

TERREL MIEDANER

The Soul of Martha a Beast

Jason Hunt thanked him, breathed a deep inward sigh of relief, and called his next witness.

Dr. Alexander Belinsky, professor of animal psychology, was a short, rotund individual of brusque and businesslike manner. His initial testimony brought to light his excellent academic credentials, qualifying him as an expert witness in his field. That done, Hunt requested the court's permission to allow a demonstration of some complexity.

There was a brief discussion before the bench as to whether this should be allowed, but as Morrison had no objection, it was permitted in spite of Feinman's reservations and the bailiff shortly escorted a pair of graduate assistants into the room, pushing before them a cart filled with a variety of electronic equipment.

Because the taking of court records had been historically limited to verbal transcription, demonstrations of the sort planned here had not been permitted until recent years, when specialized laws designed to speed up courtroom procedure permitted a court reporter to videotape such demonstrations for the official record. But as Feinman watched one assistant set up electronic paraphernalia, while the other left momentarily and returned leading a chimpanzee, he began to regret the onset of modernization.

The animal appeared nervous and afraid of the crowd, holding itself

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Close to its handler as it was escorted into the courtroom. Upon perceiving Dr. Belinsky, the creature jumped into the witness box with obvious displays of affection. Under Hunt's direction, he introduced her to the court as Martha, one of twenty experimental animals he used in his latest researches, the results of which had been recently published in book form. When asked by Hunt to describe these experiences, he proceeded as follows.

"For years it was assumed that animals had not developed a humanlike language facility because their brains were deficient. But in the early sixties some animal psychologists proposed that the only reason chimpanzees couldn't talk was because their primitive vocalizing mechanisms prevented them from sounding words. They proceeded to test this theory by devising simple symbolic languages which didn't involve speech. They tried coloured cards, pictures, magnetic slate boards, keyboard devices and even the international sign language, all with some degree of success.

"Although these experiments proved that symbolic speech is not restricted to man, they seemed also to show that the language capacity of the most intelligent animals was severely limited. When a clever undergraduate student subsequently devised a computer program capable of duplicating every language achievement of the cleverest chimpanzees, interest in the animal speech experiments diminished significantly.

"Nonetheless, it seemed that these animals might be limited by the constraints of the previous experiments, just as they were limited earlier by poor vocal chords. Man has a speech centre within his brain, a specialized area devoted to the interpretation and creation of human language. Chimpanzees do communicate with each other in their natural state, and also have a specialized brain area for their natural system of chattering and yowling.

"It occurred to me that, by their use of hand motions to bypass vocal chords, the previous language experiments had also bypassed the chimpanzee's natural speech centres. I decided to try to involve this natural speech centre while still bypassing the animal's primitive vocal cords, and succeeded with the equipment you see before you.

"If you look closely at the left side of Martha's head here, you will observe a circular plastic cap. This covers an electrical connector permanently imbedded in her skull. To this are attached a number of electrodes which terminate within her brain. Our electronic equipment can be connected to Martha's head so as to monitor the neural activity of her speech centre and translate it into English words.

"Martha is only a seven-electrode chimp, one of our slower experimental animals. She 'speaks' by stimulating certain of the implanted electrodes, although she doesn't realize that. The pattern of the electrode

signals is decoded by a small computer that outputs her selected word on a voice-synthesizer. This technique enabled her to develop a natural sort of feedback-response mechanism. Except for a deficient grammatical base and lack of inflection, when we connect up her transistorized vocal chords she will sound quite human.

“Don’t expect too much, however, for as I mentioned, Martha is not one of our star pupils. Although her seven-electrode system can be decoded into one hundred twenty-eight distinct words, she has learned only fifty-three. Other animals have done much better. Our resident genius is a nine-electrode male with a vocabulary of four hundred seven words out of five hundred twelve possibilities. Nonetheless,” he added as he reached for her connecting cable. “I believe you’ll find her a pleasant conversationalist.”

As Dr. Belinsky proceeded to connect her to the world of human language, the chimpanzee indicated delight and excitement. She jumped up and down and chattered as he reached for the cable handed him by one of his student assistants, then sat still while he removed the protective cap and mated the halves of the connector. As soon as they snapped together in positive lock she jumped up again, seemingly oblivious to the cable attached to her head, as she pointed to a small box the scientists held in one hand.

“For Martha,” he explained, “speech is an almost ceaseless activity for her electronic vocal chords never tire. In order to get a word in I use this control to literally shut her off.

“All right, Martha, go ahead,” the psychologist said as he switched her sound on.

Immediately a small loudspeaker on the equipment burst into noisy life. “Hello! Hello! I Martha Martha Happy Chimp. Hello Hello -- !

The beast was cut off with a soft electrical click as the courtroom sat in dumb amazement. The sight of the animal opening and closing her mouth in mimicry of the sexy female voice pouring from the speaker was rather difficult to assimilate.

Her teacher continued. “How old is Martha?”

“Three Three Martha Three – “

“Very good. Now relax, Martha quite down. Who am I?” he asked, pointing to himself.

“Belinsky Man Nice Belins – “

“And what are those?” he asked, his hand sweeping the packed courtroom.

“Man man People Nice people – “

The researcher cut her off again and turned to the defense attorney, indicating that he was ready to proceed.

Hunt stood and addressed his first question. "In your opinion is this animal intelligent?"

"Within the broad definition of 'intelligence' I would say yes, she is."

"Is she intelligent in the human sense?" Hunt asked.

"I believe so, but to form such an opinion of her yourself, you would really have to treat her like a human, talk to her, play with her. To that end I brought along a box of her favourite playthings. She will devote her limited attention either to me, or whoever has custody of her treasures. I suggest you examine her yourself."

From the corner of his eye Morrison observed the judge watching him in anticipation of an objection, which he dutifully provided. "Objection, your Honour. I should at least like to hear Mr. Hunt assure us this testimony will be relevant."

"Well Mr. Hunt?" Feinman asked.

"It is relevant, as will become clear."

"And if it is not," Feinman promised, "rest assured it will be stricken from the record. Proceed."

Hunt opened Martha's box, an oversized jewelry box painted in bright red, and after looking over its contents, he reached in and retrieved a cellophane-wrapped cigar. As he held it up the chimpanzee piped. "Cigar Belinsky Bad Bad Cigar." To which she added her normal chattering and some flamboyant nose-holding for emphasis.

"What's an old cigar doing in your toy box, Marha?" Hunt asked.

"What? What Wha –" she returned before Belinsky cut her off.

"The question is a bit complicated for her. Try simplifying it to key words and short verbs," he suggested.

Hunt did. "Does Martha eat cigar?"

This time she responded, "No Eat No eat Cigar. Eat Food Food Smoke Cigar."

"Rather impressive, Doctor," Hunt complimented the scientist. Then he turned to Morrison. "Perhaps the prosecution would like an opportunity to examine the witness?"

Morrison hesitated before agreeing, then took the box holding the animal's playthings. With undisguised discomfort he picked out a stuffed teddy bear and asked the chimp to identify it. Immediately the beast began to jump in agitation as her artificial voice tried to keep up with her.

"Man Bad Bad No take Bear Martha Bear Help Belinsky Help Martha Taske Bear Hel –"

As soon as she was cut off, she reverted to her natural chattering,

while the researcher explained her paranoia. “She detects a level of hostility in you, sir. Frankly, I sympathize with you, and assure you that many people besides yourself are uncomfortable with the notion that an animal might speak intelligibly. But she is becoming somewhat agitated. Perhaps if someone else could interview her – “

“I would like to try,” Judge Feinman interjected. The participants readily agreed, and as Morrison brought the box to the bench, Martha subsided, unoffended by the prosecutor’s scowl.

“Is Martha hungry?” Feinman asked, perceiving several ripe bananas and candies within the container.

“Martha Eat Now Martha Eat – “

“What would Martha like to eat?”

“Martha eat Now – “

Would Martha like Candy?”

“Candy Candy Yes Can – “

He reached in and handed her a banana, which the animal adroitly grasped, peeled, and stuck into her mouth. Once while she was eating, Belinsky turned her ion for a moment, catching parts of an endless “Happy Martha” readout that appeared to startle the chimp slightly. When done, she faced the judge again, opening and closing her mouth soundlessly until her handler switched on the audio. “Good Banana Good Banana Thank you Man Candy Now Candy Now.”

Pleased with his results, Feinman reached into the box and offered the requested treat. She took it, but instead of eating it immediately, Martha again pointed to Belinsky’s switch box, indicating that she wanted to be heard.

“Cigar Cigar Martha Want Cigar – “

The judge found the cigar and held it out. She took it, sniffed at it a moment, then handed it back. “Nice Nice Man Eat Belinsky Cigar Thank You Thank You Man –“

The judge was both fascinated with the creature’s intelligence and charmed by her childlike simplicity. The animal sensed his affection and returned it, to the delight and entertainment of the court. But Hunt did not want to prolong this, and after a few minutes of interspecies conversation, he interrupted.

“Perhaps I should proceed with the testimony, your Honour?”

“Yes, of course,” the judge agreed, reluctantly handing over the animal, who had by this time joined him on the bench.

“Doctor Belinsky,” Hunt continued after Martha had settled down, “could you briefly state your scientific conclusions regarding the intelligence of this animal?”

“her mind differs from ours, the scientist said, “but only in degree. Our brains are larger and our bodies are more adaptable, consequently we are superior. But the difference between us may yet prove to be embarrassingly slight. I believe that Marta, deficient as she is, still possesses humanlike intelligence.”

“Could you draw some clear dividing line between the mentality of her species and ours?”

“No. Clearly she is inferior to the normal human. Yet Martha is unquestionably superior to deficient humans at the idiot level, and a peer to most imbeciles. She has an added advantage in that she is cleaner and can care for herself and offspring, which idiots and imbeciles cannot do. I would not wish to make clear-cut distinctions between her intelligence and ours.”

Hunt did not ask his next question immediately. He had, of course, planned this experiment with the researcher beforehand. To complete the testimony he was to request one more demonstration, which by its nature could not have been practiced. But he was not sure that Belinsky would go through with it as planned. In fact he was not entirely sure he himself wanted the demonstration performed. Yet, there was a job to do.

“Doctor Belinsky, does the humanlike intelligence of this creature merit corresponding humanlike treatment?”

“No. We treat all laboratory animals decently, of course, but their value lies only in their experimental potential. Martha, for example, has already outlived her usefulness and is scheduled to be destroyed shortly, for the cost of her upkeep is greater than her experimental value.”

“How do you go about eliminating such an animal?” Hunt asked.

“There are a variety of quick and painless methods. I prefer an orally administered poison contained in a favourite food and given unexpectedly. Although that may seem a cruel trick, it prevents the animal from anticipating its fate. The fact of death is inevitable for all of us, but for these simple creatures at least, the fear of it need never reach them.” As he spoke, Belinsky extracted a small piece of candy from his coat pocket.

“Would you demonstrate this procedure before the court?” Hunt asked.

As the scientist offered the candy to the chimpanzee, Feinman finally realized what was being done. He voiced an order to halt the deadly experiment, but too late.

The researcher had never personally destroyed one of his animals before, always leaving the task to assistants. As the unsuspecting chimpanzee placed the poisoned gift into her mouth and bit, Belinsky conceived of an experiment he had never before considered. He turned on

the switch. “Candy Candy Thank you Belinsky Happy Happy Martha.”

Then her voice stopped of its own accord. She stiffened, then relaxed in her master’s arms, dead.

But brain death is not immediate. The final sensory discharge of some circuit within her inert body triggered a brief burst of neural pulsations decoded as “Hurt Martha Hurt Martha.”

Nothing happened for another two seconds. Then randomly triggered neural discharges no longer having anything to do with the animal’s lifeless body sent one last pulsating signal to the world of men.

“Why Why Why Why --“

A soft electrical click stopped the testimony.

Reflections

At the office in the morning and did business. By and by we are called to Sir. W. Battens to see the strange creature that Captain Holmes hath brought with him from Guiny, it is a great baboone, but so much like a man in most things, that (though they say there is a Species of them) yet I cannot believe but that it is a monster got of a man and she-baboone. I do believe it already understands much English, and I am o the mind it might be tought to speak or make signs.

--The Diary of Samuel Pepys
August 24 1661

The pathetic noncomprehending cry of the dying chimp evokes in us powerful sympathy – we can identify so easily with this innocent and enchanting creature. What though, is the plausibility of this scenario? Chimp language has been a controversial are for over a decade now. While it appears that these and other primates can absorb numerous vocabulary items – up to several hundred, in fact – and even on occasion come up with ingenious compound words, it is far less well substantiated that they can absorb a grammar by which they can combine words into complex meaning-carrying propositions. It seems that chimps may simply use arbitrary juxtapositions of words rather than syntactic structures. Is this a severe limitation? In the eyes of some it is, for it puts a strict upper bound to the complexity of ideas that can be expressed thereby. Noam Chomsky and others maintain that that which is essentially human is our

innate linguistic ability, a sort of “primal grammar” that all languages would share at a sufficiently deep level. Thus chimps and other primates not sharing our primal grammar would be essentially different from us.

Others have agreed that the primates who – or do I mean “that”? – give the appearance of using language are doing something very different from what we do when we use language. Rather than communicating – that is, conveying private ideas into the common currency of signs in patterns – they are manipulating symbols that to them have no meaning, but whose manipulations can achieve desired goals for them. To a strict behaviourist, this idea of distinguishing between external behaviours on the basis of hypothetical mental qualities such as “meaning” is absurd. And yet such an experiment was once carried out with high-school students instead of primates as the subjects. The students were given coloured plastic chips of various shapes and were “conditioned” to manipulate them in certain ways in order to obtain certain rewards. Now, the sequences in which they learned to arrange the chips in order to get the desired objects could in fact be decoded into simple English requests for the objects – and yet most of the students claimed to have never thought of matters this way. They said that they detected patterns that worked and patterns that didn’t work, and that was as far as it went. To them it felt like an exercise in meaningless symbol-manipulation! This astonishing result may convince many people that the chimp-language claims are all wishful thinking on the part of anthropomorphic animal lovers. But the debate is far from settled.

However, whatever the realism of our excerpt, many moral and philosophical issues are well posed. What is the difference between having a mind – intellect – and having a soul – emotionality? Can one exist without the other? The justification given for killing Martha is that she is not as “valuable” as a human being. Somehow this must be a code word for the idea that she has “less of a soul” than a human does. But is degree of intellect a true indicator of degree of soul? Do retarded or senile people have “smaller souls” than normal people? The critic James Huneker, writing of Chopin’s Etude opus 25 no. 1, said “Small souled men, no matter how agile their fingers, should avoid it.” What an incredible pronouncement! Yet it has a certain truth to it, snobbish and elitist though it might be to say so. But who will provide the soul meter?

Is the Turing test not such a meter? Can we measure the soul through language? Needless to say, some qualities of Martha’s soul come through loud and clear in her utterances. She is very appealing, partly through her physical appearance (actually, how do we know this?), partly

through the fact of our identifying with her, partly through her charmingly simple-minded syntax. We feel protective of her as we would of a baby or small child.

Well, all these devices and more will be exploited – even more insidiously! – in the following passage, another selection from *The Soul of Anna Klane*.

D.R.H.

TERREL MIEDANER

The Soul of the Mark III Beast

"Anatol's attitude is straightforward enough," Hunt said. "He considers biological life as a complex form of machinery."

She shrugged, but not indifferently. "I admit being fascinated by the man, but I can't accept *that* philosophy."

"Think about it." Hunt suggested. "You know that according to neoevolution theory, animal bodies are formed by a completely mechanistic process. Each cell is a microscopic machine, a tiny component part integrated into a larger, more complex device."

Dirksen shook her head. "But animal and human bodies are more than machines. The reproductive act itself makes them different."

"Why," Hunt asked, "is it so wonderful that a biological machine should beget another biological machine? It requires no more creative thought for a female mammal to conceive and give birth than for an automatic mill to spew forth engine blocks."

Dirksen's eyes flashed "Do you think the automatic mill feels anything when it gives birth?" she challenged.

"Its metal is severely stressed, and eventually the mill wears out."

"I don't think that's what I mean by 'feeling.'"

"Nor I," hunt agreed. "But it isn't always easy to know who or what

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his feelings. On the farm where I was raised, we had a brood sow with an unfortunate tendency to crush most of her offspring to death – accidentally, I imagine. Then she ate her children’s corpses. Would you say she had maternal feelings?”

“I’m not talking about pigs!

“We could talk about humans in the same breath. Would you care to estimate how many newborn babies drown in toilets?”

Dirksen was too appalled to speak.

After some silence Hunt continued. “What you see there in Klane as preoccupation with machinery is just a different perspective. Machines are yet another life form to him, a form he himself can create from plastic and metal. And he is honest enough to regard himself as a machine.”

“A machine begetting machines,” Dirksen quipped. “Next thing you’ll be calling him a mother!”

“No.” Hunt said. “He’s an engineer. And however crude an engineered machine is in comparison with the human body, it represents a higher act than simple biological reproduction, for it is at least the result of a thought process.”

“I ought to know better than to argue with a lawyer,” she conceded, still upset. “But I just do not relate to machines! Emotionally speaking, there is a difference between the way we treat animals and the way we treat machines that defies logical explanation. I mean, I can break a machine and it really doesn’t bother me, but I cannot kill an animal.”

“Have you ever tried?”

“Sort of,” Dirksen recalled. “The apartment I shared at college was infested with mice, so I set a trap. But when I finally caught one, I couldn’t empty the trap – the poor dead thing looked so hurt and harmless. So I buried it in the backyard, trap and all, and decided that living with mice was far more pleasant than killing them.”

“Yet you do eat meat,” Hunt pointed out. “So your aversion isn’t so much to killing *per se* as it is to doing it yourself.”

“Look,” she said, irritated. “That argument misses a point about basic respect for life. We have something in common with animals. You do see that, don’t you?”

“Klane has a theory that you might find interesting,” Hunt persisted. “He would say that real or imagined biological kinship has nothing to do with your ‘respect for life.’ In actual fact, you don’t like to kill simply because the animal resists death. It cries, struggles, or looks sad – it pleads with you not to destroy it. And it is your mind, by the way, not your biological body, that hears an animal’s plea.”

She looked at him, unconvinced.

Hunt laid some money on the table, pushed back his chair. “Come with me.”

A half hour later Dirksen found herself entering Klane’s house in the company of his attorney, for whose car the entrance gate had automatically moved aside, and at whose touch the keyless front door had servoed immediately open.

She followed him to the basement laboratory, where Hunt opened one of several dozen cabinets and brought out something that looked like a large aluminium beetle with small, coloured indicator lamps and a few mechanical protrusions about its smooth surface. He turned it over, showing Dirksen three rubber wheels on its underside. Stenciled on the flat metal base were the words MARK III BEAST.

Hunt set the device on the tiled floor, simultaneously toggling a tiny switch on its underbelly. With a quiet humming sound the toy began to move in a searching pattern back and forth across the floor. It sopped momentarily, then headed for an electrical outlet near the base of one large chassis. It paused before the socket, extended a pair of prongs from an opening in its metallic body, probed and entered the energy source. Some of the lights on its body began to glow green, and a noise almost like the purring of a cat emanated from within.

Dirksen regarded the contrivance with interest. “A mechanical animal. It’s cute – but what’s the point of it?”

Hunt reached over to a nearby bench for a hammer and held it out to her. “I’d like you to kill it.”

“What are you talking about?” Dirksen said in mild alarm. “Why should I kill . . . break that . . . that machine?” She backed away, refusing to take the weapon.

“Just as a experiment.” Hunt replied. “I tried it myself some years ago at Klane’s behest and found it instructiver.”

“What did you learn?”

“Something about the meaning of life and death.”

Dirksen stood looking at Hunt suspiciously.

“The ‘beast’ has no defenses that can hurt you,” he assured her. “Just don’t crash into anything while you’re chasing it.” He held out the hammer.

She stepped tentatively forward, took the weapon, looked sidelong at the peculiar machine purring deeply as it sucked away at the electrical current. She walked toward it, stooped down and raised the hammer. “But . . . it’s eating,” she said, turning to Hunt.

He laughed. Angrily she took the hammer in both hands, raised it, and brought it down hard.

But with a shrill noise like a cry of fright the beats had pulled its mandibles from the socket and moved suddenly backwards. The hammer cracked solidly into the floor, on a section of tile that had been obscured from view by the body of the machine. The tile was pockmarked with indentations.

Dirksen looked up. Hunt was laughing. The machine had moved two metres away and stopped, eyeing her. No, she decided, it was not eyeing her. Irritated with herself, Dirksen grasped her weapon and stalked cautiously forward. The machine backed away, a pair of red lights on the front of it glowing alternately brighter and dimmer at the approximate alphawave frequency of the human brain. Dirksen lunged, swung the hammer, and missed –

Ten minutes later she returned, flushed and gasping, to Hunt. Her body hurt in several places where she had bruised it on jutting machinery, and her head ached where she had cracked it under a workbench. “It’s like trying to catch a big rat! When do its stupid batteries run down anyway?”

Hunt checked his watch. “I’d guess it has another half hour, provided you keep it busy. He pointed beneath a workbench, where the beast had found another electrical outlet. “But there is an easier way to get it.”

“I’ll take it.”

“Put the hammer down and pick it up.”

“Just . . . pick it up?”

“yes. It only recognizes danger from its own kind – in this case the steel hammer head. It’s programmed to trust unarmed protoplasm.”

She laid the hammer on a bench, walked slowly over to the machine. It didn’t move. The purring had stopped, pale amber lights glowed softly. Dirksen reached down and touched it tentatively, felt a slight vibration. She gingerly picked it up with both hands. Its lights changed to a clear green colour, and through the comfortable warmth of its metal skin she could feel the smooth purr of motors.

“So now hat do I do with the stupid thing?” she asked irritably.

“Oh, lay him on his back on the workbench. He’ll be quite helpless in that position, and you can bash him at your leisure . . .”

“I can do without the anthropomorphisms,” Dirksen muttered as she followed Hunt’s suggestion, determined to see this thing through.

As she inverted the machine and set it down, its lights changed back to red. Wheels spun briefly, stopped. Dirksen picked up the hammer again, quickly raised it and brought it down in a smooth arc which struck the helpless machine off-centre, damaging one of its wheels and flipping it right side up again. There was a metallic scraping sound from the damaged wheel, and the beast began spinning in a fitful circle. A snap-

ping sound came from its underbelly, the machine stopped, lights glowing dolefully.

Dirksen pressed her lips together tightly, raised the hammer for as final blow. But as she started to bring it down there came from within the beast a sound, a soft crying that rose and fell like a baby whimpering. Dirksen dropped the hammer and stepped back, her eye on the blood-red pool of lubricating fluid forming on the table beneath the creature. She looked at Hunt, horrified. "It's . . . it's –"

"Just a machine," Hunt said, seriously now, "Like these, its evolutionary predecessors." His gesturing hands took in the array of machinery in the workshop around them. Mute and menacing watchers. "But unlike them it can sense its own doom and cry out for succour."

"Turn it off," she said flatly.

Hunt walked to the table, tried to move its tint power switch. "You've jammed it, I'm afraid." He picked up the hammer from the floor where it had fallen. "Care to administer the death blow?"

She stepped back, shaking her head as Hunt raised the hammer. "Couldn't you fix –" There was a brief metallic crunch. She winced, turned her head. The wailing had stopped, and they returned upstairs in silence.

Reflections

Jason Hunt remarks, "But it isn't always easy to know who or what has feelings." This is the crux of the selection. At first Lee Dirksen seizes on self-reproductive power as the essence of the living. Hunt quickly points out to her that inanimate devices can self-assemble. And what about microbes, even viruses, which carry within them instructions for their own replication? Have they souls? Doubtful!

Then she turns to the idea of feeling as the key. And to drive this point home, the author pulls out ever stop in the emotional organ, in trying to convince you that there can be mechanical, metallic feelings -- a contradiction in terms, it would surely seem. Mostly it comes as a set of subliminal appeals to the gut level. He uses phrases like "Aluminium beetle," "soft purring," "shrill noise like a cry of fright," "eyeing her," "gentle vibration," "the comfortable warmth of its metal skin," helpless machine," "spinning in a fitful circle," "lights gleaming dolefully." This

All seems quite blatant – but how could he have gone further than his next image; that of the “blood-red pool of lubricating fluid forming on the table beneath the creature,” from which (or from whom?) is emanating a “soft crying wail that rose and fell like a baby whimpering”? Now, really!

The imagery is so provocative that one is sucked in. One may feel manipulated, yet one’s annoyance at that cannot overcome one’s instinctive sense of pity. How hard it is for some people to drown an ant in their sink by turning on the faucet! How easy for others to feed live goldfish to their pet piranhas each day! Where should we draw the line? What is sacred and what is indispensable?

Few of us are vegetarians or even seriously consider the alternative during our lives. Is it because we feel at ease with the idea of killing cows and pigs and so on? Hardly. Few of us want to be reminded that there is a hunk of dead animal on our plate when we are served a steak. Mostly, we protect ourselves by a coy use of language and an elaborate set of conventions that allow us to maintain a double standard. The true nature of meat eating, like the true nature of sex and excretion, is only easy to refer to implicitly, hidden in euphemistic synonyms and allusions: “veal cutlets,” “making love,” “going to the bathroom.” Somehow we sense that there is soul-killing going on in slaughterhouses, but our palates don’t want to be reminded of it.

Which would you more easily destroy – a Chess Challenger VII that can play a good game of chess against you and whose red lights cheerfully flash as it “ponders” what to do next, or the cute little Teddy bear that you used to love when you were a child? Why does it tug at the heartstrings? It somehow connotes smallness, innocence, vulnerability.

We are so subject to emotional appeal yet so able to be selective in our attribution of soul. How were the Nazis able to convince themselves it was all right to kill Jews? How were Americans so willing to “waste gooks” in the Vietnam war? It seems that emotions of one sort – patriotism – can act as a valve, controlling the other emotions that allow us to identify, to project – to see our victim as (a reflection of) ourselves.

We are all animists to some degree. Some of us attribute “personalities” to our cars, others of us see our typewriters or our toys as “alive,” as possessors of “souls.” It is hard to burn some things in a fire because some piece of us is going up in flames. Clearly the “soul” we project into these objects is an image purely in our minds. Yet if that is so, why isn’t it equally so for the souls that we project into our friends and family?

We all have a storehouse of empathy that is variously hard or easy to tap into, depending on our moods and on the stimulus. Sometimes mere words or fleeting expressions hit the bull’s-eye and we soften. Other times we remain callous and icy, unmovable.

In this selection, the little beasts flailing against death touches Lee Dirksen's heart and our own. We see the small beetle fighting for its life, or in the words of Dylan Thomas, raging "against the dying of the light." Refusing to "go gentle into that good night." This supposed recognition of its own doom is perhaps the most convincing touch of all. It reminds us of the ill-fated animals in the ring, being randomly selected and slaughtered, trembling as they see the inexorable doom approach.

When does a body contain a soul? In this very emotional selection, we have seen "soul" emerge as a function not of any clearly defined inner state, but as a function of our own ability to project. This is, oddly enough. The most behaviouristic of approaches! We ask nothing about the internal mechanisms – instead we impute it, given the behaviour. It is a strange sort of validation of the Turing test approach to "soul detection."

D.R.H.