

Zeus bug is ultimate male chauvinist

Science

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As life goes, it doesn't get much better than for male Zeus bugs. The tiny water bugs that are common along Australia's east coast have an easy life. Their female partners provide free food, transport and unlimited sex whenever they want it.

All the advantages in this relationship seem to fall to the male with no obvious advantage for the female, yet the female Zeus bug seems a willing partner in this one-

sided affair," Mark Elgar of the University of Melbourne in Australia said.

Elgar and his colleagues, who studied the unusual creatures, admit to being baffled by their behavior, which defies the norm in animals and insects.

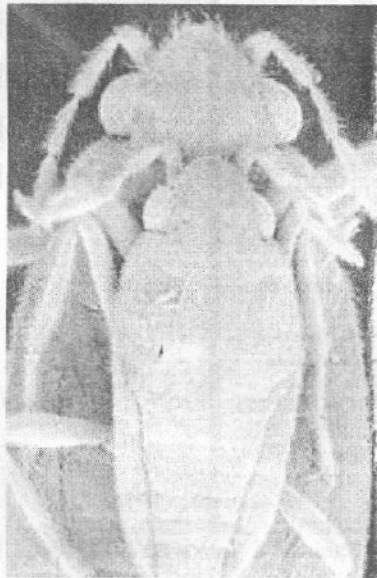
The male Zeus bug is half the size of the female and hitches a piggy back ride on the female which also feeds him. The male can ride the female, feeding and mating for up to a week.

Why the female puts up with

feeding and carrying the male around is a mystery, but Elgar and his colleagues suspect it is less tiring to put up with one male partner than several.

"A constant stream of suitors wanting to participate in a polygamous free-for-all could possibly lead to greater harassment, leading to the female expending more energy and placing herself at greater risk of harm than if she doted on just one male," Elgar said in a statement.

The male Zeus bug simply can't lose. He not only gets a free ride but is assured that his sperm, and not his rival's, is used to create the next generation. ■



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The technology gap

The B-52 bomber has become the symbol of the new technological superiority of the American military might. Flying at high subsonic speed, 50,000 feet above earth, beyond the range of any anti-aircraft gun, B-52 can carry 31,500 kilograms of lethal weapons—bombs, mines, air-launched cruise missiles, Harpoon anti-ship and Have Nap missiles. The programme that resulted in the B-52 began in 1946. By 1998, the cost of a plane had reached 53.4 million dollars. Today, it is the most important component of the American imperialism; it allows the US military to wipe out an entire region within hours. Surpassing all other long-range aircrafts, B-52 bombers are expected to remain in service into the year 2045, almost a century after its development began.

Used in the first Gulf War, then in Afghanistan and most recently in Iraq, these planes have not only killed thousands of civilians, they have also defeated the minds of a whole generation of army officers in the Muslim world who point helplessly to the devastating power of these planes and express their utter inability to design any war strategy against such airpower.

True, no one can withstand the piercing cry of the BUFF (Big Ugly Fat Fellow), as the crew often calls it. When the plane takes off with a crew of six, everyone knows that it will most likely return after several hours, with the same six members of its crew, leaving behind unrecognisable bodies and huge craters.

But this deadly airpower is merely the tip of the iceberg; the bigger issue is the technology gap between the United States of America and the rest of the world. When viewed in the perspective of contemporary politics, conflicts and fault-lines, it is clear that this technological superiority of the US military is not going to be used against Europe, Russia, China or Japan; it has been and will be used against Muslims only; even Korea, in spite of all the rhetoric that has crossed airwaves, is not a target.

In general, the question faced by the Muslim world, under siege and under a policy of reconfiguration through overt and covert actions of the United States, is simply this: What can be done to close this technology gap which has become most apparent in the recent attacks on Afghanistan and Iraq but which is a far more serious issue than the power of the B-52 bombers.

In its essence, the issue goes back to the emergence of the Scientific Revolution in Europe and the subsequent colonisation of the Muslim world. Among the most important contributing factors, which helped the European powers to colonise the Muslim world, was their technology which provided superior arms as well as helped in the accumulation of wealth through a process of industrialisation that was to change the entire spectrum of the individual and collective lives of humanity.

This empowerment of the West through a scientific revolution that was quickly used to develop tech-



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nologies which, in turn, allowed it to reach out and exploit the natural resources belonging to other people at an unprecedented scale, did not remain unnoticed by the Muslim leaders of the nineteenth and early twentieth centuries. They did realise their shortcomings and tried to "catch up" but the dice was loaded against them and it has remained so ever since.

As a result of this realisation, the most popular slogan of the reformers of the last two centuries has been the development of science and technology. But this is merely a slogan, devoid of producing any results because, in real terms, no one has been able to produce a blueprint of a viable practical plan that would bridge the gap between predominantly non-technological societies and the West. True, there have been numerous attempts, ranging from programmes of technology transfer to sending young scientists to the West. But all of these attempts have failed because these are simply inadequate attempts to catch up with an ever-expanding, highly funded, and institutionalised enterprise that is producing new discoveries at an astonishing speed.

Thus, those respectable men of our establishment who claim that they would produce wonders if only the state would pump a few hundred million dollars into the science budget, are merely making fools of themselves or are fooling with their nation. They either lack any real understanding of the vast scientific and technological enterprise that has come into existence in the West over the last three centuries or are hard core criminals who are using their clout to fill their pockets. Anyone who knows even the most basic facts about the connections between Western science (and technology) and its military and industry, would know that this gigantic system — that keeps producing new products on a daily basis — is simply unbeatable by any other nation. The institutional basis of this vast enterprise, located at the universities and research laboratories, the never-ending supply of fresh men and women dedicated to their professions, the mutually beneficial financial rewards for all involved, the elaborate and network that carries products of research from the laboratories to the market and numerous other components that make up this enterprise are the products of an organically grown system; by merely importing an instrument or technique, no nation can hope to bridge the technology gap.

It is true that specific application of certain technologies, clandestinely obtained from a Western laboratory, can produce enriched uranium which can be used to make an atomic bomb but this relatively minor achievement has nothing to do with the pro-

cess that would close the technology gap.

In purely military terms, given this unbridgeable gap between the West and the rest, what are the options for those who hope to resist their Americanisation? What can be done by any nation that does not want to surrender its life-style, culture, beliefs and aspirations to the advancing McDonald culture?

Apparently, there is no hope for anyone to be able to withstand carpet bombing by B-52 bombers. The powerlessness of fighting such lethal military might has given birth to scores of defeated generals and intellectuals who argue that, in the final analysis, it is better to be an ally of the Americans because the alternative is nothing but being bombed back to the stone age. While this may be true on purely military grounds, there are still other factors and possibilities which need to be considered before a total and unconditional surrender.

The first possibility is related to the evolution of a science infrastructure which bypasses an entire phase of scientific and technological development by focusing on the next generation of technologies which might produce an answer to B-52 bombers. A simple (and thus inadequate) example is that of technologies related to telephone systems. Any country now entering the communication age would be better off if it developed satellite communication systems rather than laying cables for a country-wide telephone system. Such a country would not have to go through the phase of wire-based telephones before establishing satellite systems.

The second point to consider is the fact that everything in the arsenal of the US military is based on computerised sub-systems. These systems are highly dependent on the stability of electromagnetic fields. Thus, there are possibilities for a group of creative scientists and technologists to develop next generation defence systems that use the yet unexplored possibilities of producing high energy magnetic fields that would simply disrupt and stall the huge arsenal of the United States and thus make it unpredictable and hence unusable. There are already reports about research on the so-called e-bombs which produce high energy magnetic fields which interfere with the computer systems. There is no reason why a small and dedicated group of Muslim scientists cannot produce such devices. Thus, even though the technology gap cannot be bridged, it might be possible to booby-trap it.

In addition to a systematic plan to raise the next generation of scientists through an institutional system, there is a need to establish institutes where a small number of creative individuals, who are not defeated by the awe and shock of the American military might, can pool their creative energies to produce meta-level theories and practical ways to resist and eventually overcome this unrestrained, immoral and aggressive American military might which is playing havoc with the international norms and civic laws humanity has evolved over centuries.