

RETIREMENT

Sex, aggression, and humour: responses to unicycling

Sam Shuster compares reactions of men and women to the sight of a unicyclist

After retiring from a busy university department in Newcastle upon Tyne, and with the time and the need for more than the usual consultancies, I was able to follow some of my more extreme inclinations. As a cyclist, I had occasionally thought of using more or fewer wheels, but it was only when choosing a grandson's gift that I got seriously lost in contemplation of a gleaming chrome unicycle. My wife said "buy the bloody" thing, which I did on the whim of the moment. After months of practice at home, I graduated to back streets, a small paved park, and finally town roads. I couldn't avoid being noticed; in turn, I couldn't avoid observing the form that notice took. Because at the time there were no other unicyclists in the area, such sightings would have been exceptional, yet I soon found that the responses to them were stereotyped and predictable. I realised that this indicated an underlying biological phenomenon and set about its study.

METHODS

As I had no idea what the phenomenon was, my reservoir of multipurpose preconceptions could not provide a testable hypothesis; instead, I needed simply to observe neu-

trally the response to the unusual stimulus of unicycling administered reproducibly. I therefore wore the same bland tracksuit, trainers, and facial demeanour, and I rode "neutrally" with no attempt to entertain.

I closely observed for just over a year, recording details of the responses and those who made them (estimated age; relationships; and class from dress, speech, and behaviour) as soon as possible. Subsequently, I only recorded new responses or significant variants. I collected written recordings from more than 400 people.

RESULTS

Observed responses

Less than 5% of people—mostly elderly men, women, and teenage girls—showed no reaction. About 1-2% of people expressed anger, distaste, or fear of collision, mostly elderly women and some men walking with sticks.

More than 90% of people showed a physical response—from an exaggerated stare or acknowledgment to a wave, nod, smile, or a show of mock surprise and fear, which reflected any remarks made.

Almost 50% of those encountered, more often men than women, responded ver-

bally (box). The sex difference in the type of response was striking. Around 95% of responses from women praised, encouraged, or showed concern, and women made few comic or snide remarks. In contrast, only 25% of the comments made by men indicated praise, appreciation, or neutrality, whereas 75% were attempts at comedy, often snide and proffered combatively as a put-down. Equally striking was their repetitive nature, even though given as if original—almost 66% of these "comic" responses referred to the number of wheels (the most common), the absence of handlebars, or a part having been lost or stolen (box). Less than 25% used a less obvious snide humour, but often with stylistic repetition. Some remarks were fired off as if they had been rehearsed on approach. More often, people paused briefly while trying to formulate the response, which was sometimes delivered after I had passed. This pause to find a comic phrase contrasted with the immediacy and apparent spontaneity of the few laudatory remarks made by men and the many made by women. Some of the remarks showed combativeness and envy, such as "bet I could do better than that."



SOME VERBAL RESPONSES TO UNICYCLING

Early years

Mother to son about 5 years old, "Oh look, why is he riding on one wheel?"

Mother to son in pram, "Isn't that clever." The boy repeated, "Clever"

Father to son about 3 years old, "Look his bike's got only one wheel... wonder what happened to the other"

Man to daughter about 4 years old, "Look... he's got no handle bars"

Boy of 3-4 years old to mother, "Mummy the man's broken his bike—it's only got one wheel"

Inquisitive 5-12 year olds

"Was it hard to learn?"

"Where do you buy them?"

"How much did it cost?"

"Why do you use only one wheel?"

Aggressive boys

"Do you want to knock him over?" "Yes I bet I could do it"

While kicking a football, "Got a good target"

Riding at me on bicycle,

"Fall off granddad"

Sudden loud shouts, then

they threw small pebbles

Loud noises, then

"You're gonna fall off..."

Women

"You make it look so easy"

"You should dress up as

Santa for the children"

"God that must be difficult

"Well done." "Clever, clever"

"Wonderful... I am impressed"

"Magic... it is magic"

"You are an Olympic

champion"

"I wish I could do that..."

Oh that looks good"

"That must need a

wonderful balance"

Men

Wheels (minor variations of the first two were the most common)

"Lost your wheel?"

"Hey do you know you've

only got one wheel?"

"I'll look for your other wheel"

"Couldn't you afford the

other wheel?"

Handle bars

"Do you know you've lost your

handle bars?"

"Is it easier with nay

handlebars?"

Lost something

"Lost half your bike"

Elderly men

Arthritic man, "It's quicker to walk"

Man moving poorly with effort,

"I'm glad I don't have to do

that"

Arthritic man, "Better you

than me... I wouldn't even

get up on it"

Two men walking together

asked seriously, not as a joke,

"Are you practising for a

circus then?" and "Does it

crush your bollocks mate?"

EVOLUTION OF RESPONSES

Young children usually showed curiosity, and drew their parent's attention to the unicycle as often as the converse. Parental comments showed a sex difference—fathers' remarks were either typical male (wheels, etc) or practical (maintaining balance, etc), whereas mothers' comments praised and usually informed the children.

Boys and girls of about 5-12 years usually showed interest. They often asked practical questions about learning, purchase, and so on (box).

From about 11-13 years, boys began to develop an aggressive response, which continued throughout the school years. They tried to put me off balance by suddenly shouting, jumping out of hiding, kicking a football, throwing stones, or riding a bicycle at me; a few asked for a ride in addition to aggressive behaviour.

A further change in male behaviour was seen during the late teens—aggression decreased, but they tried to make disparaging

"jokes," which were sometimes incorporated into mocking songs. This change continued, and finally evolved into adult male humour with its concealed aggression.

The female response was subdued during puberty and late teens, with apparent indifference or minimal approval, such as a tentative smile. It then evolved to the laudatory and concerned adult female response. Rarely, a male "joke" was made by girls in male company.

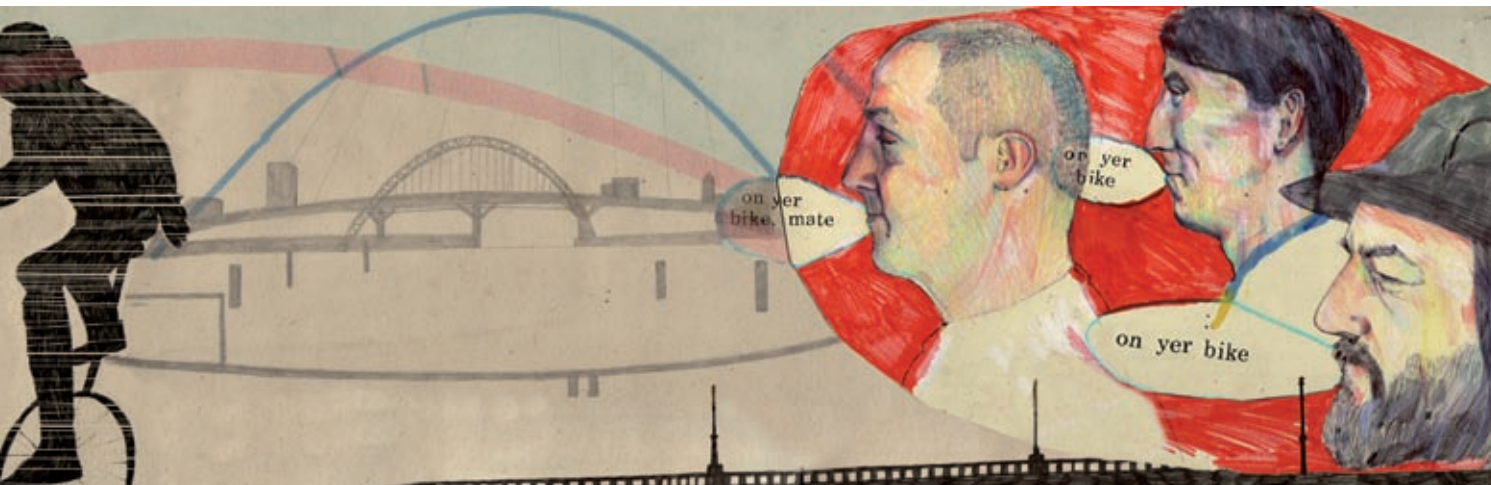
Miscellaneous observations

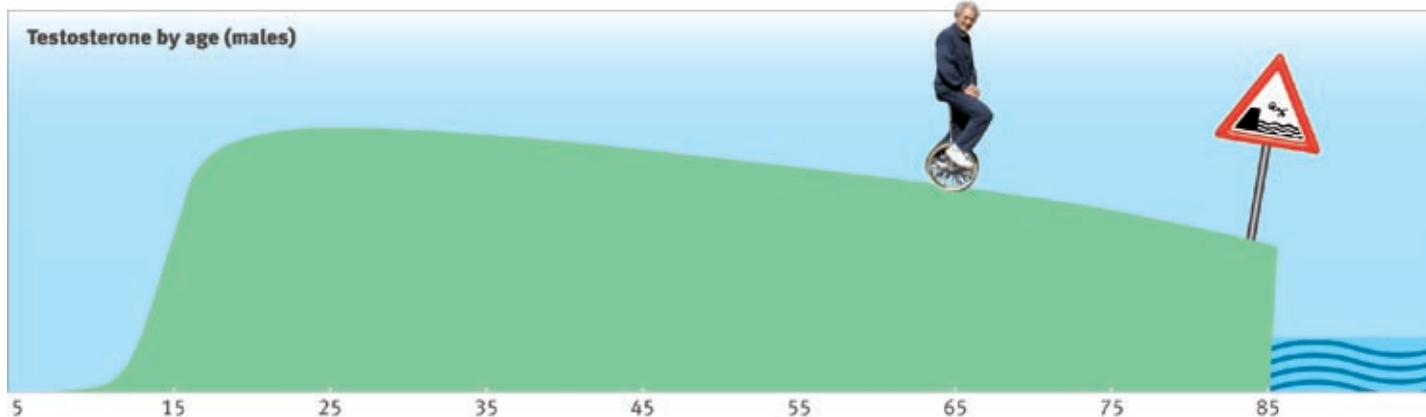
Men who seemed to be of higher social class, older men, and the few Indian and Asian people encountered gave more approving and fewer comic responses. The response of people in cars was remarkable. Young men in old cars were very aggressive, acting as if to frighten me off the road—they lowered their windows and shouted abusively, waved their arms, and hooted. I did not see this with women drivers and older men in more expensive cars.

DISCUSSION

This study observed the response to a sudden, unexpected exposure to a new phenomenon—unicycling. The response to this stimulus was surprisingly consistent but varied with age, sex, and stage of sexual development. Young children were curious, but as boys grew older their response became physically and verbally aggressive. As boys matured to men their response became more verbal and evolved into the concealed aggression of a humorous verbal put-down, which was lost with age. In contrast, the female response was praise and concern for safety.

A strength of the study was that it involved the observation of an unexpected, spontaneous response, not a planned test of a preconception. Possible limitations are that the stimulus may have varied despite attempted consistency; but the main reservation is that because responses were not from a consecutive cohort or sample, the findings are only semi-quantitative. Fortunately, the differences found were large enough to overcome this; likewise the





subjective assessments of relationships, age, and social class. Unicycles take one wheel and one person; confirmation by another rider, with a different style, appearance, dress, age, sex, and location is desirable.

Biological systems are often best defined by stimulation—for example, the heart by exercise—but conscious modification makes this less reliable for mental responses. Sudden exposure to a novel stimulus lessens the opportunity for this, and the unprepared response is more likely to reflect an underlying attitude. Opportunistic use of unicycling in this way was validated by the consistency of the response to it.

Most men clearly meant their responses to be funny and snide. Women, however, usually responded with pleasure and admiration and were concerned about safety. The consistent content of the male “joke” and its triumphant delivery as if it was original and funny, even when it was neither, was remarkable, and it suggests a common underlying mechanism. The evolution of the response provides the clue to what this might be.

Children showed curiosity and interest, which changed in young boys. In older boys, curiosity was replaced by minor physical and verbal aggression—attempts to topple the unicycle coupled with first attempts at simple, mocking humour. In teenage boys, the physical aggression was replaced by verbally aggressive mockery, with elements of adult humour. This response “matured” to its adult male form as a mocking joke, which partly disguised its aggressive origins, an origin that was again revealed by the gross response of motorists, in whom aggressive behaviour is often exacerbated. This adult stage corresponded to the peak of virility and ameliorated in older men, who were more neutral and amicable, with few attempts at a jovial put-down.

It's their hormones

The idea that unicycling is intrinsically funny cannot explain the findings—particularly their repetitiveness, evolution,

and sex differences—and the notion that males are just expressing a greater sense of humour simply restates an observational fact. Social and ethnic differences seemed to soften the male response, and such a softening was also noted when unicycling in Framlingham, a small Suffolk town to which I had moved from Newcastle. A genetic effect would explain the sex difference, but not the waxing and waning of the male response—the simplest and most direct explanation is androgen induced virility. Such a causal association fits well with the observed evolution to aggression, an attribute related to androgens (figure), but direct endocrine confirmation would require studies not available to a unicyclist. The observed aggression could be a male response to confrontation, a situation where competition and combativeness are never far away. The male response to female unicyclists has yet to be studied, but the results of enquiries to unicyclists in other regions and countries suggest that the same jokes about wheels predominate.

Particularly interesting for the evolution of humour was the way the initial aggressive intent channelled the verbal response into a contrived but more subtle and sophisticated joke, in which aggression is concealed by wit. This shows how the aggression that leads to humour eventually becomes separated from it as wit, jokes, and other comic forms, which then take on at life of their own.

Humour as androgen primed aggression

These observations lead to the conclusion that humour evolves from androgen primed aggression. But can that conclusion be generalised? Repartee and banter have many characteristics of controlled aggression—so often revealed when control is lost—and it may be no coincidence that quick wit is likened to a rapier. The findings may also be relevant to the great male-female divide in humour—women tell fewer jokes than men and most comedians

are men. The findings also suggest that the difference is sexual rather than social. I will not generalise into the many writings on humour—from Freud on male humour as an aggressive response to women to the priapic interpretations of Roman sculptures and the effect of salacious comic cartoons on subsequent aggressive behaviour. The range of theoretical options on offer is too great and unproved for interpreting or extending a simple experimental study such as the response to unicycling.

The existence of an overwhelming sex difference inevitably raises the possibility of biological advantage, in particular whether male humour enhances female sexual preference. Marty Feldman, a notoriously unprepossessing comic, had no doubt of it, and Diane Keaton said she was mostly won over by men who made her laugh. Darwin's *Descent of Man* defined the dominant evolutionary role of sexual selection. The components of mate attraction are becoming defined—the male woos and the female selects—and male humour seems to be involved. The present finding that humour may reflect androgen induced aggression could provide a Darwinian explanation both of its attraction and its continued use as a sexually useful tool.

And the female response? Embryologically, the female is the fundamental body form from which the male develops. Could it be that without androgens the human response would be female, with its favourable, warm, tolerant concern? Perhaps male aggression is too high a price for humour.

The illustration of changing testosterone concentrations is very loosely based on graphs in *J Clin Endocrine Metab* 1997;82:3976 and *N Engl J Med* 2006;355:1724-6

Competing interests: None, apart from owning a bicycle as well as a unicycle.

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- 1 Darwin C. *The descent of man, and selection in relation to sex*. London: John Murray, 1871.
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LIFE AFTER RETIREMENT

Work is a crucial part of our identity, but **Peter Froggatt** discovered when he stopped working, that he had been a slave to procedure rather than purpose

In 14 months I will be 80. I retired 21 years ago from my full time position as vice chancellor and president of Queen's University Belfast. Ten years was long enough on that ever steeper treadmill, and I took a reduced pension and entered the fee-earning market, as I still had a family to support. I gave up the fee-earning world at 75, when I couldn't find anyone still willing to pay me. Since then I have continued with the good works that have always been part of my working portfolio and the usual privileges and chores that fall to professionals put out to grass: producing book reviews, invited lectures, and content-free articles on topics such as "Whither medicine?"

Adjusting to change

The first two shocks of retirement were entirely predictable. For 10 years my wife, four children, and I had wallowed in the domestic luxury of one of the grandest mansions in Belfast, with spacious gardens, three full time gardeners, two lakes, and a boat-house. With this came a chauffeur driven limousine, generous hospitality allowance, domestic help, first class business travel, and all the other trappings that were considered essential to the life of a university vice chancellor.

Now I was unceremoniously dumped on the sidewalk and had to rediscover the doubtful joys of economy class flights, fueling and parking my own car, and buying my own drinks. Worst of all I had to re-enter the housing market, although fortunately this was depressed at the time owing to Belfast's little local difficulties. Buying a family house in a safe area took all my tax-free "lump sum" and with it went the world cruises, the holiday house, and all those other little plans for a life on easy street.

The second shock had also been foreseen, but inadequately. At work I had three personal assistants, five full time secretaries, numerous assorted minions inhabiting

rooms full of the latest technology, and some of the best brains in Ireland within hailing distance. Now I had to take on, and pay for, a confidential secretary, who worked in her child laden home, 12 miles away, and all long before email and mobile phones. Deprivation was to prove more stressful than plenty, and I soon started to have the first of my clinically mild but nevertheless irritating psychosomatic symptoms.

The third shock was to my wife rather than to me and was unforeseen—at least by me. For 30 years I had gone out at 8 00 am and come home at 8 00 pm, Monday to Friday. Saturdays were often equally busy, although more anarchic. Now "retired," I came and went irregularly and often didn't go out at all. The habit conditioned automatons that my wife and I had unwittingly become couldn't take this. Irritation followed, which worsened my psychosomatic health. My wife felt downgraded to diary secretary because the phone now never stopped ringing for me, whereas previously it had been invariably for her.

Like most recent retirees I was advised

to take a long break, preferably abroad, to break the treadmill rhythm and weaken the emotional bonds with Queen's and the Royal Victoria Hospital, where I had slaved for over 30 years. They predicted dire emotional problems if I didn't. Well, I didn't—in fact, the day after surrendering my seals of office I walked past Queen's and, for good measure, the Royal Victoria Hospital without a backward glance. And ever since I have felt absolutely no undue emotion at the sight or sound of Queen's or the hospital. This gave an early clue as to the true basis of my psychosomatic symptoms if only I had had the sense to see it.

Unhealthy response

So what happened and why? But first of all, like the dog that didn't bark in the night, what did not happen? Physically, organically, chemically, and cognitively I have remained well—better than I had expected and far better than I deserve. I feel as bright and as energetic as ever. My intellectual processes remain OK and so does my memory for



Never a backward glance (Queen's University Belfast)

recent as well as for remote events. My body responds well to the modest demands I put on it. But I can no longer handle stressful situations. It's as if my nervous capacity was a finite quantity that I used up in the line of duty, and now there is none left over.

I certainly didn't expect that. On the contrary, I had visualised myself at 80—admittedly with failing faculties—at peace with myself, possessed with the wisdom of the ages and offering words of calmness, tolerance, understanding, and comfort to a younger generation beset by the worries of the working world. But it turned out to be the very opposite—my sunny disposition and not my mental and physical health had deserted me.

That should not have been so surprising, but what of my psychosomatic symptoms? Inevitably, I suspected that they heralded sinister organic disease. So I took myself off to my general practitioner and in the following few years he and his consultant colleagues cured me of some very nasty conditions—gastric cancer (I had indigestion), motor neurone disease (I had some muscular twitching), lung cancer (I had a refractory cough), unspecified but highly malignant brain tumour (I had some headaches), and, naturally, coronary artery disease (I had chest pains almost to order). My only triumph over the diagnostic skills of the local profession was a refractory pain-cum-sensation in my hard palate and posterior nares, unknown to any textbook, and which lasted for over a year. I was heading for some medical *Guinness Book of Records* when I suddenly got tinnitus—ordinary, unilateral,

non-progressive tinnitus. At once all the other symptoms disappeared as some part of my brain now wheeled slowly round like an old battleship to meet the challenge of this new enemy. Fifteen years later, I still have the tinnitus, but I look on it benignly as a useful if sometimes annoying defence ensuring that the other symptoms are held at bay.

Why I had developed these symptoms was not obvious to me. But my wife saw things with her customary clarity. “Look,” she said, “you’ve got yourself into a lose-lose situation. You either work harder to take your mind off the symptoms, which only winds you up more and makes the symptoms worse, or you ease up like the doctors tell you to do and that gives you a guilty conscience, which also makes the symptoms worse. You think that you should be able to go on working as you did and also that you must go on working as you did.”

Everything now clicked into place. I could walk past Queen's without a backward glance because it was the rhythm and habit of my work there that was the Mephistopheles to whom I had sold my soul. It wasn't the institution and it wasn't the content of the work. I was like one of the broomsticks in the “The Sorcerer's Apprentice” in Walt Disney's *Fantasia*, which, like well drilled soldiers, mechanically and inexorably carried the buckets of water that mindlessly flooded the room. So when I retired I continued to serve the unremitting master of work habit and rhythm to the point of psychosomatic disturbance

“Addiction to work had even squeezed out my hobbies”

due to reduced nervous resources to deal with them, and contrariwise if I didn't serve this master wholeheartedly then I felt guilty, which produced much the same psychosomatic result. What I was doing and for whom I was doing it didn't matter over much.

And now something else clicked into place. A *Who's Who* entry comes with the job of vice chancellor. Back in 1976, I had listed my recreations as music, travel, and golf. I was genuinely interested in all three; I was even a good enough golfer to play internationally for Ireland. But I haven't played golf for 15 years, rarely go to a concert or listen to music, and travel only when I absolutely have to. If I indulged any of these interests I felt illogically guilty. Addiction to work had even squeezed out my hobbies.

Recipe for contentment

I conclude with two comments. Firstly, as we have been taught and as we teach others, moderation and balance in lifestyle are essential: zeal and fanaticism may be useful for some purposes and essential for others but are not normally the best recipe for a happy retirement or enjoying a healthy and contented old age. We teach this to others but we don't necessarily learn it ourselves.

The second comment is more fanciful. When I was thinking of my being a slave to procedure rather than to purpose, to work itself rather than its ultimate objective, I realised that I had seen something like this before. Was it drug addiction or dependence? Possibly, but it was also something else. It was an image of Adolph Eichmann, Himmler's trusted lieutenant, who was still boasting on his way to the gallows of how he had organised the trains to Buchenwald and Auschwitz to run on time. He seemed uninterested in what the trains were doing; sufficient that he was doing it for the Fuhrer and obeying orders. The only guilt he felt was when he was not doing it or not getting the trains on time—procedure trumping purpose.

We smile and say, “That couldn't be me.” Nor indeed (and hopefully) could it: but our autonomic and psychosomatic pathways reach parts of the body our conscious self doesn't reach, and their symptoms may be a price some of us pay for over-devotion either, in Eichmann's case, to false gods or, in the case of more normal mortals, to ephemera masquerading as worthy and enduring objectives in themselves.

Peter Froggatt is a retired vice chancellor, Belfast. Based on a talk given to the BMA retired members forum.

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