

A COURTING

by Nabanita Sen

Fair lady there you go
Your hair is swinging to and fro,
Your eyes have the autumn glow
Your name is what may I know?

Kind sir your choice of words
Make me blush from tip to toe,
I want to speak but shy am I
But on second thoughts that's a lie.

Honesty and beauty all in one,
No, (pause) shyness wouldn't make you run.
Sit on this bench and talk to me,
Let my curiosity set me free.

Genista (pause) that is the name,
My face is my fortune and my fame,
My age is sixteen, but I'm a maid
I have to leave now I'm afraid (getting up).

Wait Genista why so fast?
Make a promise and then walk past,
Promise to meet me, tomorrow this spot,
Same time, same bench forget it not.

(Blushing) Then I swear, I'll meet you here,
Let me go now, for my father I fear.
Goodbye my lord, now I'll take my leave,
See you tomorrow if my father I can deceive.

Run my fair maiden, I'll be waiting next day,
Bye sweet princess, my rose of May.
When will night fall, Oh! when will, sun rise?
For when I hear your voice I feel in paradise.

Good-morning my princess with hair like hay,
So you've come my Queen of May.
Sit down and let me hear you speak,
For your voice takes me to the highest peak.

Good morning my lord I have come,
I mixed some pills in my father's rum;
He wants me to marry some village bum,
I want some help so, give me some.

I'm not the Moorish prince to throw away my pearl,
Now let me watch the wind to play with your curl;
Forget about the bum and look through my eyes,
But since you're worrying let us rise.

But oh dear sire! where shall we go?
It's a burden to you—don't you know?
But dear Genista I love you so,
I can even starve a year in a row.

Therefore let us go,
But where, let me know?
Where fate takes us lady,
But it isn't steady.

Think of our lovely future,
But that is bizarre,
Your beauty I see and forget to breathe,
But someday I'll lose my 32 teeth.

You have a delightful humour,
Why thank you sire.
See, I love you for what you are,
I think that you want to prove that far.

So what are we waiting for, give me your hand,
I'll be delighted rise to wear your band
So you are mine, my rose of May,
Amen, to that I will love you everyday.

THE POISON ROSE

by Reshmin Haq and Jesmin Haq



SO you say there has been three deaths near this flower bed", this was the voice of Mike Camble a CID Agent. He and his friend, a Botanist, Phillapa Cork, came to a country side of England to investigate mysterious deaths near a very attractive rose bed.

"Yes", replied Mrs Martin their friend who called them to look into the matter. The postmortem report say that all three of them had Mexican rattle snakes poison in their blood. Phil rambled as she walked around the sealed park. "Yes absolutely right, do you have any idea, why?" Mrs Martin rather asked Phil. "No not really, not until I take a deep look at the flowers," said Phil. "Since there are no other apparent evidence on the bodies the flowers, the stems or the grass must be dangerous" commented Mike. "You are right"

Phil agreed. By the way Mrs Martin, do you have any idea, about any body having a snake or something like that around here. At this Mrs Martin felt a little nervous but very calmly she answered. "Yes! Mr Hord used to have a... a rattle, but he sold it two months ago". "Why did he sell it, Mike asked quickly. "Oh! I really do not know" she answered, "one more thing, did the police ask or charge this Mr Hord, after the murders" asked Phil. "Not, actually because he had already sold it," answered Mrs Martin. But the first murder was three months ago, didn't the police investigate Hord then" asked Mike slipping his arm in Mrs Martin's. "Well they did, but I don't know much about it" replied Mrs Martin, a little puzzled. "You need not to be puzzled Mrs Martin," Phil said as they

THESE times are for comets. We observed the fascinating comet Hyakutake (C/1996B2) in the early part of 1996 and now we are waiting for another spectacular view of comet "Hale-Bopp" — that will be one of the brighter comets ever seen in this century if all prediction made by Astronomers are correct. The comet is gaining brightness everyday and now it has come to the naked eye visibility (of course from dark area). We will describe it's path and informations to observe it. But at first let us know it's early history.

The Discovery
23 July 1995, Allen Hale at Cluderoft in New Mexico was observing a globular cluster named "M70" in constellation Sagittarius. He was using a 16" reflecting telescope and spied the fuzzy glow of comet at his telescopic field. The same night Thomas Bopp, observing near Stanfield, Arizona with a 17.5" dobsonian telescope, also noticed the comet. In this way the two had discovered the comet coincidentally. At the time of their discovery the comet was near a star call Delta Sagittari. Later the International Astronomical Union gave the comet's international name — "C/199501". But for their discovery the comet in also named as "Hale-Bopp".

Early Investigation
At first, astronomers thought comet Hale-Bopp was undergoing an outburst that made it briefly visible despite its distance. Comet "Schwassmann-Wachmann-1" had shown similar behaviour, suggesting that Hale-Bopp could fade again as it approaches the sun. Others recall comet "Kohoutek" in 1973, a first time visitor from the oort cloud (where the comets are born) that lost much of its volatile material on its way in. Also after a week of discovery W Offutt took the comet's photograph with charge-couple device (CCD) using 0.6 meter telescope and found that the coma of the comet is very asymmetric. At that time the coma was elongated highly towards the sun which confused the discoverer to think it as a tail. These glum thoughts have been assuaged, however, by an 18th magnitude blur found by Robert H McNaught (Anglo-Australian observatory) on a plate taken in April, 1993 with the 1.2 meter UK Schmidt telescope. Situated only arcminutes from Hale-Bopp's back tracked orbital

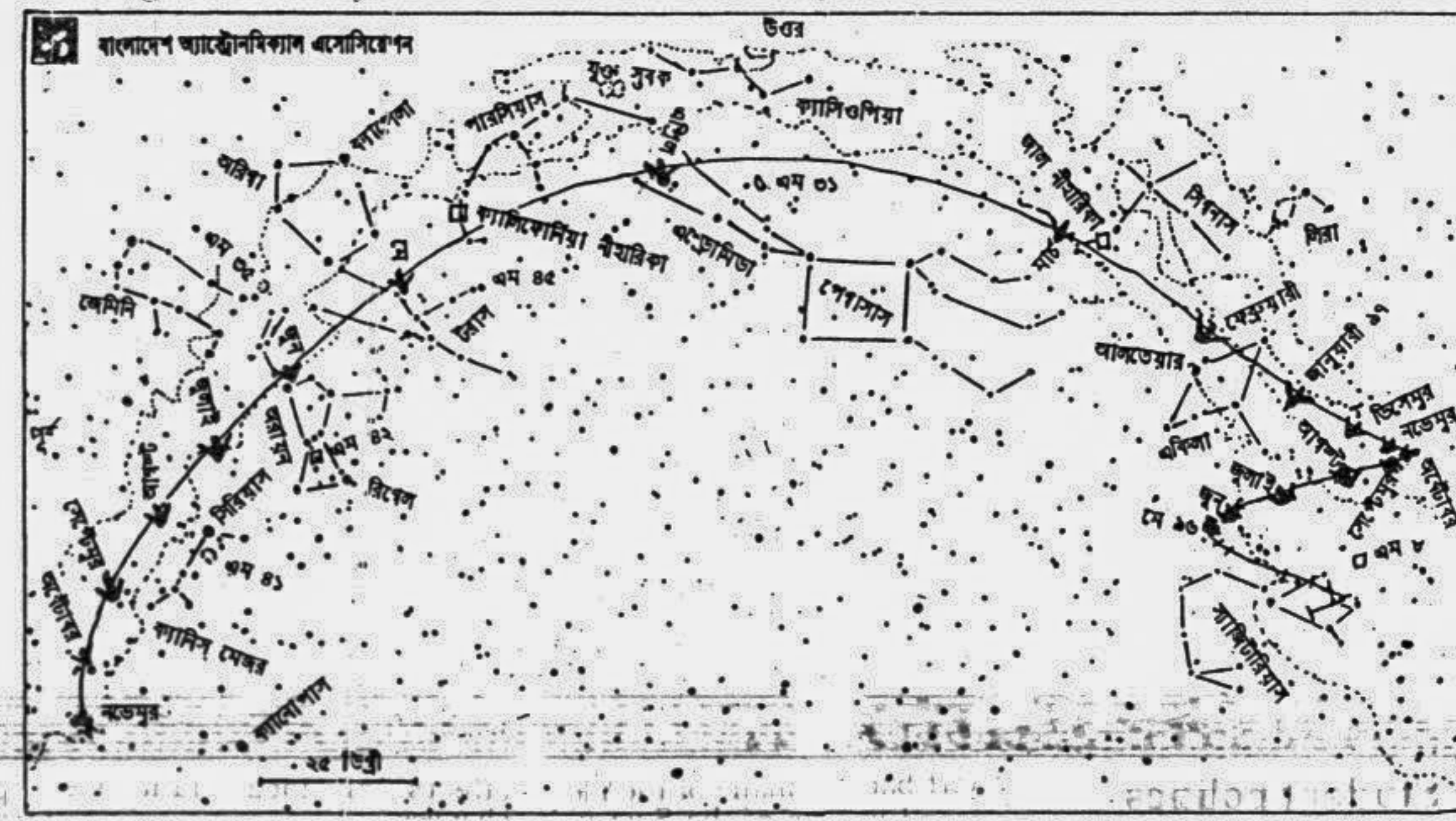
Facts
THE world's first anti-gravity device which could have an immense effect on everything from transport to power generation has been developed by researchers at the Tampere University of Technology in Finland.

path, the 3.7 arcsecond long trail was surrounded by a faint 0.4 arcminute coma.

Assuming the 1993 image indeed depicts the comet, Brian G Marsden (Central Bureau for Astronomical Telegrams) issued new orbital elements on IAU circular on 6198 confirming perihelion on April 1 1997, just inside the Earth's orbit but 1.3 AU (AU=Astronomical Unit=93,000,000 miles) from Earth itself.

Traveling in a plane perpendicular to the ecliptic, the comet follows a highly elongated elliptical path with an aphelion more than 10 times that of Pluto's orbit. In these respects as well as in its visibility long before perihelion, Hale-Bopp resemble the Great comet of 1811, whose tail grew to 70° and stretched more than 1 AU in length.

Brian Marsden suggests Hale-Bopp's total brightness could reach magnitude — 2 which is same to Jupiter's brightness. From the comet's nuclear brightness, Irgacio Farrin (University of Andes, Venezuela) hypothesizes that it's core may span some 100 to 150 Kilometres — five to ten times larger than Halley's and



The device is said to significantly reduce the weight of any object placed above it. Such has been the enthusiasm generated by the Finnish claim that the US-based NASA has funded research into how the anti-gravity effect could be turned into a lucrative proposition.

An example of the application of the anti-gravity device

estimated the comet could reach magnitude-1 in late March 1997 — as same as "Sirius" — the brightest star of the sky.

Hale-Bopp's course — already well established by hundreds of charge — couple device (CCD) measurements — from Astronomers world wide — will give observers in midnorthern latitudes ringside seats to it's 1997 perihelion. They will see the comet stand some 20° above the northeastern horizon before the start of morning twilight during late February and early March of the year. Entering the evening sky some 45° north of the sun, it will again be 20° up as darkness falls through most of April — though how bright it will become is still anybody's guess.

Let us follow the Hale-Bopp's path among the sky. Hopefully it is gaining brightness and already by March of 1996 it has come to binocular visibility and by August it has come to naked eye visibility as its magnitude has fallen to 6 — same to the faintest stars magnitude visible with naked eye. But to observe with naked eye you must have a dark sky condition. Now we will tell you it's movement with respect stars

and some deep sky objects. These will help you to identify the comet in the sky.

These are: February-March '97

March-April '97
These periods are chosen according to the change of comets appearance. While you will read the following description please look at any detail star chart to match it and then search it in sky. We also provide a chart here.

February-March '97

The time is for early risers. Hale-Bopp is now in the morning sky. Already it has crossed Aquila, Vulpecula and Cygnus constellation. It's brightness on early February was +0.9 and at the end of March will be — 1.7. This is the best time for observation as the morning weather is very good and sky is clear compare to evening sky. In naked eye you will be able to catch the comet as a starlike object. But binocular will express the real treasure. But at the second half of March it will again be back to evening sky. Then the tail of the comet will be the most interesting one. The tail will span 15° to 20° area of the sky. Comet will move in north-

east direction and will come near Milky way's bisecting area. The first three week of February was ideal time to observe it as the Moon at that time was in the evening sky. Unfortunately on March observation will be unfavourable as the comet will come in evening sky and Moon will create trouble. But there will be a rear opportunity for the observers at North Asia to see the comet during a total solar eclipse. On 9 March there will be a total solar eclipse and the observers there will be able to watch it during totality.

The Hale-Bopp will pass many deep sky objects during end March. There will be a big opportunity for wide-field photograph. During March 8 to 10 the comet will pass a few degree north of the galaxy NGC 7331 of constellation Pegasus. From 23 to 27 March comet will pass 3° north of famous Andromeda galaxy (M31) of constellation Andromeda. Obviously that will be a fascinating pair.

March-April '97

We are slowly approaching to the end of Hale-Bopp's course. It will reach perihelion on 1st April. Then comet will be in Andromeda constellation and will reach it's highest brightness. Comet will be found in evening sky 15° to 21° above the horizon. Favourable condition will remain upto 14 April. After that Moon will make trouble.

At the end of April comet will again come close to sun and sunlight will interfere to observe. It's brightness will decrease. Before covering by sun's glare the comet will pass some deep sky objects. On 4 April it will pass NGC 891 — a galaxy in Andromeda. Then on 6 to 7 April comet will pass between open cluster M54 and faint galaxy NGC1003 in Perseus constellation. The separation between the objects is 2°. On 14 April it will pass to the south of open NGC 1342. Five days later on 19 April comet will pass between the California nebula (NGC 1499) in Perseus and the pleiades open cluster (M45) in Taurus. But the Moon in to the

full and so observation will be unfavourable.

The long marathon of Hale-Bopp ends here. Because on May and June it will remain at constellation Taurus and Orion respectively which will not remain in the night sky at that time.

Note: (1) The description will favour mainly the amateur astronomers. But if you are not connected with astronomy or sky watching please start recognizing the constellations of night sky — at least those are mentioned here. The article named "The Night" which was published in Daily Star & Bhorer Kagoj Magazine may help you.

(2) We used several designation for the objects. The prefixes are: M= Messier catalogue, NGC=New General Catalogue, IC=Index Catalogue. The numbers after catalogue name indicates the serial no of the object in catalogue.

(3) If you extend your hand forward at full length then the upper face of your pump will cover 10° area of the sky.

Hale-Bopp's orbital elements
Perihelion time : April 1, 1997
Distance at perihelion : 0.9130230 AU
Eccentricity of orbit : 0.994413
Argument of perihelion : 89° 41' 42.2"
Note: For explanation please consult any book on Astronomy

Hale-Bopp observation committee:

Bangladesh Astronomical Association has established "The Hale-Bopp observation" to observe the comet lead by Astronomer Dr. A. R. Khan. The team had at first observed the comet on 12 June 1996. Using 20x50 monocular they found it near an open cluster "NGC 6774" in Sagittarius. After regular observation on 13 February, 1997 they observed the comet from a dark sky condition at Keraniganj near Dhaka. They observe the tail of the comet elongated some 1°-2° and very bright coma at 0445 BST. They have taken photographs and have drawn it's appearance seen through telescope. Persons interested to get any information of observation are requested to communicate at the following address in every Monday and Thursday between 4 pm to 7 pm: Bangladesh Astronomical Association, London House 46, Dr. K. R. Khan Road, (Former New Elephant road) Dhanmondi, Dhaka-1205.

Courtesy: Bangladesh Astronomical Association.

Julia in 3058

by Sarwat Reza



THIS is the year 3058. It is the machine world, but it is not bad as people thought it would be in the 21st or 22nd century. Nature is still alive and there is no concrete jungle in this world. The present world is as beautiful as ever and the standard of living is very high. We have trees, birds, rivers, forests and animals.

Nature is not threatened in this machine world as there are no pollutants. All the energy such as coal and oil of the world is replaced with hydraulic power which we get from water. By breaking the H2O, which is the water composition, we get H2 and O. We use the H as energy. By this process there is no black smoke or any other kind of air pollutants. The vehicles in the road do not give out carbon dioxide anymore but only little puffs of steam chemical and noise pollutants are now also under control. Our lifestyle could be understood by an example:

Julia is a thirteen year old girl. She lives with her family which is her parents because she does not have any other siblings.

Julia likes to wake up early to enjoy the bright sunshine which pours into her room and listen to birds chirping outside. On weekdays, she attends her school. She goes into the toilet and brushes her teeth, for this she needs no toothbrush. She just opens her mouth wide in front of a small, round type machine and her teeth gets

cleaned. Next she walked through a small corridor inside her toilet which had blue rays coming out from inside and that is how she finished taking her shower. She quickly changed her clothes and went to the kitchen to prepare her breakfast. She went to the "Meal Machine" and pressed some buttons. Her breakfast came out of the machine. She finished her breakfast and said goodbye to her parents and left for school on her bicycle. Before her class started, she swallowed her "Memory Pill" which could help her to remember everything discussed in the class. As she headed to her next class she suddenly felt a shock wave passing through her brain. She realised it was her best friend Lisa calling her "Thought Machine".

"Earth to Julia!" Lisa was saying. "The 'Thought Machine' enabled her brain to communicate without even using their vocal cords. Their brain cells would vibrate, sending the message they were thinking of. Sorry, I was thinking of something else. So why did you call?"

"Nothing important. I just felt like calling, so I did." "Oh," said Julia. "So, are you going to James' party?" said Lisa.

"I guess so." "Okay, bye then." "Yeah, ciao." Julia finished school and went back home.

Her parents were already sitting in the dining table. "Honey, you're late," said her mother. "Sorry, Mom." She finished her lunch and went to her room and quickly finished her homework. At 8 o'clock in the evening she watched the documentary film on "The People of Mars."

After finishing her dinner she went to bed.

And thus ended another day for Julia in the year 3058.

Question of Love

by Samia Israt Ronee

If I write down your name, With the ink from the rainbow, On the paper of the sky, Would your reply be still "No"? My love was never a game, My heart's crazy for you, you know. Then why do you say the word "Bye"? Why is your reply always a "No"? I have neither beauty nor fame: I don't have any favours. The why do you make me feel so shy? Why do you always utter "No"? You are my most precious gem, You are my own little swallow, You are the one on whom I rely, Will you still tell me "No", "No"?