

# THE CREATORS

by Joseph Green

*One of the most fascinating speculations open to science fiction writers is the possibility of discovering traces of another intelligent species somewhere in the Universe—but such relics would almost certainly be incomprehensible to the mind of Man.*

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“Contact,” said Nickno.

Fasail glanced at the lean, competent scientist, a walking stereotype of his difficult breed, and adjusted the knobs on the forward viewscreen. The other forty-nine ships of the Authorised Galactic Landing Team leaped into view. They were grouped over the sunward pole of the planet, though “sunward” was a poor description for reference to a planet circling a star which had been blackened and dead for untold millennia.

Fasail switched the communications unit from ether-graph to radio-translate, his plump fingers clumsy on the adjustment dials, and sent their call signal. It was answered almost immediately by the A.G.L.T. chairman, Seffinn of Algol.

“Where have you humans been? You are eight periods late and the team grows impatient.”

“We regret the inconvenience we have caused the other team members,” said Fasail smoothly. “You will recall that we were asked to bring the two representatives from Sinkannatat, as they lacked means of transportation. They were, unfortunately, in communion with their racial memory bank when we arrived and refused to disconnect until their researches were completed. Thus our lateness.”

“Your explanation is accepted,” said Seffinn. The translator delivered his words with crisp shortness. His race of filament creatures was famous for their unswerving devotion to truth and their complete lack of tact, which was why he was chairman and the only galactic intelligence represented by one individual. “Take your position behind me and let us land at once. The robot sun has been in position over the city for seven units and the general temperature long ago reached the agreed median.”

“Understood. Signing off,” said Fasail with equal crispness, and flipped the switch to “receive only”. Nickno, who had monitored, moved them carefully into their assigned position, using only the gravities.

“You had better alert Jelly and Belly,” said Nickno as he completed his last manoeuvre. “This landing could inflict a skin injury.”

“Affirmative,” said Fasail, his dislike of the tall scientist evident in his voice, and projected an “alert” signal. His own psi powers were much too weak for actual communication but the jellyfish could reinforce him once they were alerted.

*We monitored the conversation, Fasail, and are moving into our eggs, said the voice of Belly in his mind. If you will wait a moment...Jelly is inside now and I am closing my own door. We are secure. Please proceed without further thought of us. And let me apologise again for the inconvenience...-*

*No need! No need!* Fasail projected furiously. The Sinkannatations were the most polite known intelligence, always convinced they had caused offence and always apologising for it. After a while it grew tiring. However, if you had to endure the close proximity of aliens he preferred the two jellyfish to most species. Even though installing the metal eggs which protected their globular bodies had held up their departure from Arcturus for three days, and they had been held up again on Sinkannatata by the research effort.

“Jellyfish secured,” he said aloud to Nickno, and adjusted a strap himself. His plump body did not fare too well under the stresses of gravitic landing.

Nickno nodded, and began to ease them down. This ancient planet in the Large Magellanic cloud had no atmosphere, and they followed Seffinn’s ship with ease as he moved past the pole to the sunward side. They saw the artificial sun immediately, small but intensely bright, about a mile above the top of the highest tower. The fleet followed Seffinn under it and to a landing in the huge open circle in the city’s heart. The other ships, all small cruisers, settled around them, each holding its assigned position in the grid.

“I would remind all of you that per the agreement worked out by our respective governments I am to remain in my ship while you ninety-eight individuals do the actual research,” said the voice of Seffinn as the last ship

landed. "I would also remind you all results are to be turned into me nightly, and that if any of the collected data indicates a promising line of attack I have the authority to assign specific tasks to selected teams. At the end of the third galactic there will be a full team conference. And I doubt I need remind you a compilation of *all* collected data will be given to each unit before we leave. Now start the individual lines of exploration each of you has worked out, and good variable factors to all of you."

The compartment door of the humans' ship slid aside and Jelly and Belly rolled into the room. The Sinkannatatiats propelled themselves on land by shifting water inside their skins in a regular pattern which caused a forward rolling motion of the entire body. Those skins, the only impermeable feature of their semi-liquid bodies, were tougher than human skin but not impervious to sharp objects. The intelligent jellyfish had the ability to thin or thicken the skin as required, an excellent feature when unusual conditions made it necessary for them to leave their all-water world.

What the jellyfish would learn, considering they had to deal with physical objects and were completely unmanipulative, was doubtful, but there were only fifty intelligent species in the galaxy and they could not be excluded.

Probably a lot of the other forty-eight intelligences could just as well have stayed at home, Nickno found himself thinking as he and Fasail donned their exterior suits. Not more than ten of them had discovered the galactic drive without human help, though admittedly all except the jellyfish had perfected spacetravel techniques. Many of them were riding the coat-tails of the advanced species, acquiring technical information in exchange for goods and services. Still, in an affair of this sort there was no predicting who would be most useful. Except, of course, Fasail. It was reasonably certain there was no place for an artist on this expedition. Why they had chosen to send one instead of a second scientist was beyond him. And when he was dressed, he tested his radio by saying something of this aloud.

Fasail, in communication but not yet suited up, sighed wearily, but answered, "They sent me to solve the problem if you can't, esteemed colleague. Please remember these people, whoever they were, used their great technical knowledge for artistic purposes, not to build more gadgets. It may mean a great deal more to me than you."

"That would be the joke of the millennium," said Nickno shortly as he opened the inner door to the airlock.

The four intelligences filed out of the ship, the humans staring at the massed towers of the ageless city, the jellyfish absorbing the scene by whatever means their psi senses provided. The robot sun two miles overhead gave an excellent light directly below, but created deep black shadows where the numerous multi-formed towers cut the light rays. The other forty-eight ships were disgorging their passengers also, and they were a motley assemblage. The largest intelligences present were the Cyclops, one-eyed giant humanoids forty feet high, the smallest, the thousand individuals who clung together in symbiotic partnership to form a single unit resembling a tentacled melon. Near the humans' ship on the right were the Rigellians, a vigorous young race of anthropods who had only recently acquired the galactic drive and joined the community of intelligences. They had paid no one for the knowledge and unpleasant stories were circulating about their methods of acquisition. The remaining species varied from sentient, mobile plants to creatures almost human in appearance but with a silicon life-chain. This was only the second time in galactic history all recognised intelligences had joined in a group venture, and even here distrust was so strong most teams wanted to work alone.

*We will leave you now, said a voice in both human minds. Belly and I, lacking tools, will seek the nearest building containing the formations and attempt to arrive at an understanding by absorbing impressions of art. Good variables to you, dear friends.*

*And to you, projected Nickno, unable to keep from liking the friendly jellyfish. You will need it if you seek to solve the mystery by "absorbing" it.*

They felt his derision but were not offended. The two five-foot globes rolled across the deserted pavement to the nearest building, and disappeared inside.

"Let's go," said Nickno shortly, and led Fasail towards the nearest building towards which no other team member seemed to be heading. They had previously agreed to work in a building containing all three known classes of energy phenomena, the transmitting machines with energy formations still existing in front of them, those without energy formations, and energy formations existing where apparently no transmitting machine had ever been.

The first building was a failure for their purposes, containing no energy forms at all. When they emerged again on the ground floor they debated briefly, then headed towards the nearest building on a radial line

drawn from the centre of the open circle behind them. The city was laid out in the form of concentric circles, the innermost of which was the open area where they had landed. It probably contained ten thousand buildings, most of them in excess of a mile high. But the energy formations were known to be common. That much the first exploratory ship from Algol had determined before the captain realised what he had found and lifted off to report his find to expedition headquarters. The Algolians, with their typical honesty, had decided the find was too important to be investigated by their small group and set sufficient explosives in the planet to reduce it to atoms if a spaceship attempted to land. Then the combined galactic fleet completed its tentative survey of the Large Magellanic cloud and returned to their own galaxy, and of all tales they brought with them the one about the deserted city on its lifeless planet was the most important. For that Algolian captain, a competent scientist, had recognised what the buildings contained. And no world in the galaxy could duplicate the feat of creating forms of pure energy, forms that partook of all the known properties of matter without having in fact a real existence. But perhaps the most amazing part of all, the reason why a member of the artist class had been selected to accompany Nickno, was the use to which the unknown scientists had put their unique gift. They had created art forms.

With control of the known universe at their fingertips, with such power available as was never known to a living intelligence, they had created art. Their expression-forms possessed a strange, overpowering beauty, a variety of colour and shape almost unimaginable to anyone not a fellow artist. Some of the huge buildings had been hollowed out until only the exterior remained, and filling it from top to bottom would be a single great formation. Others contained small formations of stirring beauty and infinite variety. Some showed clearly, by the open spaces near which projectors still crouched, that they had been occupied by formations now vanished. And it was into one of these nonoperable machines Nickno wanted to get his trained fingers and prying mind. A machine which created energy, projected it, formed it into immortal shapes and patterns of the designer's choosing, was an invention of the creative mind dwarfing anything which had previously been imagined. -

If one species alone obtained the secret it meant almost automatic galactic domination, if they chose to so use it. This group representing every known galactic intelligence was the answer, and even here many of the representatives feared the others would cheat.

The humans' third building met all requirements. It was built in the form of two gigantic ovoids, one sitting on top of the other. The larger lower ovoid was open from top to bottom and contained one gigantic flaming

figure, so dazzling to the eyes it could not be viewed except through protecting shields. The upper ovoid was divided into several floors containing thousands of smaller figures of all possible shapes and types. In the upper floors were many blank spaces where the projectors sitting by them had obviously failed in service.

The two men had done little talking as they climbed, but on the top floor Nickno felt moved to speak when he saw a projector forming a surpassingly beautiful figure no larger than his hand. "Do you realise, Fasail, that although the size of the formations varies from gigantic to tiny the projectors are always roughly the same?"

Fasail's voice was indifferent when he said, "Yes, that's understandable. An artist uses the same tools to create a masterpiece, large or small."

Nickno could not keep the impatience from his voice when he said, "Let's concentrate on solving the problem of *how* it's done, shall we? Look, here's another one which has stopped operating. Hmmmmm, I think this coverplate will be relatively easy to get off. Give me a hand here, will you?"

"No," said Fasail.

Nickno reared back from the machine in astonishment. "No? What do you mean, No? Of course you'll help me. How else are we going to get the answers we're seeking?"

"By reading the message they left for us," said Fasail calmly. "Look, I know you're no artist, but can't you read the meaning of that tiny figure we just passed? It's birth, or the beginning, so obviously even you should see it. I think we've made a very lucky find. This artist seems to have concentrated on telling the story of his race, from its beginnings to whatever end befell it. I propose to learn that story by studying these forms until I understand them."

"Study these forms until you—you..." Nickno broke off, almost inarticulate with anger. He calmed himself with a visible effort, then said, "Switch to the chop-channel, please."

Fasail, annoyed, hesitated then complied. Now tiny scramblers in their sets gave them protection from eavesdroppers. "What's the reason for secrecy?" he asked.

"Fasail, as leader I have been entrusted with information not given to

you. An attempt was made to bribe an Algolian official and obtain the deactivating command for the bomb left here. It was made through an intermediary but the Algolians are certain the Rigellians were behind it. If those Lobsters get the secret they are just young and foolish enough to attempt to use it as a threat, and the result could be galactic catastrophe. Now do you understand why you must help me?"

"No. I was a scientist before I progressed to a higher order of universal understanding. I doubt your ability to learn anything useful by mechanical dissection."

"And I studied art in Final School! And I find it inconceivable that you could learn anything by staring at completely alien artistic forms, forms not meant for the human mind to understand. Now stop this nonsense and get to work, or as your leader I assure you a report will be filed and you will never create another expression-form."

Fasail turned and walked away, completely indifferent. Nickno turned back to the projector with a curse, digging in his suit pockets for tools. He would have to do this alone. Oh, the idiocy of it! Even a member of the Appreciatives, that largest of all human groups, who did not create at all, would have been better than this artistic form-maker.

But a scientist of his experience might, just might, be able to grasp the concepts behind the energy projector by examining its working parts. He set to work again on the cover.

Fasail strolled leisurely through the top floor and to the series of ramps leading to the other levels. Once below the upper ovoid he found what he expected, several doors opening off the ramps to various vantage points where the huge creation in the bottom ovoid could be seen at different heights. He studied it thoroughly on the way down, being careful of his shielding. It was circular in shape, so bright its details blurred and flowed together when examined by an eye of no greater capacity than the human, and resembled nothing so much as a heatless miniature of a star. He had a feeling the crux of the puzzle was here, but for now the immensity of the creation staggered rather than inspired.

He took a last look from the groundfloor and for the first time a possible form, the hint of a pattern, emerged. It seemed a good possibility that the tiny but beautiful creation on the top floor, and this burning monster, were the two ends of a single complex form. Fasail felt a small pulse of excitement at the thought. If his guess was right and these forms held the answer to the disappearance of this great race—and then a further thought

occurred and he raced back to the top of the building, cursing the ramps and wishing the gravlifts still worked. At last he stood panting, not far from where Nickno was busily at work, and surveyed the room. He climbed on a transmitter case for greater height and his heart leaped as, ignoring the machines and concentrating on the forms, he let his eye follow the outline he found. The tiny creation was the approximate centre of a huge spiral of interlocking circles, with the last circle lying against the wall of the building and ending at a ramp leading to the lower floor.

Fasail sped for the door, too excited to walk, and received a puzzled glance from Nickno, who had succeeded in getting the cover off and was staring with fascinated absorption at an apparently simple mechanism. Fasail went down the ramp at a brisk trot and out on the next floor, paused briefly to check distances and started down the circular aisle in front of the series of forms nearest the wall. He made a full circle and discovered he was on the right track when he emerged one ring closer to the centre of the building, and then abandoned the slow route and walked directly to the floor's centre.

There was a gravlift there, as he had expected, but no ramp.

So it was simple enough. You started at the tiny bit of perfection on the top floor and walked in circles, reading all forms along the way, and dropped from the outside of the top circle to the outside of the next one and worked your way to its centre. At the end of your walk you emerged over the centre of the gleaming star, and that was the climax and the culmination.

He had the form, the mode of expression. Now he had to decipher the expressions themselves. And if he did find a clue he still had a terrible obstacle to overcome. Almost a quarter of the transmitters were inoperative.

Fasail skipped the next floor and moved down to the one directly above the gigantic figure. As he walked towards the centre of the room and the overhead view of the burning star he expected to find, his new understanding of the spiral nature of the form progression brought home an odd fact. This was the floor containing forms which existed without benefit of transmitters, and the transition from transmitter-created forms to independent ones was abrupt. In the third circle from the centre the last transmitter stood casting its beautiful creation. The rest of that spiral, and the two inner spirals, were all independent forms.

It looked very much as if the discovery of creating enduring forms



with portable machinery had been made as the unknown artist was drawing towards the end of his remarkable composition.

He checked the area near several of the forms carefully, but could see no sign where any portable device had ever been mounted. But the greater mystery was how the energy forms continued to exist after creation, while in hundreds of other cases the forms had disappeared when the transmitters ceased to function. His puzzlement was not alleviated by the observation that all forms created by use of the portable method remained in existence.

Fasail made a final check, verified that the great star in the lower ovoid was indeed an independent form, then dismissed the problem with a shrug. That was more in Nickno's line of research than his. He would have to bring the oddity to his attention, though.

On the top floor Nickno was staring in wonder at the few simple assemblies before his eyes. He had been sitting that way for half a unit, striving to grasp, to understand what was apparently some natural law on the control of energy so far above the knowledge of any known galactic race that it verged on impossibility of comprehension.

The machinery before his eyes was simple to the eyesight, but not to the brain which must absorb and understand a concept completely beyond its experience. And yet there was no other way.

He settled himself again, concentrating this time on one simple mechanism, the one that appeared to be the power source. If he could arrive at an understanding of this basic assembly, and from there work his way up to the actual transmitting mechanism...

He was still lost in thought when Fasail called on their private wavelength, "Are you ready for a rest, Nickno? I'm out of suit water."

Nickno staggered to his feet, suddenly conscious of deep fatigue, aware that he also was out of water. He had drunk and taken food tablets without being aware of it. And working themselves until their brains dulled and grew foggy was not a good way to solve their problem.

As they emerged from the round building and started towards the central circle Seffinn called them impatiently on the group frequency. "Hello, hello, humans. You are the last still out. Are you ready with your evening report? Respond, please."

Nickno answered for them and gave a brief account of what they had found and he had accomplished. He did not mention Fasail's refusal to assist him or the artist's determination to solve the mystery through "understanding" the message in the artwork itself.

When he finished Seffinn said bluntly, "I have no objection to your line of attack, but you should know that forty-one other teams have adopted precisely the same attitude. If you think of a more promising line of inquiry do not hesitate to change to it."

"If we think of one," agreed Nickno, and cut off. Of course the other teams were taking the same approach! It was the only sensible one. For creatures like the jellyfish, handicapped by lack of tools and non-technical background, understanding through "absorption" was the only way. But it would gain them nothing.

"Did you get anywhere?" asked Fasail when they had shed their suits in the ship.

"I found a logical starting point and began work," said Nickno shortly. "I'm sure that's more than you accomplished."

"On the contrary, I found both my beginning and the end," said Fasail, smiling. "However, I concede that all which lies between is at present a mystery."

Nickno repressed a sharp rejoinder to the effect it would remain so forever if left to an artist, and ate his meal. He retired for the night immediately afterwards. Fasail soon joined him, but despite his tiredness it was some time before the plump artist went to sleep.

The work went on for two more days, and slowly Nickno felt he was gaining an understanding of at least the function of the machine, if not its operating concepts. He now had it separated into its various operable stages, and some of those stages into their component parts. And he had proven one supposition to his own satisfaction. The machine tapped the planet's weak but still existing magnetic field for power. It was a start.

He had to concede that Fasail, too, was working, though his accomplishments were non-existent. The plump artist spent long hours staring at the energy forms, walking around them, examining, prying, poking. But he made no reports of progress.

The question of the energy forms on the second floor which existed

independently of machines was a puzzle in theoretics which Nickno had no intention of solving. They were here for the very practical purpose of increasing their galaxy's knowledge of the control of energy. Theory could wait.

When they returned to their ship at the end of the third day they found Jelly and Belly there, the first time the self-contained creatures had returned since leaving. Fasail smiled when he saw them, and projected, *Have you solved the puzzle, friends? If not perhaps I can assist you.*

*It is not necessary,* transmitted Jelly to both of them. There was gentle laughter in the psychic voice. *I only regret that the answer should prove so useless to Nickno and our other friends here.*

Nickno, who had not received Fasail's transmission, stared at them sourly. *We found a round building, many lengths of this ship in diameter, Jelly transmitted to both of them. Floating in its exact centre was a tiny energy form, a miniature star, and on the walls of the building other energy forms had been worked into what you call a fresco. This creation tells the story of their species, from birth till death...or immortality, if you prefer.*

"Do I understand that you three think you have the answer?" Nickno asked unbelievably, staring at Fasail and the cryptic skins of the living globes.

"If you mean how to make an energy-form transmitter, the intent of our trip, no. If you want the answer to what happened to this great race, and will perhaps happen to us some day, I can give it to you."

"Please do," said Nickno icily, impressed despite himself. He sensed that the jellyfish and Fasail had reached identical conclusions. But before Fasail could speak the communications unit blared angrily; "This is Chairman Seffinn, Chairman Seffinn. Attention all units. I am calling the scheduled conference together early because of a betrayal in our midst. The team from Rigel has just lifted. I repeat, the team from Rigel has lifted and does not respond to my signals. Since we know their puny intellect to be incapable of mastering the problem this soon we must presume they have taken a complete transmitting unit aboard their ship and are..." At that moment there was a titanic explosion far over the city, one so strong even the great towers shook slightly. For a brief moment the robot sun's artificial light was greatly augmented, and then the flaring brilliance faded and died away.

There was silence for a moment, and then Seffinn's voice, translated shakily by the communications unit, said, "Apparently our traitorous friends have met the fate they deserved. The conference is postponed until tomorrow. I will file a complete report on this affair tonight, and I hope this deters any other team who may have entertained similar thoughts."

Nickno glanced at Fasail, who had sat silently through the brief message. The plump man was frowning slightly. "The utter fools," Nickno heard him mutter, more to himself than his companions.

*Their understanding was limited, came Jelly's voice in their minds. In their hands knowledge could have been very dangerous. It is best they died.*

"Yes, but so useless," Fasail said aloud. "Nickno, I will attempt to explain what we have found. First, you will have to separate your mind from facts and begin thinking in concepts. That shouldn't be hard, since you are working towards that end. The first concept you must discard is that of universal entropy. The universe is not running down, only changing. It has always existed and will always continue to exist. The only possible changes are that in some areas the hydrogen atoms, the basic building blocks of the universe, are condensed for a time into more complex forms. Next, discard any concepts you hold regarding the destiny of Man. The destiny of all intelligent creatures is the same, and that is the one reached by these people. They started the universal cycle over again. Third, stop thinking of life as an outlaw in the system; it's an established part and has its own role to play. Fourth..."

"You are talking absolute and complete nonsense," said Nickno coldly.

Fasail sighed. "Perhaps I am. Let me put it a different way, then. The small figure on the top floor of our building represents the first spark of life on this planet. The succeeding forms tell of the growth of that life, of its gradual evolution over several billion of our years into what we consider intelligence. After intelligence appeared the world population increased greatly, but never strained the resources of the people. Due to some peculiar properties of this planet they never emigrated, existing only on this one sphere. They reached a population," he glanced at their top viewscreen, where their own distant galaxy glowed brightly, "of approximately a hundred billion. They reached the point attained by ourselves only a few thousand years ago, a complete absence of need. Like us, they diverted their energies into art and into the increase of

knowledge for its own sake. They combined science and art to form what is perhaps the ultimate in artistic expression, the energy expression-forms. And always they dug deeper into the greatest mystery of all, the meaning of life. And they found it. Or rather, they found that life is a natural part of a cycling universe. There is no beginning and no end, only change. Their greatest step forward was when they learned to duplicate by the mind alone what it had formerly taken a machine to do, the creation and freezing of energy into semi-permanent form. From there it was only a small jump to an understanding of the universal life-cycle. My guess is that when the first intelligence made his discovery it was flashed to all the hundred billion others almost instantly.”

He paused, staring again at the viewscreen and their own wheeling spiral of stars. “Several of them stayed when the great emigration started, even at the risk of having to travel further than the rest in order to find sufficient free hydrogen for growth. They wanted to finish their current works, most of which dealt with their new understanding of the universal life-force. I’m not sure we should be grateful.”

Nickno felt a coldness beginning to work its way up his spine. Jelly and Belly were listening silently with their psi senses, and not disagreeing.

“I see you’re beginning to grasp the principle,” said Fasail. His voice was gentle and without mockery. “Yes, the ability to control energy with the mind alone was only a short step away from the mind, an entity conscious of itself, to becoming primarily energy. And once a mind became free energy it exercised its sovereign right to accumulate more energy and start the growth process again. Only there isn’t room for growth in an existing galaxy. The hundred billion inhabitants left, separated into a hundred billion paths, though all of them headed in the same general direction. The nearest open area.” He glanced again at the viewscreen. “Don’t you understand yet, Nickno? The Large Magellanic Cloud is the child of the Small. Our galaxy is the child of the Large. It is fair to say that on this planet every living individual gave birth to— a sun.”