it activates the pain centers of the nerve system and paralyzes as

100,000 m.1 wani ii removed.

"A block across the shafts?"

"Let 's not work away at being surprised. Yesterday you spoke to

Twissell.Today there is the block.I

want to know what you said to Twissell.I want to know what 's been done and what will be done.By Time,

Computer, if you don't tell me, I'll use the whip. Try me, if you doubt my word."

"Now listen "--Finge 's words slurred a bit and the first edge of fear made its appearance,and also a kind

of desperate anger--"if you want the truth,it 's this.We know about you and Noÿs."

Harlan's eyes flickered. "What about myself and Noÿs?"

Finge said, "Did you think you were getting away with anything?" The Computer kept his eyes fixed on

the neuronic whip and his forehead was beginning to glisten. By Time, with the emotion you showed after

"Yes.We knew you had brought her to the Hidden Centuries.We knew every time you entered the

At that moment marian despised his own stupidity. You knew?

482nd to supply her with appropriate luxuries; playing the fool, with your Eternal's Oath completely forgotten.". "Then why didn't you stop me?" Harlan was tasting the very dregs of his own humiliation..

"Do you still want the truth?" Finge flashed back, and seemed to gain courage in proportion as Harlan

sank into frustration.

"Go on."

from the start. A flashy Observer,

"Then let me tell you that I didn 't consider you a proper Eternal

perhaps,and a Technician who went through the motions.But no Eternal.When I brought you here on this last

job,it was to prove as much to Twissell,who values you for some obscure reason. I wasn't just testing the

society in the person of the girl,Noÿs.I was testing you,too,and you failed as I thought you would fail.Now

you the exact truth, that you could

keep Noÿs only in the thenpresent Reality. You chose to act, not as an

Eternal, but as a sniveler. I expected you

to."

"I would do it again now," said Harlan gruffly,,"and since it 's all known,you can see I have nothing to lose."He thrust his whip outward toward Finge 's plump waistline and

lose."He thrust his whip outward toward Finge 's plump waistline ar spoke through pale lips and clenched

"I have no idea."

"Don't tell me that.What has happened to Noÿs?"

"I tell you I don 't know."

Harlan's fist tightened on the whip; his voice was low. "Your leg first. This will hurt."

"For Time 's sake listen Wait!"

teeth. "What has happened to Noÿs?"

"All right.What has happened to her?"

way out that in finality and simplicity had no equal.

aiready happened death would offer a

know of them; we Computers. What 's

Finge obviously misunderstood the reasons for the smile. He said hurriedly, "Don't think there's no

death penalty in Eternity because you 've never come across one. We

more, executions have taken place, too. It is simple. In any Real-

ity, there are numbers of fatal accidents in which

bodies are not recovered. Rockets explode in mid-air, aeroliners sink

in mid-ocean or crash to powder in

mountains. A murderer can be put on one of those vessels minutes, or seconds, before the fatal results. Is this

worth that to you?"

Harlan stirred and said, "If you're stalling for rescue, it won 't work.Let me tell you this: I 'm not afraid

of punishment. Furthermore, I intend to have Noys. I want her now. She does not exist in the current Reality.

killing you.1 am no ordinary Technician.

"Because you are Twissell 's Technician?" and there was a strange

look on Finge's round, sweating face

that might have been hatred or triumph or part of each.

Harlan said, "For reasons much more important than that. And now ..."

With grim determination he touched finger to the weapon's activator.

Finge screamed, "Then go to the Council. The Allwhen Council; they know. If you are that important----

"He ended,,gasping.

For a moment Harlan's finger hovered irresolutely. "What?"

"Do you think I would take unilateral action in a case like this? I reported this whole incident to the $\frac{1}{2}$

Council, timing it with the Reality Change. Here! Here are the duplicates."

"Hold on, don 't move."

But Finge disregarded that order. With a speed as from the spur of a possessing fiend Finge was at his

Harlan listened, frozen. It was clear enough. Finge had reported in full. He had detailed every motion of

Harlan 's in the kettle shafts.He hadn 't missed one that Harlan could remember up to the point of making the

Finge shouted when the report was done, "Now, then, go to the Coun-

report.

cil.I 've put no block in Time.I

wouldn't know how.And don't think they're unconcerned about the matter.You said I spoke to Twissell

yesterday. You 're right. But I didn 't call him; he called me. So go; ask Twissell. Tell them what an important

Technician you are. And if you want to shoot me first; shoot and to Time with you."

Harlan could not miss the actual exultation in the Computer 's voice. At that moment he obviously felt

enough the victor to believe that even a neuronic whipping would leave him on the profit side of the ledger.

est kettle shaft.

It was the Council, then, or Twissell, at the very least. He was afraid of none of them, nor of all put together.

With each passing day of the last unbelievable month he had grown more convinced of his own

indispensability. The Council, even the Allwhen Council itself, would have no choice but to come to terms

when it was a choice of bartering one girl for the existence of all of

Eternity..11 Full Circle

It was with a dull surprise that Technician Andrew Harlan,on bursting into the 575th, found himself in

the night shift. The passing of the physiohours had gone unnoticed during his wild streaks along the kettle

shafts.He stared hollowly at the dimmed corridors,the occasional evidence of the thinned-out night force at work.

Tore I wisself s door (The name plate

his Technician.

upon it advertising the fact in clear, inlaid lettering).

Harlan activated the door signal brashly on the buzzer level.He shorted the contact with a damp palm

and let the sound become continuous. He could hear it dimly.

A step sounded lightly behind him and he ignored it in the sure knowledge that the man, who ever he

was, would ignore him. (Oh, rose-red Technician's patch!)

But the sound of steps halted and a voice said, "Technician Harlan?"

tion. Harlan raged inwardly. This

Harlan whirled. It was a Junior Computer, relatively new to the Sec-

was not quite the 482nd. Here he was not merely a Technician, he was Twissell's Technician, and the younger

Computers, in their anxiety to ingratiate themselves with the great

Twissell, would extend a minimum civility to

The Computer said, "Do you wish to see Senior Computer Twissell?"

III.

"Exactly when is he,then?" asked Harlan impatiently..

The Computer 's glance became a supercilious stare." I wouldn 't know."

Harlan said, "But I have an important appointment first thing in the morning."

"You have," said the Computer,,and Harlan was at a loss to account for his obvious amusement at the

The Computer went on, even smiling now, "You're a little early, aren't you?"

"But I must see him."

"I 'm sure he 'll be here in the morning." The smile broadened..

"But----"

thought.

The Computer passed by Harlan, carefully avoiding any contact, even of garments. Harlan 's fists clenched and unclenched. He stared help-lessly after the Computer and then, simply

They would not dare harm her,he thought feverishly. They could not send her back to Time without first

calculating the effect on Reality and that would take days, probably weeks. As an alternative, they might do to

her what Finge had threatened for him; place her in the path of an untraceable accident.

He did not take that into serious consideration. There was no necessity for drastic action such as that.

They would not risk Harlan's displeasure by doing it. (In the quiet of a darkened sleeping room, and in that phase of half sleep where things often grew queerly disproportion-

ate in thought, Harlan found nothing
grotesque in his sure opinion that the Allwhen Council would not dare

Of course, there were uses to which a woman in captivity might be put. A beautiful woman from a

hedonistic Reality.

risk a Technician's displeasure.)

rirsi of all, mere was noys.

man needs his sleep. Harian was sure of the answer. There were

Council consultations going on.About Harlan.

About Noÿs. About what to do with an indispensable Technician one dared not touch.

Harlan's lips drew back. If Finge reported Harlan's assault of that evening, it would not affect their

considerations in the least. His crimes could scarcely be worsened by

be lessened.

it. His indispensability would certainly not

And Harlan was by no means certain that Finge would report him. To admit having been forced to

cringe before a Technician would put an Assistant Computer in a ridiculous light,and Finge might not choose

to do so.

Harlan thought of Technicians as a group, which, of late, he had done rarely. His own somewhat

anomalous position as Twissell 's man and as half an Educator had kept him too far apart from other

superstition of others forced them?

In his mind he had already forced the capitulation of the Council as far as Noÿs was concerned, and now

he was making further demands. The Technicians were to be allowed an organization of their own, regular

meetings--more friendship--better treatment from the others.

His final thought of himself was as a heroic social revolutionary, with

Noÿs at his side,when he sank finally into a dreamless sleep...The door signal awoke him.It whis-

pered at him with hoarse impatience. He collected his thoughts to the point of being able to look at the small clock beside his bed and groaned inwardly.

Father Time! After all that he had overslept.

He managed to reach the proper button from bed and the viewsquare high on the door grew transparent.

He did not recognize the face, but it carried authority whoever it was.

"Well?"

"I am here to inform you that you are late."

Harlan stared at him. "What 's this all about? You 're not from the 575th, are you?"

"The 222nd is my station," said the other frigidly.."Assistant Administrator Arbut Lemm.I 'm in charge

of the arrangements and I $^{\prime}m$ trying to avoid undue excitement by

by-passing official notification over the Communiplate."

"What arrangements?What excitement?What 's it all about?Listen,I

've had conferences with Twissell

before. He 's my superior. There 's no excitement involved."

A look of surprise passed momentarily over the studious lack of expression the Administrator had so far

kept on his face. "You haven 't been informed?"

"About what?"

night outside Twissell's room. The

Computer knew of the projected committee meeting and it amused

him to think that a Technician could

possibly expect to see Twissell at a time like that. Very amusing, thought Harlan bitterly.

The Administrator said, "I have my orders. I know nothing more."

Then,,still surprised,"You've heard

nothing of this?"

"Technicians," said Harlan sarcastically,,"lead sheltered lives."

Five besides Twissell!Senior Computers all,none less than thirty five years an Eternal..Six weeks earlier Harlan would have been overwhelmed by the honor of sitting at lunch with such a group,tongue-tied by the combination of responsibility and power they represented.They would have seemed

twice life-size to him.

But now they were antagonists of his,worse still,judges.He had no time to be impressed.He had to

browbeaten and insulted by a Technician.

It seemed advisable, then, for Harlan to nurse this possible advantage for the time being, to let *them*

make the first move, say the first sentence that would join actual combat.

They seemed in no hurry. They stared at him placidly over an abstemious lunch as though he were an

interesting specimen spreadeagled against a plane of force by mild repulsors. In desperation Harlan stared back.

He knew all of them by reputation and by trimensional reproduction in the physiomonthly orientation

films. The films co-ordinated developments throughout the various

Sections of Eternity and were required viewing for all Eternals with rating from Observer up.

August Sennor, the bald one (not even eyebrows or eyelashes), of course attracted Harlan most. First.

because the odd appearance of those dark, staring eyes against bare eyelids and forehead was remarkably

Primitive times, young man?" "Do you find the study rewarding, young man?"

Finally,he seemed to settle himself in his seat.He pushed his plate casually onto the disposal chute and

clasped his thick fingers lightly before him. (There was no hair on the back of the hands, Harlan noticed.)

Sennor said, "There is something I have always wanted to know. Perhaps you can help me."

Harlan thought: All right, now, this is it.

Aloud he said, "If I can, sir."

you first come to be interested in

"Some of us here in Eternity--I won't say all, or even enough" ((and he cast a quick glance at Twissell's

tired face, while the others drew closer to listen) "but some, at any rate--are interested in the philosophy of

Time.Perhaps you know what I mean."

"The paradoxes of Time-travel,sir?"

travel. What were their views on the

matter?"

Twissell 's whisper carried the length of the table. "Cobwebs!"

But Sennor ignored that.He said, "Would you answer my question, Technician?"

Harlan said, "The Primitives gave virtually no thought to Timetravel, Computer.". "Did not consider it possible, eh?"

"I believe that 's right."

"Did not even speculate?"

"Well, as to that," said Harlan uncertainly,, "I believe there were speculations of sorts in some types of

escape literature. I am not well acquainted with these, but I believe a recurrent theme was that of the man who

returned in Time to kill his own grandfather as a child."

Sennor seemed delighted. "Wonderful! Wonderful! After all, that is at least an expression of the basic

there may have been speculations as to alternate paths of time or planes of existence. I don't know."

answer you with certainty, sir. I believe

Sennor thrust out a lower lip. "I 'm sure you 're wrong. You may have been misled by reading your own

knowledge into various ambiguities you may have come across.No, without actual experience of Time-travel,

the philosophic intricacies of Reality would be quite beyond the human mind. For instance, why does Reality

possess inertia? We all know that it does. Any alteration in its flow must reach a certain magnitude before a

Change, a true Change, is effected. Even then, Reality has a tendency to flow back to its original position.

"For instance, suppose a Change here in the 575th. Reality will change with increasing effects to

perhaps the 600th.It will change, but with continually lesser effects to perhaps the 650th.Thereafter,Reality

rives at his own choice.

"Consider how helpless the Primitives must be. They worry about a man killing his own grandfather

because they do not understand the truth about Reality. Take a more likely and a more easily analyzed case and

let's consider the man who in his travels through time meets himself----"

Harlan said sharply, "What about a man who meets himself?"

The fact that Harlan interrupted a Computer was a breach of manners in itself. His tone of voice

worsened the breach to a scandalous extent, and all eyes turned reproachfully on the Technician.

Sennor harumphed, but spoke in the strained tone of one determined to be polite despite nearly

insuperable difficulties. He said, continuing his broken sentence and thus avoiding the appearance of answering

"Or B, the later individual, may see A while A does not see

of b, me later marriadar, may see h while h aces not see

be expected. B, seeing A, sees him in a position and engaged in activity of which he already has knowledge.

Nothing new is involved.

aismiss mis case as mivial.

B.Here, too, no serious consequences need

"The third and fourth possibilities are that A sees B, while B does not see A and that A and B see one

another. In each possibility, the serious point is that A has seen B; the man at an earlier stage in his. physiological existence sees himself at a later stage. Observe that he has learned he will be alive at the

age of B.He knows he will live long enough to perform the action he

has witnessed. Now a man in knowing his

own future in even the slightest detail can act on that knowledge

and therefore changes his future. It follows that

Reality must be changed to the extent of not allowing \boldsymbol{A} and \boldsymbol{B} to meet or,at the very least,of preventing \boldsymbol{A}

sell rose to his feet.

Twissell said, "I believe, gentlemen, that time presses."

Far more suddenly than Harlan would have thought the lunch was over. Five of the subcommittee

members filed out, nodding at him, with the air of those whose curiosity, mild at best, had been assuaged. Only

Sennor held out a hand and added a gruff "Good day, young man" to the nod..

With mixed feelings Harlan watched them go.What had been the purpose of the luncheon?Most of all,

why the reference to men meeting themselves? They had made no mention of Noÿs. Were they there, then, only

to study him? Survey him from top to bottom and leave him to Twissell 's judging?

Twissell returned to the table, empty now of food and cutlery. He was alone with Harlan now, and

faded eyes, and he tamped at the

ash end of his cigarette thoughtfully.

He said, "By all means, speak if you wish, but first, sit down, sit down, boy."

Technician Andrew Harlan did not sit down.He strode up and back the length of the table,biting off his

sentences hard to keep them from boiling and bubbling into incoherence. Senior Computer Laban Twissell's

age-yellowed pippin of a head turned back and forth as he followed the other 's nervous stride.

Harlan said, "For weeks now I 've been going through films on the history of mathematics. Books from

several Realities of the 575th. The Realities don 't matter much. Mathematics doesn't change. The order of its

development doesn 't change either.No matter how else the Realities shifted,mathematical history stayed about

ringers that held his cigarette played

with it with unwonted nervousness.

Jan Verdeer in the 27th Century."

Harlan said, "There was a man named Vikkor Mallansohn who lived in the 24th Century. That was part

of the Primitive era, you know. The thing he is known best for is the fact that he first successfully built a

Temporal Field. That means, of course, that he invented Eternity, since Eternity is only one tremendous

Temporal Field shortcircuiting ordinary Time and free of the limitations of ordinary Time."

"You were taught this as a Cub,boy."."But I was not taught that Vikkor Mallansohn could not possibly have invented the Temporal Field in the 24th Century.Nor could anyone have.The mathematical basis for

it didn't exist. The fundamental Lefebvre equations did not exist; nor could they exist until the researches of

If there was one sign by which Senior Computer Twissell could indicate complete astonishment, it was

ously. "What if Mallansohn had stumbled on

the Temporal Field without being aware of the mathematical justification? What if it were simply an empirical

discovery? There have been many such."

"I 've thought of that. But after the Field was invented, it took three centuries to work out its implications

and at the end of that time there was no one way in which Mallansohn's Field could be improved on. That could

not be coincidence. In a hundred ways, Mallansohn 's design showed that he must have used the Lefebvre

equations. If he knew them or bad developed them without Verdeer 's work, which is impossible, why didn 't he say so?"

Twissell said, "You insist on talking like a mathematician. Who told you all this?"

"I 've been viewing films."

"No more?"

Mahansonn could never have accomplished this without a knowledge

of mathematics that existed only in his

future. That 's number one. Meanwhile, here in Eternity at this moment, there is a Cub who was selected as an

Eternal against all the rules, since he was overage and married, to boot. You are educating him in mathematics

and in Primitive sociology. That 's number two."

"Well?"

"I say that it is your intention to send him back into Time somehow,back past the downwhen terminus

of Eternity, back to the 24th. It is your intention to have the

 $\hbox{\it Cub, Cooper, teach the Lefebvre equations to}$

 $\label{thm:main} \textbf{Mallansohn.You} \ see, then, \textit{``Harlan} \ added \ with \ tense \ passion,, \textit{``that} \ my$ own position as expert in the Primitive

and my knowledge of that position entitles me to special treatment. Very special treatment. $^{\prime\prime}$

"Father Time!" muttered Twissell..

could not tell why he was so certain of

the essentials of what he said, even quite apart from the fact that he so desperately wanted it to be so.. Twissell said, "No, no, not the exact truth. The Cub, Cooper, is not going back to the 24th to teach

Mallansohn anything."

"I don't believe you."

"But you must. You must see the importance of this. I want your cooperation through what is left of the

project. You see, Harlan, the situation is more full circle than you imagine. Much more so, boy. Cub Brinsley

Sheridan Cooper is Vikkor Mallansohn!".12 The Beginning of Eternity

Harlan would not have thought that Twissell could have said anything at that moment that could have surprised him. He was wrong.

surprised him. He was wrong

He said, "Mallansohn.He--"

gnomish face broke into a wrinkled

extension of his usual smile. "But come, boy, physiotime passes even for us and we are not completely masters

of ourselves this day.Won't you come with me to my office?"

He led the way and Harlan followed, not entirely aware of the opening doors and the moving ramps.

He was relating the new information to his own problem and plan of action. With the passing of the first

moment of disorientation his resolution returned. After all, how did this change things except to make his own

importance to Eternity still more crucial, his value higher, his demands more sure to be met, Noÿs more certain

to be bartered back to him.

to be bartered back to hir

Noÿs!

Father Time, they must not harm her! She seemed the only real part of his life. All Eternity beside was

only a filmy fantasy, and not a worth-while one, either.

Twissell 's office was a clean,long room of porcelain asepsis. One wall of the office was crowded from

floor to ceiling and wall to distant wall with the computing microunits which, together, made up the largest

privately operated Computaplex in Eternity and,indeed,one of the largest altogether. The opposite wall was

crammed with reference films.Between the two what was left of the room was scarcely more than a corridor,

an unusual object the like of which

broken by a desk, two chairs, recording and projecting equipment, and

Harlan was not familiar with and which did not reveal its use until Twissell flicked the remnants of a cigarette

It flashed noiselessly and Twissell,in his usual prestidigitational fashion,held another in his hands.

Harlan thought: To the point, now.

into it.

troubled you, it need trouble you no more."

Harlan stared at the old man, stupefied. Was this all? Though he had thought intently of the immensity

of his power,he had not expected so clear a demonstration.

But Twissell was talking again.
"Let me tell you a story" he began with almost the tone he would

"Let me tell you a story," he began, with almost the tone he would have used in addressing a newly

inducted Cub. "I had not thought this would be necessary, and perhaps it still isn't, but your own researches and

insight deserve it."

He stared at Harlan quizzically and said, "You know, I still can 't quite believe that you worked this out

on your own," then went on::

ord of his life behind him after he
died.It was not quite a diary,not quite a biography.It was more of a
guide,bequeathed to the Eternals he knew

"The man most of Eternity knows as Vikkor Mallansohn left the rec-

been passed along in strictest security since, along a line of Senior

Computers ending with myself. It is referred

to as the Mallansohn memoir.

"The memoir tells the story of a man named Brinsley Sheridan Cooper, born in the 78th, inducted as a

Cub into Eternity at the age of twenty-three, having been married for a little over a year, but having been, as yet, childless.

"Having entered Eternity,Cooper was trained in mathematics by a

Computer named Laban Twissell and
in Primitive sociology by a Technician named Andrew Harlan. After a

thorough grounding in both disciplines, and in such matters as temporal engineering as well,he was sent

back to the 24th to teach certain necessary

techniques to a Primitive scientist named Vikkor Mallansohn.

"Once having reached the 24th,he embarked first on a slow process of adjusting himself to the society.

daring and unconventional mind. Cooper

made friends slowly,acclimated the man to the thought of having met a traveler from the future still more

slowly, and set about teaching the man the mathematics he must know.

"With the passage of time, Cooper adopted the other 's habits, learned to shift for himself with the help of a clumsy Diesel-oil electric generator and with wired electrical appliances which freed them of dependence on power beams.

"But progress was slow and Cooper found himself something less

than a marvelous teacher. Mallansohn
grew morose and unco-operative and then one day died, quite suddenly, in a fall down a canyon of the wild,

mountainous country in which they lived. Cooper, after weeks of despair, with the ruin of his lifework and,

denerator, to the callfornia fustitute of technology last as years before he had expected the real Mallansohn to

do.. "You know the story from your own studies. You know of the disbelief and rebuffs he first met, his

period under observation, his escape and the near-loss of his generator, the help he received from the man at the

lunch counter whose name he never learned but who is now one of

demonstration for Professor Zimbalist, in which a white mouse moved backward and forward in time. I won 't

bore you with any of that.

Eternity's heroes, and of the final

"Cooper used the name of Vikkor Mallansohn in all this because it gave him a background and made

him an authentic product of the 24th. The body of the real Mallansohn was never recovered.

"In the remainder of his life, he cherished his generator and cooperated with the Institute scientists in

could perform so brilliantly and yet

was unable to explain the whys of his performance. And he himself was frustrated too, because he foresaw,

without in any way being able to quicken, the work that would lead, step by step, to the classic experiments of

Jan Verdeer, and how from that the great Antoine Lefebvre would construct the basic equations of Reality. And

how,after that,Eternity would be constructed.

"It was only toward the end of his long life that Cooper,staring into a Pacific sunset (he describes the

scene in some detail in his memoir)came to the great realization that he was Vikkor Mallansohn;he was not a

substitute but the man himself. The name might not be his, but the man history called Mallansohn was really

Brinsley Sheridan Cooper.

"Fired with that thought, and with all that implied, anxious that the process of establishing Eternity be

changes At this moment in physiciane the Cooper you know is un-

changes.At this moment in physiotime, the Cooper you know is unaware of what lies ahead of him. He believes

he is only to instruct Mallansohn and to return. He will continue to believe so until the years teach him

differently and he sits down to write his memoir.

"The intention of the circle in Time is to establish the knowledge of

Time-travel and of the nature of

Reality, to build Eternity, ahead of its natural Time. Left to itself, mankind would not have learned the truth

about Time before their technological advances in other directions had made racial suicide inevitable."

Harlan listened intently,caught up in the vision of a mighty circle in Time,closed upon itself,and

traversing Eternity in part of its course. He came as close to forgetting Noÿs, for the moment, as he ever could.

He asked, "Then you knew all along everything you were to do, everything I was to do, everything I

moment when he wrote his memoir. He could remember only so much, and only what he himself had

Tween cooper's stay in Elernity and the

witnessed. You should realize that."

Twissell sighed and he drew a gnarled finger through a line of updrafting smoke, breaking it into little turbulent swirls. "It worked itself out. First, I was found and brought

to Eternity. When, in the fullness of physiotime, I became a Senior Computer, I was given the memoir and placed in charge. I had been described as

in charge, so I was placed in charge. Again in the fullness of

physiotime, you appeared in the changing of a

Reality (we had watched your earlier analogues carefully), and then

Cooper.

"I filled in the details by using my common sense and the services of the Computaplex. How carefully,

for instance,we instructed Educator Yarrow in his part while betraying none of the significant truth. How

cause. For functery, I am not the codwed

during which his mathematical studies

spinner Sennor is.

"I was pleased, boy, to find you so excellent an Observer and Technician. The memoir had not

mentioned that since Cooper had no opportunity to observe your

work or evaluate it. This suited me. I could use

you in a more ordinary task that would make your essential one less noticeable. Even your recent stay with

Computer Finge fitted in.Cooper mentioned a period of your absence

were so sharpened that he longed for your return. Once, though, you frightened me."

Harlan said,at once, "You mean the time I took Cooper along the kettle ways."

"How do you come to guess that?" demanded Twissell..

"It was the one time you were really angry with me.I suppose now it went against something in the

Mallansohn memoir."

tinued as they should, so all is well."

The old Computer rubbed one hand slowly over the other, staring at the young Technician with a look compounded of surprise and curiosity. "And all along you 've been

guessing this.It simply astonishes me.I

would have sworn that even a fully trained Computer could not have made the proper deductions, given only

the information you had. For a Technician to do it is uncanny." He leaned forward, tapped Harlan's knee

lightly. The Mallansohn memoir says nothing about your life after Cooper's leaving, of course."

"I understand,sir," said Harlan..

"We will be free then,in a manner of speaking, to do as we please with it. You show a surprising talent

that must not be wasted. I think you are meant for something more than a Technician. I promise nothing now,

freak of insight in the course of a very unusual and stimulating

directed library research. They had become certainties now that

Twissell had told him the story. Yet in one way

at least there had been a deviation.Cooper was Mallansohn.

night, had become reasonable as the result of

That had simply improved his position, but, wrong in one respect, he might be wrong in another. He

must leave nothing to chance, then. Have it out! Make certain!. He said levelly, almost casually, "The responsibility is great for me, also, now that

"How fragile is the situation? Suppose something unexpected were

I know the truth."

"Yes,indeed?"

to happen and I were to miss a day

when I ought to have been teaching Cooper something vital."

"I don't understand you."

(Was it Harlan's imagination, or had a spark of alarm sprung to life in those old, tired eyes?)

"It seems a logical thought. It seems to me that by a careless or willful action, I could break the circle,

and well,what?Destroy Eternity?It seems so.If it is so," Harlan added composedly,, "I ought to be told so that

I may be careful to do nothing unfitting. Though I imagine it would take a rather unusual circumstance to drive

me to such a thing."

Twissell laughed, but the laughter rang false and empty in Harlan's

ear. "This is all purely academic, my

boy. Nothing of this will happen since it hasn't happened. The full circle will not break."

"It might," said Harlan.."The girl of the 482nd----"

But what puts all this in your mina?

"Is safe," said Twissell..He rose impatiently. "There 's no end to this kind of talk and I have quite enough

of logic-chopping from the rest of the subcommittee in charge of the project. Meanwhile, I have yet to tell you

concerning the memoir.

Harlan had known enough to do this yesterday. Twissell had thought to overwhelm him with the

knowledge of the importance of his task, but if the Computer had thought to force Harlan into line in that way,

he was mistaken.

Harlan rose and followed Twissell.

Harlan had made his threat very clear with respect to Noÿs 's safety,and Twissell 's expression as he had

barked, "Is safe," showed he realized the nature of the threat..

Harlan had never been in the room they now entered.It was large

and looked as though walls had been

knocked down for its sake. It had been entered through a narrow corridor which had been blocked off by a

force-screen that did not go down until after a pause sufficient for Twissell's face to be scanned thoroughly by

automatic machinery.

nim.11 was Sennor of the Allwhen Council

and behind him was another of the group at the breakfast table.

Twissell did not look pleased at this. His voice, however, was restrained. "Is the subcommittee still

here?"

"Only we two," said Sennor casually,,"Rice and myself. A beautiful instrument we have here. It has the

level of complexity of a spaceship."

Rice was a paunchy man with the perplexed look of one who is accustomed to being right yet finds

himself unaccountably on the losing side of an argument. He rubbed his bulbous nose and said, "Sennor's mind

is running on space-travel lately."

Sennor 's bald head glistened in the light."It 's a neat point, Twissell," he said.. "I put it to you. Is space-

travel a positive factor or a negative factor in the calculus of Reality?"

is a negative factor. My view
entirely."

"If you please," said Twissell,, "Cooper will be here soon. We will need
the floor clear."

"By all means." Sennor hooked an arm under that of Rice and led him away..His voice declaimed

clearly as they departed. "Periodically, my dear Rice, all the mental effort of mankind is concentrated on space-

travel, which is doomed to a frustrated end by the nature of things. I would set up the matrices except that I am certain this is obvious to you. With minds concentrated on

space, there is neglect of the proper development of things earthly. I am preparing a thesis now for submission to the

Council recommending that Realities be changed to eliminate all space-travel eras as a matter of course."

Rice's treble sounded."But you can't be that drastic.Space-travel is a valuable safety-valve in some

"I doubt it.We 'd have a better chance of judging if Sennor would

mean.

actually submit the thesis he

mentioned. But he won 't. He 'll have a new enthusiasm before he 's finished and drop the old. But never mind---

-" He brought the flat of his hand against the sphere so that it rang resoundingly, then brought his hand back so

that he could remove a cigarette from his lip.He said, "Can you guess what this is, Technician?"

"Harlan said,"It looks like an outsize kettle with a top."

"Exactly. You're right. You've got it. Come on inside."

four or five men, but the interior

was absolutely featureless. The floor was smooth, the curved wall
was broken by two windows. That was all.

Harlan followed Twissell into the sphere. It was large enough to hold

"No controls?" asked Harlan..."Remote controls," said Twissell..He ran his hand over the smoothness of the wall and said, "Double

stepped in and stared somberly at

Twissell said,"Can you hear me,boy?"

immense bus bars.

me outside?"

Harlan started and looked about.He had not been aware that Twissell had not followed him inside.He

stepped automatically to the window and Twissell waved to

him.Harlan said, "I can hear you,sir.Do you want

"Not at all.You are locked in."

Harlan sprang to the door and his stomach turned into a series of

cold, wet knots. Twissell was correct

and what in Time was going on?

Twissell said, "You will be relieved to know, boy, that your responsi-

bility is over. You were worried about that responsibility; you asked searching questions about it; and I think I know what you meant. This

feel that that, too, is too great a responsibility, you may re-

lax.Another contact in parallel with yours is in charge of another man.If,for any reason,you are unable to operate the contact,he will do so.Furthermore,I will cut

off radio transmission from within the control room. You will be able to hear us but not to speak to us. You

need not fear, therefore, that some involuntary exclamation from you will break the circle."

Harlan stared helplessly out the window.

Twissell went on, "Cooper will be here in moments and his trip to the

Primitive will take place within

two physiohours. After that, boy, the project will be over and you and I will be free."

Harlan was plunging chokingly through the vortex of a waking night-mare. Had Twissell tricked him?

Had everything he had done been designed only to get Harlan quietly into a locked control room? Having

How could he have believed that!If they were not going to harm her,or touch her,why the temporal

barrier across the kettleways at the 100,000th? That alone should have given Twissell completely away.

But because he (fool!)wanted to believe,he allowed himself to be led through those last physiohours

blindly, placed inside a locked room where he was no longer needed, even to close the final contact.

In one stroke he had been robbed of his essentiality. The trumps in his hand had been neatly maneuvered

into deuces and Noÿs was out of his reach forever. What punishment might lie in wait for him did not concern

him. Noÿs was out of his reach forever..It had never occurred to him that the project would be so close to its end. That, of course, was what had

really made his defeat possible.

naa sala. Ali wili de well.

Twissell 's voice sounded dimly." You 'll be cut off now, boy."

room's radio.He inought billery.

A Mallansohn mustache!Of course!)

Cooper strode toward Twissell. "They wouldn't let me in till now, Computer."

"Very right," said Twissell.. "They had their instructions."

"Now 's the time, though? I 'll beheading out?"

"Almost the time."

"And I 'll be coming back? I 'll be seeing Eternity again?" Despite the straightness Cooper gave his back,

there was an edge of uncertainty in his voice.

(Within the control room Harlan brought his clenched hands bitterly

to the reinforced glass of the

window,longing to break through somehow,to shout:"Stop it!Meet my

terms,or I 'll--" What was the use??)

Cooper looked about the room, apparently unaware that Twissell had refrained from answering his question. His glance fell on Harlan at the control-room window.

Cooper said, "Great Time, yes! I 've known about it for weeks now and

I'm not used to it yet." There

anyone hervous.

was a trace of near-hysteria in his laugh." I still haven 't got it through my thick head that it is really my show. I-

-I 'm a little scared."

"I scarcely blame you for that."

"It 's my stomach, mostly, you know. It 's the least happy part of me."

Twissell said, "Well, it's very natural and it will pass. Meanwhile, your time of departure on Standard

Intertemporal has been set and there is still a certain amount of orientation to be gone through. For instance, you

haven 't actually seen the kettle you will use."

In the two hours that passed Harlan heard it all, whether they were in sight or not. Twissell lectured

Cooper in an oddly stilted manner, and Harlan knew the reason. Cooper was being informed of just those things

that he was to mention in Mallansohn's memoir

Tury y within Elernity there is a fully powered

initial point and a fully powered final point.

"What we have here is a kettle with a powered initial point but an unpowered destination point. It can

only be pushed, not pulled. For that reason, it must utilize energies at

a level whole orders of magnitude higher

than those used by ordinary kettles. Special power-transfer units

have had to be laid down along the kettleways to siphon in sufficient concentrations of energy from Nova Sol.

"This special kettle, its controls and power supply, are a composite

structure. For physiodecades, the

passing Realities have been combed for special alloys and special techniques. The 13th Reality of the 222nd

was the key. It developed the Temporal Pressor and without that this kettle could not have been built. The 13th

Reality of the 222nd."

He pronounced that with elaborate distinctness.

rerminus, of course, but it has taken

numerous trips within Eternity. We are convinced there will be no bad effects."

"There can 't be, can there?" said Cooper.."I mean I did get there or Mallansohn could not have

succeeded in building the field and he did succeed."

Twissell said, "Exactly. You will find yourself in a protected and isolated spot in the sparsely populated

southwestern area of the United States of Amellika-----"

"America," corrected Cooper..

"America, then. The Century will be the 24th; or, to put it to nearest

hundredth,the 23.17th.I suppose

we can even call it the year 2317,if we wish.The kettle,as you saw,is

we can even call it the year 2317, if we wish. The kettle, as you saw large, much larger than necessary for

you.It is being filled now with food,water,and the means of shelter and defense.You will have detailed

instructions that will, of course, be meaningless to anyone but you. I must impress upon you now that your first

fore, but repeat what must go into
the memoir. Round and round ...)

Twissell said, "You will have to unload in fifteen minutes. After that, the kettle will return automatically

to starting point, carrying with it all tools that are too advanced for the Century. You will have a list of those.

After the kettle returns, you will be on your own."

Cooper said, "Must the kettle return so quickly?"

Twissell said, "A quick return increases the probabilities of success."

(Harlan thought: The kettle *must* return in fifteen minutes because

it *did* return in fifteen minutes.Round and ...)

Twissell hurried on. "We cannot attempt to counterfeit their medium of exchange of any of their negotiable scrip. You will have gold in the form of small nuggets. You

will be able to explain its possession.according to your detailed instruc-

enough. You will have a wireless receiver

built on the principles of the z4th which will enable you to come abreast of the current events and, more

important,learn the proper pronunciation and intonation of the language of the times. Do that thoroughly. I'm

sure that Harlan's knowledge of English is excellent, but nothing can substitute for native pronunciation on the

substitute for native pronunciation on the spot."

Cooper said, "What if I don't end up in the right spot? I mean, not in the 23.17?"

"Check on that very carefully, of course. But it will be right. It will be right."

(Harlan thought:It will be right because it was right.Round ...)

Cooper must have looked unconvinced, though, for Twissell said, "The accuracy of focus was carefully worked out. I intended to explain our methods and now is a good

time. For one thing, it will help Harlan

Twissell said, "Obviously a serious problem was that of determining how far into the Primitive an object

nis mina marian stili listenea.

is sent after the application of a given energy thrust. The most direct method would have been to send a man

into the downwhen via this kettle using carefully graduated thrust levels. To do that, however, would have

meant a certain lapse of time in each case while the man determined the Century to its nearest hundredth

through astronomical observation or by obtaining appropriate information over the wireless. That would be

slow and also dangerous since the man might well be discovered by the native inhabitants with probably catastrophic effects on our project.

"What we did then instead was this: We sent back a known mass of the radioactive isotope, niobium-94,

which decays by beta-particle emission to the stable isotope, molybdenum-94. The process has a halflife of

discharged into the mountainside and the kettle then returns to Eternity. At the moment in physiotime that the

ampule is discharged, it simultaneously appears at all future Times growing progressively older. At the place of discharge in the 575th (in actual Time and not in Eternity) a Techni-

cian detects the ampule by its radiation and

retrieves it.

"The radiation intensity is measured, the time it has remained in the mountainside is then known, the

Century to which the kettle traveled is also known to two decimal places. Dozens of ampules were thus sent. back at various thrust levels and a calibration curve set up. The curve was a check against ampules sent not all

the way into the Primitive but into the early Centuries of Eternity where direct observations could also be made.

"Naturally, there were failures. The first few ampules were lost until we learned to allow for the not too

detect and wonder what radioactive artifacts

might be doing in the region. But we had enough for our purposes and we are certain we can send back a man to

any hundredth of a Century of the Primitive that is desired.

"You follow all this,Cooper,don 't you?"

Cooper said, "Perfectly, Computer Twissell. I have seen the calibration curve without understanding the

purpose at the time.It is quite clear now."

But Harlan was exceedingly interested now. He stared at the measured arc marked off in centuries. The

shining arc was porcelain on metal and the fine lines divided it into Centuries, Decicenturies and Centicenturies.

Silvery metal gleamed thinly through the porcelain penetrating lines, marking them clearly. The figures were as

lines, marking them clearly. The figures were as
finely done and, bending close, Harlan could make out the Centuries
from 17 to 27. The hairline was fixed at
the 23.17th Century mark.

nodded.

Twissell said,almost as though chiming in with Harlan 's thoughts,"The time-gauge is set for a thrust

back to the 23.17th. That requires no adjustment. Your only task is to pour energy through at the proper moment

in physiotime. There is a chronometer to the right of the gauge. Nod if you see it."

Harlan nodded.

"It will reach zero-point backward. At the minus-fifteen-second point, align the contact points. It's

simple. You see how?"

Harlan nodded again.

Twissell went on, "Synchronization is not vital. You can do it at minus fourteen or thirteen or even

minus five seconds, but please make every effort to stay this side of minus ten for safety 's sake. Once you 've

Twissell said, "We have thirty physiominutes left. Cooper and I will leave to check on the supplies.". They left. The door closed behind

(already moving slowly backward toward zero)--and a resolute knowledge of what must be done.

them, and Harlan was left alone with the thrust control, the time

Harlan turned away from the window.He put his hand inside his pocket and half withdrew the neuronic

whip it still contained. Through all this he had kept the whip. His hand shook a little.

An earlier thought recurred:a Samson-smash of the temple!

A corner of his mind wondered sickly: How many Eternals have ever heard of Samson? How many

know how he died?

was not really certain it would work at all.

At minus one minute Harlan was standing at the controls. Detachedly he thought: The last minute of life? Nothing in the room was visible to him but the backward sweep of the red hairline that marked the passing seconds. Minus thirty seconds. He thought: It will not hurt. It is not death. He tried to think only of Noÿs. Minus fifteen seconds. Noÿs! Harlan's left hand moved a switch down toward contact. Not hastily! Minus twelve seconds. Contact! The force-gear would take over now. Thrust would come at zero time. And that left Harlan one last manipulation. The Samson-smash! His right hand moved. He did not look at his right hand.

Doinerea him noi ai aii.

The room was empty. Where the giant, enclosed kettle had been was

nothing. Metal blocks that had

served as its base sat emptily, lifting their huge strength against air.

Twissell,strangely small and dwarfed in the room that had become a waiting cavern, was the only thing

that moved as he tramped edgily this way and that.

Harlan's eyes followed him for a moment and then left him.

Then, without any sound or stir, the kettle was back in the spot it had left. Its passage across the hairline

from time past to time present did not as much as disturb a molecule of air.

Twissell was hidden from Harlan's eyes by the bulk of the kettle, but then he rounded it, came into view.

He was running.

A flick of his hand was enough to activate the mechanism that opened the door of the control room. He

no longer had the ability or the strength to

no longer had the ability or the strength to

filter the important from the inconsequential, but were selecting observational material in a purely random

manner.

Wearily he thought: What does it matter? What does anything matter now?

Twissell said (Harlan heard him dimly),"I 'll tell you now that I 've been more anxious than I cared to

admit. Sennor used to say once that this whole thing was impossible. He insisted something must happen to stop

it----What 's the matter?"

He had turned at Harlan's odd grunt.

Harlan shook his head, managed a choked "Nothing."

spoke to Harlan or to the air.It was
as though he were allowing years of pent-up anxieties to escape in
words

Twissell left it at that and turned away. It was doubtful whether he

"We knew our own future, Sennor said. I, Twissell, knew, for instance, that I would survive, despite the

fact that I would be quite old,until Cooper made his trip past the downwhen terminus. I knew other details of

my future, the things I would do.. "Impossible, he would say. Reality must change to correct your knowledge, even if it meant the circle

"Why he argued so,I don 't know.Perhaps he honestly believed it,perhaps it was an intellectual game

would never close and Eternity never established.

with him, perhaps it was just the desire to shock the rest of us with an unpopular viewpoint. In any case, the

project proceeded and some of the memoir began to be fulfilled. We located Cooper, for instance, in the

Century and Reality that the memoir gave us. Sennor 's case was exploded by that alone, but it didn't bother

nis tavorite.

him.By that time,he had grown interested in something else.

Sennor caned a paradox.11 would have to change to one in which

Eternity would not exist. Sometimes, in the

dark of a sleeping period, when I couldn't sleep, I could almost per-

suade myself that that was indeed so.--and

now it 's all over and I laugh at myself as a senile fool."

Harlan said in a low voice, "Computer Sennor was right."

Twissell whirled. "What?"

"The project failed." Harlan 's mind was coming out of the shadows

(why,and into what,he was not

sure)."The circle is not complete."

"What are you talking about?" Twissell 's old hands fell on Harlan 's shoulders with surprising strength.

"You 're ill,boy.The strain."

"Not ill. Sick of everything. You. Me. Not ill. The gauge. See for your-self."

"The gauge?" The hairline on the gauge stood at the 27th Century,,hard against the right-hand extreme.

There 's what 's left of it." He kicked at a small heap of metal frag-

Source in one flash, like a forch.

ments in one corner..

Twissell wasn't taking it in. "In the 27th? You mean Cooper's in the 27th----"

"I don't know where he is," said Harlan dully.."I shifted the thrust control downwhen, further down than

the z4th.I don't know where.I didn't look.Then I brought it back.I still didn't look."

Twissell stared at him, his face a pale, unhealthy yellowish color, his lower lip trembling.

"I don 't know where he is now," said Harlan.."He 's lost in the Primi-

tive.The circle is broken.I thought
everything would end when I made the stroke.At zero time.That 's
silly.We 've got to wait.There 'll be a

moment in physiotime when Cooper will realize he 's in the wrong Century, when he 'll do something against the

end of Elemity..14 The Earlier Crime

"Why?Why?"

Twissell looked helplessly from the gauge to the Technician,his eyes

mirroring the puzzled frustration

in his voice.

Harlan lifted his head.He had only one word to say."Noÿs!"

Twissell said, "The woman you took into Eternity?"

Harlan smiled bitterly, said nothing.

Twissell said, "What has she to do with this? Great Time, I don't understand, boy."

"What is there to understand?" Harlan burned with sorrow.."Why do you pretend ignorance?I had a

woman.I was happy and so was she.We harmed no one.She did not exist in the new Reality.What difference

would it have made to anyone?"

Twissell tried vainly to interrupt.

Harlan shouted. But there are rules in Eternity, aren 't there? I know them all. Liaisons require

He ended in a kind of despair and Twissell moved quickly to the Communiplate. Its function as a

transmitter had obviously been restored.

The Computer shouted into it till he aroused an answer. Then he said, "This is Twissell. No one is to be

allowed in here. No one. No one. Do you understand?... Then see to it. It goes for members of the Allwhen

Council. It goes for them particularly."

He turned back to Harlan, saying abstractedly, "They'll do it because I 'm old and senior member of the

Council and because they think I 'm cranky and queer. They give in to me because I 'm cranky and queer." For a

moment he fell into a ruminative silence. Then he said, "Do you think I

up to Harlan's like that of a seamed monkey.

'm queer?" and his face turned swiftly

Harlan thought: Great Time, the man's mad. The shock has driven him mad.

queer? I suppose you do. Too queer to talk to.

If you had thought of me as a friend instead of as a crotchety old man, whimsical and unpredictable, you would

have spoken openly to me of your doubts. You would have taken no such action as you did."

Harlan frowned. The man thought Harlan was mad. That was it!

He said angrily, "My action was the right one. I 'm quite sane."

Twissell said, "I told you the girl was in no danger, you know.". "I was a fool to believe that even for a while. I was a fool to believe the Council would be just to a

Technician."

"Who told you the Council knew of any of this?"

"Finge knew of it and sent in a report concerning it to the Council."

"And how do you know that?"

"I got it out of Finge at the point of a neuronic whip. The business end of a whip abolishes comparative status."

status.

"Because he hated me and wanted to make certain I lost all status.He wanted Noÿs."

Twissell said, "You 're naive! If he had wanted the girl, he could easily have arranged liaison. A

Technician would not have been in his way. The man hated *me* ,boy."

((Still no cigarette. He looked odd without

one and the stained finger he lay on his chest as he spoke the last pronoun looked almost indecently bare.)

"You?"

mailer nimseit?

"There 's such a thing,boy,as Council politics.Not every Computer is appointed to the Council.Finge

wanted an appointment. Finge is ambitious and wanted it badly. I blocked it because I thought him emotionally

unstable. Time, I never fully appreciated how right I was.... Look, boy. He knew you were a protégé of mine.

He had seen me take you out of a job as an Observer and make you a master Technician.He saw you working

looked at the space between finger
and thumb blankly.

Harlan thought: He 's not as calm as he 's trying to sound. He can 't be. But why does he talk all this

nonsense *now?*With Eternity ending?

Then in agony:But why doesn't it *end* then?Now!

Twissell said, "When I allowed you to go to Finge just recently, I more than half suspected danger. But

Mallansohn 's memoir said you were away the last month and no other natural reason for your absence offered

itself.Fortunately,Finge underplayed his hand."

"In what way?" asked Harlan wearily..He didn't really care,but Twissell talked and talked and it was

easier to take part than to try to shut the sound out of his ears.

Twissell said, "Finge labeled his report: 'In re unprofessional conduct of Technician Andrew Harlan.'

to me of this?"

"How could I?I was afraid to do anything that would disturb you with the crisis of the project at hand. I

gave you every opportunity to bring your problem to me."

Every opportunity?Harlan 's mouth twisted in disbelief,but then he thought of Twissell 's weary face on

the Communiplate asking him if he had nothing to say to him. That was yesterday. Only yesterday.

Harlan shook his head, but turned his face away now.

Twissell said softly,"I realized at once that he had deliberately goaded you into your--rash action."

Harlan looked up. "You know that?"

"Does that surprise you? I knew Finge was after my neck. I 've known it for a long time. I am an old

man,boy.I know these things.But there are ways in which doubtful Computers can be checked upon.There are

Harlan asked suddenly, "I suppose Finge suspected you of spying?"

"He might have. I wouldn't be surprised."

Harlan thought back to his first days with Finge when Twissell first

Harlan thought back to his first days with Finge when Twissell first showed his abnormal interest in the

showed his abnormal interest in the young Observer. Finge had known nothing of the Mallansohn proj-

ect,and he had been interested in Twissell's interference."Have you ever met Senior Computer Twissell?" he had

once asked and,,thinking back,Harlan

could recall the exact tone of sharp uneasiness in the man 's

voice.As early as that Finge must have suspected

Twissell was speaking, "So if you had come to me----"
"Come to you?" cried Harlan.. "What of the Council?"

"Of the entire Council, only I know."

"You never told them?" Harlan tried to be mocking..

"I never did."

Harlan shouted, "Why should I? They came to look at me, didn 't they? At that breakfast? Why should

they have done that if they didn't know of the report? They came to look at the queer phenomenon who had

broken the laws of Eternity but who couldn't be touched for one more day. One more day and then the project

would be over. They came to gloat for the tomorrow they were expecting.". "My boy, there was nothing of that. They wanted to see you only because they were human. Councilmen

are human too. They could not witness the final kettle drive because the Mallansohn memoir did not place them

at the scene. They could not interview Cooper since the memoir made

no mention of that either. Yet they wanted something. Father Time, boy, don 't you see they would want

could get, so they brought you close and stared at you."
"I don't believe you."

I don i believe you.

something? You were as close as they

pathetic figure he is?His

homewhen is the 803rd, one of the few cultures in which the human body is deliberately disfigured to meet the

aesthetic requirements of the time. It is rendered hairless at adolescence.

"Do you know what that means in the continuity of man? Surely you do. A disfigurement sets men apart

from their ancestors and descendants. Men of the 803rd are poor risks as Eternals; they are too different from

the rest of us. Few are chosen. Sennor is the only one of his Century ever to sit on the Council.

"Don 't you see how that affects him? Surely you understand what insecurity means. Did it ever occur to

you that a Councilman could be insecure? Sennor has to listen to discussions involving the eradication of his

Reality for the very characteristic that makes him so conspicuous among us. And eradicating it would leave him

he used it to predict disaster for the project and it was we, the

Councilmen, that he was attempting to annoy, not

you.It had nothing to do with you.Nothing!"

Twissell had grown heated. In the long emotion of his words he seemed to forget where he was and the

crisis that faced them, for he slipped back into the quickgestured, uneasily motioned gnome that Harlan knew

so well.He even slipped a cigarette from his sleeve pouch and had all but frictioned it into combustion.

But then he stopped, wheeled, and looked at Harlan again, reaching back through all his own words to

what Harlan had last said, as though until that moment, he had not heard them properly.

He said, "What do you mean, you almost met yourself?"

Harlan told him briefly and went on, "You didn't know that?"

"No."

There were a few moments of silence that were as welcome to the feverish Harlan as water would have

cycle----". "The circle goes on forever?" asked Harlan with what wonder he could still find in himself...

iansonn Reality in the previous turn of the

"Do you think only twice?Do you think two is a magic number?It 's a matter of infinite turns of the

circle in finite physiotime. Just as you can draw a pencil round and round the circumference of a circle infinitely

yet enclose a finite area. In previous turns of the cycle, you had not met yourself. This one time, the statistical

self. Reality had to change to prevent the meeting

uncertainty of things made it possible for you to meet your-

Harlan cried, "What 's all this talk about? What are you getting at? It

and in the new Reality, you did not send Cooper back to the 24th but----"

's all done. Everything. Let me

alone now!Let me alone!

"I want you to know you 've done wrong. I want you to realize you did the wrong thing."

"It is *not* too late. Things are *not* irreparable. With your help, we can succeed yet. I must have your help.

marian stared at him wide-eyed. But it s too late, what s the use?

You must realize that you did wrong. I am trying to explain this to you. You must want to undo what you have

done."

Harlan licked his dry lips with a dry tongue and thought:He is mad.His mind can 't accept the truth.--

or, does the Council know more?

Did it?Did it?Could it reverse the verdict of the Changes?Could they halt Time or reverse it?

He said, "You locked me in the control room, kept me helpless, you thought, till it was all over."

with your part."

"That was meant to be a threat."

"I took it literally.Forgive me.I must have your help."

fooled a second time.

"No!" he said..

about?

"You 'll have Noÿs."

"You mean the Council will be willing to break the laws of Eternity once the danger is safely gone?I

don 't believe it." How could the danger safely be passed,,a sane scrap of his mind demanded. What was this all

"The Council will never know."

THE Council will never know.

nal.With the danger gone,you would

"Would you be willing to break the laws? You 're the ideal Eter-

obey the law. You couldn't act otherwise.". Twissell reddened blotchily, high on each cheekbone. From the old face all shrewdness and strength

drained away. There was left only a strange sorrow.

"I will keep my word to you and break the law," said Twissell,,"for a reason you don't imagine.I don't

Trings as much as out of anything

else said wearily, "Go on."

I have heard (began Twissell)that I was born old,that I cut my teeth on a Micro-Computaplex,that I

keep my hand computer in a special pocket of my pajamas when I sleep,that my brain is made up of little force-

relays in endless parallel hookups and that each corpuscle of my

blood is a microscopic spatio-temporal chart floating in computer oil.

All these stories come to me eventually, and I think I must be a lit-

tle proud of them. Maybe I go around believing them a bit. It 's a foolish thing for an old man to do, but it makes life a little easier.

Does that surprise you? That I must find a way to make life easier? I, Senior Computer Twissell, senior

member of the Allwhen Council?

Maybe that 's why I smoke. Ever think of that? I have to have a reason, you know. Eternity is essentially

Thought about this for a long time. It isn't pleasant.

It involved a woman,of course,as your affair did. That 's not coincidence. It 's almost inevitable, if you

stop to think of it.An Eternal,who must sell the normal satisfactions of family life for a handful of perforations

on foil, is ripe for infection. That 's one of the reasons Eternity must take the precautions it does. And,

apparently, that 's also why Eternals are so ingenious in evading the precautions once in a while.

I remember my woman.It 's foolish of me to do so,perhaps.I can 't remember anything else about that

emember anything else about that

physiotime.My old colleagues are only names in the record books;the

Changes I supervised--all but one--are only items in the Computaplex memory pools. I remember her, though, very well. Perhaps you can understand that.

I had had a long-standing request for liaison in the books;and after
I achieved status as a Junior

been proud to have her as my wife. I told

her that many times. I believe it pleased her. I know it was the truth. Not all Eternals, who must take their

women as and how Computing permits, are that fortunate.

In that particular Reality,she was to die young,of course,and none of her analogues was available for

liaison.At first,I took that philosophically.After all,it was her short lifetime which made it possible for her to

live with me without deleteriously affecting Reality..I am ashamed of that now, of the fact that I was glad she had a short time to live.Just at first, that is.Just

at first.

I visited her as often as spatio-temporal charting allowed.I squeezed every minute out of it, giving up meals and sleep when necessary, shifting my labor load shamelessly whenever I could. Her amiability passed

imminent death stanged being a convenience and became a calam-

imminent death stopped being a convenience and became a calamity. I Life-Plotted her. I didn't go to the Life-

Plotting departments, either. I did it myself. That surprises you, I imagine. It was a misdemeanor, but it was

nothing compared to the crimes I committed later.

Yes,I,Laban Twissell.Senior Computer Twissell.

Three separate times,a point in physiotime came and passed,during which some simple action of my

own might have altered her personal Reality.Naturally,I knew that no such personally motivated $\it Change\ could$

possibly be authorized by the Council.Still,I began to feel personally responsible for her death.That was part

of my motivation later on,you see.

She became pregnant. I took no action, though I should have. I had worked her Life-Plot, modified to include her relationship with me, and I knew pregnancy to be a high-probability consequence. As you may or

in her pregnancy and I wanted her to remain so. So I only watched and tried to smile when she told me she could feel life stirring within her.

But then something happened. She gave birth prematurely----

I don 't wonder you look that way. I had a child. A real child of my own. You 'll find no other Eternal,

perhaps,who can say that. That was more than a misdemeanor. That was a serious felony, but it was still

I hadn't expected it.Birth and its problems were an aspect of life with which I had had little experience.

I went back to the Life-Plot in panic and found the living child,in an alternate solution to a low-

probability forklet I had overlooked. A professional Life-Plotter would not have overlooked it and I had done wrong to trust my own abilities that far.

But what could I do now?

nothing.

knowledge, for over a year. In my arms, I held my son and hers.

--Yes,I let it live.Why do you cry out so?Are you going to condemn

me?. You cannot know what it means to hold a little atom of your own life in your arms. I may have a

Computaplex for nerves and spatio-temporal charts for a bloodstream, but I do know.

when I could (in strict temporal sequence,held even with physiotime) to make necessary payments and to watch

the boy grow.

my having waited for death, in full

Two years went by that way.Periodically,I checked the boy 's Life-Plot (I was used to breaking that

particular rule, by now) and was pleased to find that there were no signs of deleterious effects on the then-

current Reality at probability levels over 0.0001. The boy learned to walk and mispronounced a few words. He $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right$

moted to Assistant Computer, was placed

in charge.It was the first Change ever left to my sole supervision.

I was proud,of course,but also apprehensive.My son was an intruder in the Reality.He could scarcely

be expected to have analogues. Thought of his passage into nonexistence saddened me.

I worked at the Change and I flatter myself even yet that I did a flawless job.My first one.But I $\,$

succumbed to a temptation. I succumbed to it all the more easily be-

cause it was becoming an old story now for

me.I was a hardened criminal,a habitué of crime.I worked out a new

Life-Plot for my son under the new

Reality,certain of what I would find.

But then for twenty-four hours, without eating or sleeping, I sat in my office, striving with the completed

Life-Plot, tearing at it in a despairing effort to find an error.

There was no error.

my knowledge of his mother 's family, to do so. He had no knowledge of his father, no memory of my visits to

He was an aeronautical engineer. The 575th was expert in half a dozen varieties of air travel (as it still is

him in his infancy.

abandoned.

in the current Reality), and my son was a happy and successful member of his society. He was married to an

ardently enamored girl, but would have no children. Nor would the girl have married at all in the Reality in

had known there would be no deleterious

affect on Reality.Otherwise,I might not have found it in my heart to
let the boy live.I am not *completely*

which my son had not existed. I had known that from the beginning. I

I spent the day with my son. I spoke to him formally, smiled politely, took my leave coolly when the

had used every second that had been available to me.I dared not even enter Time to see her,unseen..I returned to Eternity and spent one last horrible night wrestling futilely against what must be The next

one last horrible night wrestling futilely against what must be. The next morning I handed in my computations together with my recommendations for Change.

Twissell's voice had lowered to a whisper and now it stopped. He sat there with his shoulders bent, his eyes fixed on the floor between his knees, and his fingers twisting slowly into and out of a knotted clasp.

Harlan, waiting vainly for another sentence out of the old man, cleared his throat. He found himself

pitying the man pitying him despite the many crimes he had commit-

pitying the man, pitying him despite the many crimes he had committed. He said, "And that 's all?"

Twissell whispered, "No, the worst----An analogue of my son did exist. In the new Reality,

he existed--as a paraplegic from the age of four. Forty-two years in bed, under circumstances that barred me

ordered the Change. I had committed a number of crimes for his sake and for his mother 's, but that one last

deed,though strictly in accordance with my oath as an Eternal,has always seemed to me to be my great crime,

the crime."

There was nothing to say, and Harlan said nothing.

Twissell said, "But you see now why I understand your case, why I will be willing to let you have your

girl.It would not harm Eternity and,in a way,it would be expiation for $\mbox{\it my crime."}$

And Harlan believed. All in one change of mind, he believed!

Harlan sank to his knees and lifted his clenched fists to his temples. He bent his head and rocked slowly

as savage despair beat through him.

He had thrown Eternity away,and lost Noÿs--when,except for his Samson-smash,he might have saved

one and kept the other..15 Search through the Primitive

cated.When you alter something in Time

and create a Reality Change, the Change may take place at once. Why should that be?"

and look at it intrough a computer is eyes, the view is more sophisti-

Harlan said shakily, "Because your alteration has made the Change inevitable?"

"Has it?You could go back and reverse your alteration,couldn't you?"

"I suppose so.I never did, though.Or anyone that I heard of."

"Right.There is no intention of reversing an alteration,so it goes through as planned.But here we have

something else. An unintentional alteration. You sent Cooper into the

wrong Century and now I firmly intend to

reverse that alteration and bring Cooper back here."

"For Time 's sake,how?"

"I 'm not sure yet, but there *must* be a way. If there were no way, the alteration would be irreversible;

Change would come at once.But Change has not come.We are still in the Reality of the Mallansohn memoir.

ists, we can be certain that the solution remains

high-probability. If at any moment, you or I make the wrong decision, if the probability of healing the circle

falls below some crucial magnitude, Eternity disappears. Do you understand?"

Harlan was not sure that he did.He wasn 't trying very hard.Slowly he got to his feet and stumbled his

way into a chair. "You mean we can get Cooper back----"

"And send him to the right place, yes. Catch him at the moment he leaves the kettle and he may end up

in his proper place in the 24th no more than a few physiohours older; physiodays, at the most. It would be an alteration, of course, but undoubtedly not enough of one. Reality

alteration, of course, but undoubtedly not enough of one. Reality would be rocked, boy, but not upset."

"But how do we get him?"

"We know there 's a way,or Eternity wouldn 't be existing this moment. As to what that way is, that is

Harlan's regret-drugged senses the man

seemed to be enjoying himself, actually enjoying himself, now that
battle had been joined.. "We can reconstruct the event," said Twissell.. "Here is the thrust control. You're standing at it, waiting

for the signal. It comes. You make contact and at the same time squeeze the power thrust in the downwhen

"I don't know,I tell you.I don't know."

direction. How far?"

"You don't know, but your muscles do. Stand there and take the con-

trols in your hand. Get hold of yourself. Take them, boy. You 're waiting for the signal. You 're hating

then. Now I 'll set the clock in motion again. I 'll give you one min-

me. You 're hating the Council. You 're hating Eternity. You 're wearying your heart out for Noÿs. Put yourself back at that moment. Feel what you felt

ute,boy,to remember your emotions and

```
other way you can get back your girt?
   There wasn 't. Harlan forced himself back to the controls, and as he
did so emotion flooded back. He did
  not have to call on it. Repeating the physical movements brought
them back. The red hairline on the clock
   started moving.
   Detachedly he thought: The last minute of life?
   Minus thirty seconds.
   He thought: It will not hurt. It is not death.
   He tried to think only of Noÿs.
   Minus fifteen seconds.
  Noÿs!
   Harlan's left hand moved a switch down toward contact.
   Minus twelve seconds.
```

Contact!

Noÿs!

His right hand moved.

Minus five seconds.

different.1 knew what I was doing

and that made it different."

Twissell said, "I know, I know. Maybe it 's all wrong. Call it a first approximation." He paused a

moment in mental calculation, took a pocket computer half out of its container and thrust it back without

consulting it. "To Time with the decimal points. Say the probability is

0.99 that you sent him back to the second quarter of the 20th. Somewhere between 19.25 and 19.50. All

right?"."I don't know."

"Well,now,look.If I make a firm decision to concentrate on that part

of the Primitive to the exclusion
of all else and if I am wrong, the chances are that I will have lost my

chance to keep the circle in time closed
and Eternity will disappear. The decision itself will be the crucial

point, the Minimum Necessary Change, the

M.N.C., to bring about the Change. I now make the decision. I decide, definitely----"

Then Eleminy Still exists, said twissell in a diunt,,matter-of-fact manner, "and we have made the right

decision. Now there 's nothing more to do here for the while. Let 's get to my office and we can let the

subcommittee of the Council swarm over this place, if that will make

them any happier. As far as they are concerned, the project has ended successfully. If it doesn 't, they 'll

Twissell studied his cigarette and said, "The question that now confronts us is this: What will Cooper do

when he finds himself in the wrong Century?"

"I don't know."

never know. Nor we."

"One thing is obvious.He 's a bright lad,intelligent,imaginative,wouldn 't you say?"

"Well,he 's Mallansohn."

"Exactly. And he wondered if he would end up wrong. One of his last questions was: What if I don't end

up in the right spot? Do you remember?"

communication across Time.He is not likely to surrender to the thought of being marooned in Time.He'll

know that we 're looking for him."

Harlan said, "Without kettles and with no Eternity in the 20th, how would be go about communicating with us?"

"With you Technician with w

"With you ,Technician, with you. Use the singular. You 're our expert on the Primitive. You taught

Cooper about the Primitive. You 're the one he would expect to be capable of finding his traces."

"What traces,Computer?"

Twissell's shrewd old face stared up at Harlan,its lines crinkling."It was intended to leave Cooper in

the Primitive.He is without the protection of an enclosing shield of physiotime.His entire life is woven into the

fabric of Time and will remain so until you and I reverse the alteration. Likewise woven into the fabric of Time $\,$

And he studied them with you?

"Yes."

"And is there any particular reference that was your favorite, one that he knew you were intimately

acquainted with, so that you would recognize in it some reference to himself?"

"I see what you 're driving at, of course," said Harlan..He grew thoughtful.

"Well?" asked Twissell with an edge of impatience..

Harlan said, "My news magazines, almost surely. News magazines were a phenomenon of the early

20 's. The one of which I have nearly a complete set dates from early in the 20th and continues well into the

22nd."

"Good. Now is there any way, do you suppose, in which Cooper could make use of that news magazine

to carry a message? Remember, he 'd know you 'd be reading the periodical, that you'd be acquainted with it,

and be sure of its appearance. Even if

Cooper managed to get a position on its editorial staff, which is very unlikely, he couldn't be certain that his

exact wording would pass the various editors. I don 't see it, Computer."

Twissell said, "For Time 's sake, think! Concentrate on that news magazine. You 're in the 20th and

you 're Cooper with his education and background. You taught the boy, Harlan. You molded his thinking. Now

what would he do? How would he go about placing something in the magazine; something with the exact

wording he wants?"

Harlan's eyes widened."An advertisement!"

"What?"

"An advertisement.A paid notice which they would be compelled to print exactly as requested.Cooper

and I discussed them occasionally."

"Ah,yes.They have that sort of thing in the 186th," said Twissell..

directly.He can 't say: 'Cooper of the 78th, stranded in the 20th and calling Eternity----'

"How can you be sure?"

inspiration. He can I say anything

"Impossible!To give the 20th information we know they did not have would be as damaging to the

Mallansohn circle as would wrong action on our part. We 're still here, so in his whole lifetime in the current

"Besides which," said Harlan, retreating from the contemplation of

Reality of the Primitive he's done no harm of that sort."

the circular reasoning which seemed

to bother Twissell so little, "the news magazine is not likely to agree

to bother Twissell so little, "the news magazine is not likely to agree to publish anything which seems mad to it.or which it cannot understand. It would suspect fraud or some form of illegality and would not wish to be

implicated. So Cooper couldn't use Standard Intertemporal for his message."

items. How big do you suppose it would

items. How big do you suppose it would

be,Harlan?Are those advertisements expensive?"

"Quite expensive, I believe."

"And Cooper would have to hoard his money.Besides which,to avoid

the wrong kind of attention,it
would have to be small,anyway.Guess,Harlan.How large?"

Harlan spread his hands. "Half a column?"

"Column?"

"They were printed magazines, you know. On paper. With print arranged in columns."

"Oh yes.I can 't seem to separate literature and film somehow ...Well, we have a first approximation of another sort now. We must look for a half-column advertisement which will, practically at a glance, give

evidence that the man who placed it came from another Century (in the upwhen direction,of course) and yet $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty$

unusual,subtly wrong."

struck you, even momentarily, as odd, queer,

"No."

"I don't want an answer so quickly. Take five minutes and think."

"No point.At the time I was going over the news magazines with Cooper,he hadn't been in the 20th."

"Please, boy. Use your head. Sending Cooper to the 20th has introduced an alteration. There's no

Change; it isn 't an irreversible alteration. But there have been some changes with a small 'c,' or micro--changes,

as it is usually referred to in Computation. At the instant Cooper was sent to the 20th, the advertisement

appeared in the appropriate issue of the magazine. Your own Reality has micro-changed in the sense that you $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^$

may have looked at the page with that advertisement on it rather than one without that advertisement as you did

in the previous Reality.Do you understand?"

"Good enough," said Twissell.."Let 's go there.Now!".Harlan watched Twissell stare curiously at the old,bound volumes in the library and then take one

I had a special library built on Level Two, using the Cooper priority.

down. They were so old that the fragile paper had to be preserved by special methods and they creaked under

Twissell's insufficiently gentle handling.

 $\label{thm:condition} \mbox{Harlan winced.In better times he would have ordered Twissell away} \\ \mbox{from the books,Senior Computer}$

The old man peopled through

though he was.

The old man peered through the crinkling pages and silently mouthed the archaic words. This is the

English the linguists are always talking about, isn 't it?" he asked, tapping a page.

"Yes.English," muttered Harlan..

Twissell put the volume back. "Heavy and clumsy."

Harlan shrugged. To be sure, most of the Centuries of Eternity were film eras. A respectable minority

intentions

intentness.

Harlan thought: Does the man think he's going to hit the solution by a lucky stab?

The thought might have been correct, for Twissell, meeting Harlan's appraising eyes, reddened and put

the book back.

Harlan took the first volume of the 19.25th Centicentury and began turning the pages regularly. Only his

right hand and his eyes moved. The rest of his body remained at rigid attention.

At what seemed aeonic intervals to himself Harlan rose, grunting, for a new volume. On those occasions

there would be the coffee break or the sandwich break or the other breaks.

Harlan said heavily,"It 's useless your staying."

Twissell said, "Do I bother you?"

"No."

lingered over his last sip of

coffee and said,"I wonder sometimes why I didn 't throw up my

Computership after the matter of my----You

know."

Harlan nodded.."I felt like it,"the old man went on."I felt like it.For physiomonths,I hoped desperately that no

Changes would come my way.I got morbid about it.I began to wonder if Changes were right.Funny,the tricks emotions will play on you.

"You know Primitive history,Harlan.You know what it was like.Its Re-

ality flowed blindly along the
line of maximum probability. If that maximum probability involved a
pandemic, or ten Centuries of slave

economy, a breakdown of technology, or even a--a--let's see, what's really bad--even an atomic war if one had

been possible then,why,by Time,it *happened* .There was nothing to stop it.

harder? I'm doing my best.

Twissell said, "If we miss our chance now, Eternity disappears, probably through all of physiotime. And in one vast Change all Reality reverts to maximum probability with, I am positive, atomic warfare and the end

Harlan said, "I'd better get on to the next volume."

At the next break Twissell said helplessly, "There 's so much to do. Isn't there a faster way?"

Harlan said, "Name it. To me it seems that I must look at every single page. And look at every part of it,

too.How can I do it faster?"

of man."

Methodically he turned the pages.

"Eventually," said Harlan,,"the print starts blurring and that means it's time for sleep."

A second physioday ended.

about news magazines and

about news magazines and advertisements."

Twissell had absorbed it now." You 've found it!"

He leaped at the volume Harlan was holding, clutching at it with shaking fingers.

Harlan held it out of reach and slammed the volume shut. "Just a moment. You won't find it, even if I

showed you the page."

"What are you doing?" shrieked Twissell.."You 've lost it."

"It 's not lost.I know where it is.But first----"."First what?"

Harlan said, "There 's one point remaining, Computer Twissell. You say

I can have Noÿs.Bring her to

me,then.Let me see her."

Twissell stared at Harlan, his thin white hair in disarray. "Are you joking?"

"No," said Harlan sharply,,"I 'm not joking. You assured me that you would make arrangements--Are

Harlan stared at the old man and grew tense. He said, chokingly, "You 're playing with words. All right,

she 's in the far upwhen,but what good is that to me? Take down the barrier at the 100,000th--"

"The what?"

she was sate.

"The barrier. The kettle won't pass it."

"You never said anything of this," said Twissell wildly..

thought of it often enough. Had he never said a word about it? He couldn't recall, at that. But then he

"I haven 't?" said Harlan with sharp surprise..Hadn 't he?He had

hardened.

He said, "All right.I tell you now.Take it down."

"But the thing is impossible. A barrier against the kettle? A temporal barrier?"

"Are you telling me you didn 't put one up?"

"I didn 't.By Time,I swear it."

hald of vousself Think have

hold of yourself. Think, boy,

think.The Council put up no barrier."

"It 's there."

"But they can 't have put up such a barrier.No one could have.It 's theoretically impossible."

"You don't know it all. It's there."

"I know more than anyone else on the Council and such a thing is impossible."

"But it 's there."

"But if it is----"

And Harlan grew sufficiently aware of his surroundings to realize that there was a kind of abject fear in

Twissell's eyes;a fear that had not been there even when he first learned of Cooper's misdirection and of the

impending end of Eternity...16 The Hidden Centuries

Andrew Harlan watched the men at work with abstracted eyes. They ignored him politely because he

against a black background. They used

intricate force-field equipment to test the kettle motors and the

degrees of hyper-freedom along the kettleways.

They had, Harlan imagined, little theoretical knowledge of temporal engineering, but it was obvious that they

had a vast practical knowledge of the subject.

Harlan had not learned much concerning Maintenance when he was a Cub.Or, to put it more accurately,

he had not really wished to learn. Cubs who did not make the grade were put into Maintenance. The

"unspecialized profession" ((as the euphemism had it)was the hall-mark of failure and the average Cub

automatically avoided the subject.

Yet now, as he watched the Maintenance men at work, they seemed to Harlan to be quietly,

tensionlessly efficient, reasonably happy.

erature and film dramatizations culled out of
the various Realities.

It was they,after all,who probably had the better-rounded personalities.It was the Specialist's life

which was harried and affected, artificial in comparison with the sweet and simple life in Maintenance.

Maintenance was the foundation of Eternity. Strange that such an obvious fact had not struck him

earlier. They supervised the importation of food and water from Time, the disposal of waste, the functioning of

the power plants. They kept all the machinery of Eternity running smoothly. If every Specialist were to die of a

stroke on the spot, Maintenance could keep Eternity going indefinitely. Yet were Maintenance to disappear, the

Did Maintenance men resent the loss of their homewhens, or their womanless, childless lives? Was

Specialists would have to abandon Eternity in days or die miserably.

nauried than he had an hour before, when he had lett, with mainte-

idice direddy di work.

Harlan thought: How does he keep it up? He 's an old man.

Twissell glanced about him with birdlike brightness as the men automatically straightened up to

respectful attention.

He said, "What about the kettleways?"

One of the men responded, "Nothing wrong, sir. The ways are clear, the fields mesh."

"You 've checked everything?". "Yes, sir. As far upwhen as the Department's stations go."

Twissell said, "Then go."

There was no mistaking the brusque insistence of his dismissal. They bowed respectfully, turned, and

hastened out briskly.

Twissell and Harlan were alone in the kettleways.

Twissell turned to him. "You'll stay here. Please."

Harlan shook his head."I must go."

clous.He is called the several times in

the last two physiodays. Why am I in seclusion, he wants to know. When he finds out I 've ordered a complete

overhaul of the kettleway machinery...I must go now,Harlan.I can 't delay."

"I don't want delay.I'm ready."

"You insist on going?"

"If there 's no barrier, there 'll be no danger. Even if there is, I 've been there already and come back.

What are you afraid of, Computer?"

"I don't want to risk anything I don't have to."

"Then use your logic, Computer. Make the decision that I 'm to go with you. If Eternity still exists after

that, then it means that the circle can still be closed. It means we'll survive. If it's a wrong decision, then

Eternity will pass into nonexistence, but it will anyway if I don 't go, because without No \ddot{y} s, I'll make no move

to get Cooper.I swear it."

figures of the temporometer. Even the scaler gauge, which measured in units of Kilocenturies, and which the

men had adjusted for this particular purpose, was clicking at minute intervals.

He said, "You should not have come."

Harlan shrugged. "Why not?"

kerne. He stared at the skimming

"It disturbs me.No sensible reason.Call it a long-standing superstition of mine.It makes me restless."

He clasped his hands together, holding them tightly.

Harlan said, "I don 't understand you.". Twissell seemed eager to

talk, as though to exorcise some mental demon. He said, "Maybe you'll appreciate this, at that. You're the expert on the Primitive. How long did man exist in the Primitive?"

Harlan said, "Ten thousand Centuries. Fifteen thousand, maybe."

"Yes.Beginning as a kind of primitive apelike creature and ending as Homo sapiens.Right?"

"It 's common knowledge.Yes."

did.)

 $^{\tt w}I$ 'm from a Century in the 30,000 's," Twissell said again,, "and you 're from the 95th.The time between

our homewhens is twice the total length of time of man's existence in the Primitive,yet what change is there

between us?I was born with four fewer teeth than you,and without an appendix.The physiological differences

about end with that. Our metabolism is almost the same. The major difference is that your body can synthesize

the steroid nucleus and my body can 't, so that I require cholesterol in my diet and you don 't.I was able to breed

with a woman of the 575th. That 's how undifferentiated with time the species is."

Harlan was unimpressed. He had never questioned the basic identity of man throughout the Centuries. It

was one of those things you lived with and took for granted.He said,"There have been cases of species living

be checked by a Computaplex, it had no business taking up the time of a Computer. And yet, in my younger

"Of what?" Harlan thought::Well,it's something to listen to,anyway.

"I sometimes thought about Eternity as it was when it was first es-

tablished.It stretched over just a few

days, I sometimes thought----"

speculation was proper. It something couldn't

Centuries in the 30 's and 40 's, and its function was mostly trade. It interested itself in the reforestation of

denuded areas, shipping topsoil back and forth, fresh water, fine chemicals. Those were simple days.

Wadsman,in the dramatic manner with which we are all acquainted, prevented a war by removing the

"But then we discovered Reality Changes. Senior Computer Henry

safety brake of a Congressman's ground
vehicle.After that,more and more,Eternity shifted its center of
gravity from trade to Reality Change.Why?"

Harlan said, "The obvious reason. Betterment of humanity."

--even in the 70,000th. Yes, I know. And have our Reality Changes

had something to do with it?We

bred out the unusual. Even Sennor 's homewhen with its hairless creatures is under continual question and that 's. harmless enough. Perhaps in all honesty, in all sincerity, we 've prevented human evolution because we don't

want to meet the supermen."

Still no spark was struck. Harlan said, "Then it's done. What does it matter?"

"But what if the superman exists just the same, further upwhen than we can reach? We control only to

the 70,000th.Beyond that are the Hidden Centuries!Why are they

hidden?Because evolved man does not want

to deal with us and bars us from his time? Why do we allow them to remain hidden? Because we don't want to

deal with them and, having failed to enter in our first attempt, we refuse even to make additional attempts? I

extend only through a few Centuries before temporal inertia causes its effects to die out. You remember Sennor

brought that up as one of the unanswered problems of Time at our breakfast. What he might have said was that

it 's all a matter of statistics. Some Changes affect more Centuries

than other. Theoretically, any number of

Centuries can be affected by the proper Change; a hundred Centu-

ries,a thousand,a hundred thousand.Evolved

man of the Hidden Centuries may know that. Suppose he is disturbed by the possibility that someday a Change

may reach him clear to the 200,000th."

"It 's useless to worry about such things," said Harlan with the air of a man who had much greater worries.

"But suppose," went on Twissell in a whisper,, "they were calm enough as long as we left the Sections of

do what seems impossible to us and throw a

barrier across the kettleways, cutting us off----"

And now Harlan was on his feet,in full horror," They have Noÿs?"

"I don 't know.It 's speculation.Maybe there is no barrier.Maybe

there was something wrong with your ket--"

"There was a barrier!" yelled Harlan.."What other explanation is

there?Why didn't you tell me this

erezwny dian' i you tell me in before."

"I didn't believe it," groaned Twissell.."I still don't.I shouldn't have said a word of this foolish

dreaming.My own fears--the question of Cooper--everything--But wait just a few minutes."

He pointed at the temporometer. The scaler indicated them to be between the 95,000th and 96,000th

Centuries.

99,851--99,852--99,853--

controls.

Harlan steeled himself for the shock of the barrier and thought desperately: Would preserving Eternity

be the only means of finding time to fight back at the creatures of the Hidden Centuries? How else recover

Noÿs?Dash back,back to the 575th and work like fury to--99,938--99,939--99,940--

Harlan held his breath. Twissell slowed the kettle further, let it creep. It responded perfectly to the

99,984--99,985--99,986--

"Now,now,now," said Harlan in a whisper,,unaware that he had made any sound at all.

99,998--99,999--100,000--100,001--100,002--

The numbers mounted and the two men watched them continue to mount in paralytic silence.

Then Twissell cried, "There is no barrier."

Twissell, climbing out more sedately, called after the younger man, "Wait, Harlan----"

That was useless.Harlan,at a run,was hurtling along the corridors toward that portion of the Section

they had made a kind of home.

He thought vaguely of the possibility of meeting one of Twissell's "evolved men" and momentarily his

skin prickled,but then that was drowned in his urgent need to find $No\ddot{y}s$.

"Noÿs!"

Syncoparion.

And all at once, so quickly that she was in his arms before he was sure he had seen her at all, she was

there and with him, and her arms were around him and clutching him and her cheek was against his shoulder

and her dark hair was soft against his chin.

"Andrew?" she said,,her voice muffled by the pressure of his body. "Where were you? It is been days

Harian whirled...IT was only Twissell, panting.

Noÿs must have gained confidence from Harlan 's expression. She said more quietly, "Do you know

him,Andrew?Is it all right?"

Harlan said, "It 's all right. This is my superior, Senior Computer La-

ban Twissell.He knows of you."

"A Senior Computer?" Noÿs shrank away..

Twissell advanced slowly."I will help you,my child.I will help you both.The Technician has my

promise, if he would only believe it."

"My apologies, Computer," said Harlan stiffly, and not yet entirely repentant.

"Forgiven," said Twissell..He held out his hand, took the girl 's reluctant one. "Tell me, girl, has it been

well with you here?"

"I 've been worried."

"There 's been no one here,since Harlan last left you."

"N--no,sir."

look up when the 100,000th was passed in the downwhen direction and Twissell had snorted an obvious sigh of

relief as though he had half expected to be trapped on the upwhen side.

He scarcely moved when Noÿs 's hand stole into his,and the manner in which he returned the pressure

Noÿs slept in another room and now Twissell 's restlessness reached

of her fingers was almost mechanical.

a peak of devouring intensity.

"The advertisement,boy!You have your woman.My part of the agree-

ment is done."

Silently, still abstracted, Harlan turned the pages of the volume on the desk. He found his page.

"It 's simple enough," he said,, "but it 's in English. I 'll read it to you and then translate it."

It was a small advertisement in the upper left-hand corner of a page numbered 30.Against an irregular

Twissell listened painstakingly to Harlan 's translation and was obvi-

Twissell listened painstakingly to Harlan's translation and was obviously disappointed. He said, "What is the market? What do they mean by that?"

"The stock market," said Harlan impatiently.." A system by which private capital was invested in

business.But that 's not the point at all.Don 't you see the line drawing against which the advertisement is set?"

"Yes.The mushroom cloud of an A-bomb blast.An attention getter.What about it?"

Harlan exploded. "Great Time, Computer, what 's wrong with you? Look

at the date of the magazine issue."

He pointed to the top heading, just to the left of the page number. It read March 28,1932.

Harlan said, "That scarcely needs translation. The numbers are about those of Standard Intertemporal

"Might it?Will you look at the wording again?" Harlan 's fingers punched out the short lines: "All the--

the mushroom cloud only coincidentally.

Talk--Of the--Market. The initials spell out ATOM, which is English for atom. Is that coincidence, too? Not a chance.

"Don't you see,Computer,how this advertisement fits the conditions you yourself set up?It caught my

eye instantly. Cooper knew it would out of sheer anachronism. At the

same time, it has no meaning other than

its face value, no meaning at all, for any man of the 19.32nd.
"So it must be Cooper. That 's his message. We have the date to the

nearest week of a Centicentury.We have his mailing address.It is only necessary to go after him and I $\,$

'm the only one with enough knowledge of

the Primitive to manage that."

"And you 'll go?" Twissell 's face was ablaze with relief and happiness.

"One thing, Computer," said Harlan solemnly.. "One thing still. There was a barrier across the

100,000th.Why?That is what still disturbs me.".17 The Closing

Circle

It did not stop disturbing him. It was a matter that grew in his mind as the days of preparation sped by. It

interposed itself between him and Twissell; then between him and

It was all he could do to rouse a shadow of interest when Twissell

Noÿs.When the day of departure came,he

mere de mai silli disturds you?

was only distantly aware of the fact.

returned from a session with the

Council subcommittee.He said, "How did it go?"

Harlan was almost willing to let it go at that, but he broke his moment's silence with a muttered "I

suppose you said nothing about----"

"What can they do? They must wait for the correction to be made

well.

before they can touch me. If we fail,

we 're all beyond help or harm. If we succeed, success itself will probably protect me. And if it doesn 't----" The

old man shrugged. "I plan to retire from active participation in Eternity's affairs thereafter anyway." But he

fumbled his cigarette and disposed of it before it was half burned away.

He sighed."I would rather not have brought them into this at all, but there would have been no way,

otherwise, of using the special kettle for further trips past the downwhen terminus."

Harlan turned away. His thoughts moved around and about the same

channels that had been occupied to the increasing exclusion of all else for days. He heard Twissell's further remark dimly, but it was only at its repetition that he said with a start, "Pardon me?"

I KNOW.

That was all for the moment, and Harlan was left alone with his thoughts and a sickening realization of what he must do.

With the kettle loading done and the controls adjusted Harlan and Noÿs appeared in a final change of costume, approximating that of an unurbanized area of the early 20th.

Noÿshad modified Harlan's suggestion for her wardrobe, according to some instinctive feeling she claimed women had when it came to matters of clothing and aesthetics. She chose thoughtfully from pictures in the advertisements of the appropriated volumes of the news magazine and had minutely scrutinized items

imported from a dozen different Centuries.

He would shrug. "If it is instinctive knowledge, I ill leave it to you."

Occasionally she would say to Harlan, "What do you think?"

"Father Time," he said,, "what ugly costumes in the Primitive, and yet how it fails to hide your beauty, my--my dear."

Noÿs smiled warmly at him, and Harlan, standing there impassively silent, was forced to admit that

Twissell 's rust-choked vein of gallantry had something of truth in it.Noÿs 's clothing encompassed her without

accentuating her as clothing should.Her make-up was confined to unimaginative dabs of color on lips and $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left($

cheeks and an ugly rearrangement of the eyebrow line. Her lovely hair (this had been the worst of it) had been

cut ruthlessly.Yet she was beautiful.

elicited a feeble attempt at jocularity.

Harlan himself was already growing accustomed to his own uncomfortable belt, the tightness of fit under armpits and in the crotch and the mousy lack of color about his rough-textured clothing. Wearing strange

costumes to suit a Century was an old story to him.

a return lever."

He led them into the kettle, picking his way among the piled supplies, and pointed out the obtruding

finger of metal that now marred the smooth inner wall of the kettle.

"It amounts to the installation of a simple switch," he said... "Instead of returning automatically to

Eternity, the kettle will remain in the Primitive indefinitely. Once the lever is plunged home, however, you will

return.There will then be the matter of the second and,I hope,final trip--"

"A second trip?" asked Noÿs at once..

Harlan said, "I haven 't explained that.Look, this first trip is intended merely to fix the time of Cooper's arrival precisely. We don 't know how long a Time-lapse exists be-

tween his arrival and the placing of the advertisement. We 'll reach him by the post-office box, and learn, if possible, the exact minute of his arrival, or

moys seemed to absorb it. I see, she said,, not too definitely.

Twissell said to Noÿs, "Picking up Cooper at the time of his arrival will reverse all micro-changes. The

A-bomb advertisement will disappear again and Cooper will know only that the kettle, having disappeared as

we told him it would, had unexpectedly appeared again. He will not know that he was in the wrong Century and

he will not be told. We will tell him that there was some vital instruction we had forgotten to give him (we 'll. have to manufacture some) and we can only hope that he will regard the matter as so unim-

mention being sent back twice when he writes his memoir."

portant that he won 't

Noÿs lifted her plucked eyebrows."It 's very complicated."

"Yes.Unfortunately." He rubbed his hands together and looked at the others as though nursing an inner

doubt. Then he straightened, produced a fresh cigarette, and even managed a certain jauntiness as he said, "And

nim, smiling, untrightened. Momentarily his own

spirits responded to that.But that was emotion,not reason,he counciled himself;instinct,not thought.He

looked away.

The trip was nothing, or almost nothing; no different from an ordinary kettle ride. Midway there was a

kind of internal jar that might have been the downwhen terminus and might have been purely psychosomatic. It

And then they were in the Primitive and they stepped into a

craggy,lonely world brightened by the

was barely noticeable.

splendor of an afternoon sun. There was a soft wind with a chilly edge to it and, most of all, silence.

The bare rocks were tumbled and mighty, colored into dull rainbows by compounds of iron, copper, and

chromium. The grandeur of the manless and all but lifeless surroundings dwarfed and shriveled Harlan.

Andrewit m cold. He turned to her with a start.

She said, "Hadn't we better set up the Radiant?"

He said, "Yes.In Cooper's cavern."

"Do you know where it is?"

"It 's right here," he said shortly..

He had no doubt of that. The memoir had located it and first Cooper, now he, had been pin-pointed back

to it.

He had not doubted precision pin-pointing in Time-travel since his

himself then, facing Educator Yarrow seriously, saying, "But Earth

Cubhood days. He remembered

moves about the Sun, and the Sun moves

about the Galactic Center and the Galaxy moves too. If you started

from some point on Earth, and move downwhen a hundred years, you'll be in empty space, because it will

take a hundred years for Earth to reach

vanishes from under the creature?

Arguing from analogy is risky, but Harlan obtained more rigorous proof in later days and, now, after a

scarcely precedented trip into the Primitive, he could turn confidently and feel no surprise at finding the opening precisely where he had been told it would be.

He moved the camouflage of loose rubble and rock to one side and entered.

He probed the darkness within, using the white beam of his flash almost like a scalpel. He scoured the $\,$

walls,ceiling,floor,every inch.

Noÿs,remaining close behind him,whispered, "What are you looking for?"

He said, "Something. Anything,"

He found his something, anything, at the very rear of the cave in the shape of a flattish stone covering greenish sheets like a paperweight.

cause from effect. Eternity existed,

so Cooper must be making correct decisions too. In assuming the advertisement would pull Harlan into the

correct Time, the cave was an obvious additional means of communication.

Yet this was almost better than he had dared hope. More than once during the preparations for his trip

into the Primitive, Harlan had thought that making his way into a town with nothing but bullion in his

possession would result in suspicion and delay.

Cooper had managed, to be sure, but Cooper had had time. Harlan hefted the sheaf of bills. And he must

have used time to accumulate this much. He had done well, the youngster, marvelously well.

And the circle was closing!

The supplies had been moved into the cave,in the increasingly ruddy glow of the westering sun. The $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2$

noys stared inoughtfully into the smooth paraboloid interior of the

Radiant as it slowly rotated. She said,

"Andrew, what are your plans?"

"Tomorrow morning," he said,, "I'll leave for the nearest town. I know where it is -- or should be." ((He

changed it back to "is" in his mind. There would be no trouble. Twissell's logic again.)

"I 'll come with you, won 't I?". He shook his head. "You can 't speak the language, for one thing, and the trip will be difficult enough for one to negotiate."

Noÿs looked strangely archaic in her short hair and the sudden anger in her eyes made Harlan look away

uneasily.

She said, "I'm no fool, Andrew. You scarcely speak to me. You don't look at me. What is it? Is your

homewhen morality taking hold? Do you feel you have betrayed Eternity and are you blaming me for that? Do

you feel I have corrupted you? What is it?"

the sight of me?"

Harlan muttered, "There's danger."

"Oh, come now."

"It 's more than danger.It 's a nightmare.Computer Twissell 's nightmare," said Harlan.."It was during

our last panicky flash upwhen into the Hidden Centuries that he told

me of thoughts he had had concerning

those Centuries.He speculated on the possibility of evolved varieties of man,new species, supermen perhaps,

hiding in the far upwhen, cutting themselves off from our interference, plotting to end our tamperings with

Reality.He thought it was they who built the barrier across the 100,000th.Then we found you,and Computer

Twissell abandoned his nightmare. He decided there had never been a barrier. He returned to the more

immediate problem of salvaging Eternity.

ways. He felt that man *must* evolve,

but that 's not so.Paleontology is not one of the sciences that interest Eternals, but it interested the late

Primitives,so I picked up a bit of it myself.I know this much:species

evolve only to meet the pressures of new

environments. In a stable environment, a species may remain unchanged for millions of Centuries. Primitive

man evolved rapidly because his environment was a harsh and

to create his own environment,he created a pleasant and stable one,so he just naturally stopped evolving."

"I don 't know what you 're talking about," said Noÿs,,sounding not the least mollified, "and you 're not

saying anything about us, which is what I want to talk about."

changing one. Once, however, mankind learned

Harlan managed to remain outwardly unmoved. He said, "Now why the barrier at the 100,000th? What

to his comfort by removing them for the hight, but not how, not how

•••

He said, "There was only one answer to that question. The existence of that barrier sent me raving back

downwhen to get a neuronic whip, to assault Finge. It fired me to the thought of risking Eternity to get you back

and smashing Eternity when I thought I had failed.Do you see?".Noÿs stared at him with a mixture of horror and disbelief."Do you mean the people in the upwhen

wanted you to do all that? They planned it?"

"Yes .Don't look at me like that. Yes!And don't you see how it makes everything different? As long as I

acted on my own, for reasons of my own, I 'll take all the consequences, material and spiritual. But to be fooled

into it, to be $\it tricked$ into it, by people handling and manipulating my emotions as though I were a $\it Computaplex$

on which it was only necessary to insert the properly perforated foils--"

personal tragedy which lay behind and ahead. The circle was closing!

Triumph, aissociated from the

Noys 's hand reached out uncertainly as though to take his own rigid, unyielding one.

Harlan drew away, avoided her sympathy. He said, "It had all been arranged. My meeting with you.

Everything.My emotional make-up had been analyzed. Obviously. Action and response. Push this button and

the man will do that. Push that button and he will do this."

shook his head, trying to shake the horror of it away as a dog would water, then went on. "One thing I

Harlan was speaking with difficulty, out of the depths of shame. He

guess that Cooper was to be sent back into the Primitive? It was a most unlikely thing to guess. I had no basis.

Twissell didn 't understand it. More than once he wondered how I could have done it with so little understanding

of mathematics.

didn't understand at first. How did I come to

a position to destroy Eternity.Later I

checked through histories of mathematics, but it was unnecessary really. I already knew. I was certain of it.

How?How?"

Noÿs stared at him intently. She didn't try to touch him now. "Do you mean the men of the Hidden

Centuries arranged that, too? They put it all in your mind, then maneuvered you properly?"

"Yes.Yes.Nor are they done.There is still work for them to do.The circle may be closing, but it is not

yet closed."

"How can they do anything now? They 're not here with us."

"No?" He said the word in so hollow a voice that Noÿs paled..

"Invisible superthings?" she whispered..

"Not superthings.Not invisible.I told you man would not evolve while he controlled his own She stared at him with horror. "What are you saying, Andrew?"

She stated at thin with horror. What are you saying, marews

"What I must say.What were you saying that evening,when you gave me the peppermint drink?You

were talking to me. Your soft voice--soft words ... I heard nothing, not

consciously, but I remember your

delicate voice whispering About what? The downwhen journey of

delicate voice whispering. About what? The downwhen journey of Cooper; the Samson-smash of Eternity. Am

I right?"

Noÿs said,"I don 't even know what Samson-smash means."

"You can guess very accurately, Noÿs. Tell me, when did you enter the 482nd? Whom did you replace?

Or did you just--squeeze in.I had your Life-Plot worked out by an

expert in the 2456th.In the new Reality,you

had no existence at all.No analogue.Strange for such a small

Change,but not impossible.And then the Life-

Plotter said one thing which I heard with my ears but not with my mind. Strange that I should remember it.

Noÿs said urgently, "Andrew----"

111,394th,anyway? Was it your homewhen?"

Noys said urgently," Andrew----"

"It all fit in, if I had the eyes to look. A book-film in your house entitled Social and Economic History . It

surprised me when first I saw it. You needed it, didn 't you, to teach you how best to be a woman of the Century.

Another item. Our first trip into the Hidden Centuries, remember? You stopped the kettle at the 111,394th. You

stopped it with finesse, without fumbling. Where did you learn to control a kettle? If you were what you seemed

to be, that would have been your first trip in a kettle. Why the

She said softly, "Why did you bring me to the Primitive, Andrew?"

He shouted suddenly, "To protect Eternity.I could not tell what damage you might do there.Here, you

are helpless, because I know you. Admit that all I say is true! Admit it!"

ii maiter to you whether I damit it

or not."

Harlan felt the wildness mount. "Admit it, anyway, so that I need feel

no pain at all.None at all."

"Pain?"

"Because I have a blaster, Noÿs, and it is my intention to kill you.".18

The Beginning of Infinity

There was a crawling uncertainty inside Harlan,an irresolution that was consuming him. He had the

blaster in his hand.It was aimed at Noÿs.

But why did she say nothing? Why did she persist in this impassive attitude?

How could he kill her?

How could he not kill her?

He said hoarsely, "Well?"

She moved, but it was only to clasp her hands loosely in her lap, to look more relaxed, more aloof.

your travels in the dawn. Or you might

have asked Computer Twissell to keep me in solitary confinement during your absence in the Primitive.Or you

might take me with you at dawn,lose me in the wastes. If it is only killing that will satisfy you, it is only

because you think that I have betrayed you,that I have tricked you into love first in order that I might trick you

into treason later. This is murder out of wounded pride and not at all

the just retribution you tell yourself it is."

Harlan squirmed." Are you from the Hidden Centuries? Tell me."

Noÿs said,"I am.Will you now blast?"

she indulging in foolish heroics born of

Harlan's finger trembled on the blaster's contact point. Yet he hesitated. Something irrational within him

could still plead her case and point up the remnants of his own futile love and longing. Was she desperate at his rejection of her? Was she deliberately courting death by lying? Was

bleeding lily.

Then was she scornfully denying his ability to kill her for any reason whatever? Was she confidently

relying on the attraction she knew she had for him even now, certain that it would immobilize him, freeze him

in weakness and shame.

That hit too closely. His finger clamped a bit harder on the contact.

Noÿs spoke again. "You 're waiting. Does that mean you expect me to enter a brief for the defense?"

"What defense?" Harlan tried to make that scornful,, yet he welcomed the diversion. It could postpone

the moment when he must look down upon her blasted body,upon whatever remnants of bloody flesh might

remain, and know that what had been done to his beautiful Noÿs had been done by his own hand.

He found excuses for his delay. He thought feverishly: Let her talk. Let her tell what she can about the

stance, why Earth is empty of mankind after

the 150,000th?Would you be interested?"

Harlan wasn 't going to plead for knowledge,nor was he going to buy knowledge.He had the blaster.He

was very intent on no show of weakness.

He said, "Talk!" and flushed at the little smile which was her first response to his exclamation..

She said, "At a moment in physiotime before Eternity had reached very far upwhen, before it had reached even the 10,000th, we of our Century--and you 're right, it was the 111,394th--learned of Eternity 's

existence.We,toe,had Time-travel,you see,but it was based on a completely different set of postulates than

yours,and we preferred to view Time,rather than shifting mass. Furthermore, we dealt with our past only, our downwhen.

Harian heard her say his hame with all the intimate tenderness she

had used in weeks past.It should

grate on him now,anger him with its cynical faithlessness. And yet it didn 't.

He said desperately, "Go on and get it over with, woman."

He tried to balance the warmth of her "Andrew" with the chill anger of his "woman" and yet she only

smiled again,pallidly.

growing Eternity. It seemed obvious to

us almost at once that there had been at one point in physiotime (

us almost at once that there had been at one point in physiotime (a conception we have also, but under another

She said, "We searched back through time and came across the

name)another Reality. The other Reality, the one of maximum probability we call the Basic State. The Basic

State had encompassed us once,or had encompassed our analogues,at least. At the time we could not say what

the nature of the Basic State was. We could not possibly know.

nals on the downwhen side of the 70,000th.

This armor of isolation would affect us from all but a vanishingly small percentage of the Changes being made.

It wasn't absolute security but it gave us time.

"We next did something our culture and ethics did not ordinarily allow us to do.We investigated our

own future,our upwhen. We learned the destiny of man in the Reality that actually existed in order that we $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{$

might compare it eventually with Basic State. Somewhere past the 125.000th mankind solved the secret of the

interstellar drive. They learned how to manage the Jump through hyperspace. Finally, mankind could reach the

stars."

Harlan was listening in growing absorption to her measured words. How much truth was there in all

this?How much was a calculated attempt to deceive him?He tried to break the spell by speaking,by breaking

None, in this Galaxy at least, are as ancient as manking, but in the

125,000 Centuries man remained on Earth,

younger minds caught up and passed us, developed the interstellar drive, and colonized the Galaxy.

"When we moved out into space, the signs were up. Occupied! No

Trespassing!Clear Out!Mankind

drew back its exploratory feelers, remained at home. But now he knew Earth for what it was:a prison

surrounded by an infinity of freedom ...And mankind died out!"

Harlan said, "Just died out. Nonsense."

"They didn't just die out. It took thousands of Centuries. There were ups and downs but, on the whole,

there was a loss of purpose, a sense of futility, a feeling of hopelessness that could not be overcome. Eventually

there was one last decline of the birth rate and finally, extinction. Your Eternity did that."

Harlan could defend Eternity now, the more intensely and extravagantly for having so shortly before

to weigh in the balance? The machines do not solve problems with greater insight than men do, only faster.

adjusts the machines and tells them what

Only faster!Then what is it the Eternals consider good?I 'll tell you.Safety and security.Moderation.Nothing

in excess.No risks without overwhelming certainty of an adequate return."

Harlan swallowed. With sudden force he remembered Twissell 's words in the kettle while talking about

the evolved men of the Hidden Centuries.He said:" We bred out the unusual."

And wasn 't it so?

"Well," said Noÿs,,"you seem to be thinking. Think of this, then. In the

Reality that now exists, why is it that man is continually attempting space-travel and continually failing? Surely each space-travel era must know

of previous failures.Why try again,then?"

century, and saying longingly. It had been very beautiful. And life-

-Plotter Neron Feruque, who had sworn

bitterly at its passing and had launched into a fit of railing at Eternity's handling of anti-cancer serums to case his spirit.

Was there such a thing as an instinctive yearning on the part of intelligent beings to expand outward, to

reach the stars, to leave the prison of gravity behind? Was it that which forced man to develop interplanetary

travel dozens of times, forced him to travel over and over again to the dead worlds of a solar system in which

only Earth was livable? Was it the eventual failure, the knowledge that one must return to the home prison, that brought about the maladjustments that Eternity was forever

fighting. Harlan thought of the drug addiction in those same futile Centuries of the electro-gravitics.

Noys said, "In ironing out the disasters of Reality, Eternity rules out the triumphs as well. It is in

own biller and beller solutions, the real solutions that come from conquering difficulty, not avoiding it.". Harlan began woodenly, "The greatest good of the greatest number----"

Noÿs cut in. "Suppose Eternity had never been established?"

"Well?"

"I 'll tell you what would have happened. The energies that went into temporal engineering would have

gone into nucleonics instead. Eternity would not have come but the interstellar drive would. Man would have

reached the stars more than a hundred thousand Centuries before

he did in this current Reality. The stars would then have been untenanted and mankind would have established it-

self throughout the Galaxy. We would have

been first."

"And what would have been gained?" asked Harlan doggedly.. "Would we be happier?"

"Whom do you mean by 'we '?Man would not be a world but a million worlds,a billion worlds.We

feeling attraction for the picture she had

conjured. "How can you tell what would have happened?"

Noÿs said, "You smile at the ignorance of the Timers who know only one Reality. We smile at the

ignorance of the Eternals who think there are many Realities but

"What does that gibberish mean?"

that only one exists at a time."

"We don't calculate alternate Realities. We view them. We see them in their state of non-Reality."

"A kind of ghostly never-never land where the might-have-beens play with the ifs."

"Without the sarcasm,yes."

"And how do you do that?"

Noÿs paused, then said, "How can I explain that, Andrew? I have been educated to know certain things

without really understanding all about them, just as you have. Can you explain the workings of a Computaplex?

tence. Any system like Eternity, which allows men to choose their own future, will end by choosing safety and mediocrity, and in such a Reality the stars are out of

rity, and in such a Reality the stars are out of reach. The mere existence of Eternity at once wiped out the Galactic Empire. To restore it, Eternity must be done away with.

"The number of Realities is infinite. The number of any subclass of Realities is also infinite. For

number in which Eternity does not exist is infinite; the number in which Eternity does exist but is abolished is

instance, the number of Realities containing Eternity is infinite; the

among the infinite a group that involved me.

also infinite. But my people chose from

"I had nothing to do with that. They educated me for my job as Twissell and yourself educated Cooper

for his job.But the number of Realities in which I was the agent in destroying Eternity was also infinite. I was offered a choice among five

thought, sickly: She 's an actress--

He said, "That 's rather ridiculous."

"Is it? I studied the Realities at my disposal. I studied the Reality in which I went back to the 482nd, met

first Finge, then you. The one in which you came to me and loved me, in which you took me into Eternity and

the far upwhen of my own Century, in which you misdirected Cooper, and in which you and I, together,

returned to the Primitive. We lived in the Primitive for the rest of our days. I saw our lives together and they

were happy and I loved you. So it 's not ridiculous at all. I chose this alternative so that our love might be true."

Harlan said, "All this is false. It is false. How can you expect me to believe you?" He stopped, then said

suddenly, "Wait! You say you knew all this in advance? All that would happen?"

"Yes."

number of very similar Realities. There are

fuzzy spots. The finer we focus, the less fuzzy, but perfect sharpness cannot be obtained. The less fuzzy, the

lower the probability of chance variation spoiling the result, but the probability is never absolutely zero. One

fuzzy spot spoiled things."

"Which?"

"You were to have come back to the far upwhen after the barrier at the 100,000th had been lowered and

you did. But you were to have come back alone. It is for that reason that I was momentarily so startled at seeing

Computer TwisseIl with you."

Again Harlan was troubled. How she made things fit in!

Noÿs said, "I would have been even more startled, had I realized the significance of that alteration in

full.Had you come alone,you would have brought me back to the $\mbox{\sc Primitive}$ as you did.Then,for love of

ended with a blaster between us....And now,Andrew,that 's the story.You may blast me.There is nothing to stop you."

Harlan 's hand ached from its spastic grasp on the blaster.He shifted it dizzily to the other hand.Was

there no flaw in her story? Where was the resolution he was to have gained from knowing certainly that she was

a creature of the Hidden Centuries.He was more than ever tearing at himself in conflict and dawn was $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac{1$

approaching..He said, "Why two efforts to end Eternity? Why couldn't Eternity have ended once and for all when I

uncertainty."

enged with your gondling my doog faily Ti

sent Cooper back to the 20th?" Things would have ended then and there would not have been this agony of

"Because," said Noÿs,,"ending this Eternity is not enough. We must reduce the probability of

the letter, a man of Italy will begin experimenting with the neutronic

bombardment of uranium."

Harlan found himself horrified. "You will alter Primitive history?"

"Yes.It is our intention.In the new Reality, the final Reality, the first nuclear explosion will take place

not in the 30th Century but in the 19.45th."

"But do you know the danger? Can you possibly estimate the danger?"

"We know the danger. We have viewed the sheaf of resulting Realities. There is a probability, not a

certainty,of course,that Earth will end with a largely radioactive crust,but before that----"

"You mean there can be compensation for that?"

"A Galactic Empire.An actual intensification of the Basic State."

"Yet you accuse the Eternals of interfering----"

"We accuse them of interfering many times to keep mankind safely at home and in prison. We interfere

once,once,to turn him prematurely to nucleonics so that he might never, never ,establish an Eternity."

truth about Reality and Cub Latourette trying to kill himself as a result. Latourette had survived to become an

ininking. He inought of cubs learning the

his bald head by fighting all the Eternals.

Eternal, with what scars on his personality none could say, yet helping to decide on alternate Realities.

He thought of the caste system in Eternity, of the abnormal life that turned guilt feelings into anger and

hatred against Technicians.He thought of Computers,struggling against themselves,of Finge intriguing against
Twissell and Twissell spying on Finge.He thought of Sennor,fighting

He thought of himself.

Then he thought of Twissell the great Twissell also breaking the

Then he thought of Twissell, the great Twissell, also breaking the laws of Eternity.

It was as though he had always known Eternity to be all this. Why else should he have been so willing to destroy it? Yet he had never admitted it to himself fully; he had never looked it clearly in the face, until,

he had gained a new viewpoint.

His blaster fell away from the line connecting it and Noÿs's heart for the first time.

The pale streakings of dawn grayed the sky, and the bulking kettle just outside the cave was an

oppressive shadow against the pallor. Its outlines were dulled and blurred by the film thrown over it.

Noÿs said, "This is Earth.Not the eternal and only home of mankind, but only a starting point of an

infinite adventure. All you need do is make the decision. It is yours to make. You and I and the contents of this

cave will be protected by a physiotime field against the Change.Cooper will disappear along with his

advertisement; Eternity will go and the Reality of my Century, but we will remain to have children and

grandchildren,and mankind will remain to reach the stars."

with that disappearance, he knew, even as thous moved slowly into his

arms, came the end, the final end

of Eternity.

-- And the beginning of Infinity.