

# Juggle for your LIFE!

*Juggling really is good for you! You've heard it said - but did you know that many therapists, not all of them 'alternative', use juggling? Pippa Tee, our correspondent not-in-any-need-of-any-therapy-at-all-thanks-how-dare-you takes you through some of the theories and the practise.*

## Learning to juggle

To acquire any new skill, you need a 'vocabulary'. If you already have ball skills your body has gained a set of ways of moving; if not, the actions of throw and catch have to be learnt. The brain also has to understand the verbal vocabulary, 'pass', 'self', etc. When I'm teaching I show the whole of a pattern, then break it down into little bits. This can be applied to anything, but juggling demonstrates it perfectly. You can't learn Mills Mess if you don't understand what you're trying to achieve, nor if the 'vocabulary' of the moves is lacking.

The process of assembling bit-by-bit sequential patterns uses the left side of the brain. The creation of 'wholes' uses the right side of the brain. Integrating the two hemispheres relaxes you, which creates an atmosphere for learning new activities - such as juggling, for which you have to be relaxed... and we've come full circle.

Whilst juggling acts as a clear demonstration of this integration, it also makes you more able to integrate. Any pattern using an odd number of balls is a *bilateral* movement. By moving right and left sides of the body simultaneously (e.g. touching the left leg with the right hand and vice-versa), you are encouraging the use of both hemispheres of the brain. Even more useful is to do 'under the leg', making sure that the right hand throws under the left leg, and the left hand under the right leg. People who have for some reason not crawled as a baby, or who walk with their hands stiff at their sides, tend to be poorly integrated and will benefit from juggling.

What's so great about integration? The left side of the brain tends to be dominant: very good at patterned, sequential behaviour, working out the bits. It's not, however, adaptable - a pattern will be studiously followed even if it's been proven to fail... The extreme dominance of this side results in various neuroses.

The right side sees the whole picture, enabling radical, spontaneous responses. But if there are no left brain limitations, obsession and psychosis can follow. Balance is achieved not by working to increase activity on one side or the other,

but both. We need the left brain to work out the individual bits, and the right brain to understand the whole. We also need to be able to switch from one to the other. Juggling does this by changing from three-ball cascade, bilateral movement, to four-ball columns (or '2 up, 1 up') which is *homo-lateral*. This latter is the same action as carrying heavy bags in each hand, pushing a mower or pushchair, or working above one's head. All these are very tiring as there is no crossing movement. You can prove this to yourself, and here's a reason why: the cerebrospinal fluid can be thought of as a shock absorber, you could also compare its function to an electrolyte, giving more electrical potential for brain messages, the brain being the 'battery': crossing actions charge the battery, working stiff and straight runs the battery down. I always tell workshops to find the easiest way, that using the least energy and least effort is the 'right' way. Apparently this too helps integration.

There's more... We all have a 'safety zone' around us, wider in some than others. This protects - or inhibits - intimacy, limits our 'identity projection', and communication. Passing, throwing, catching - and being prepared to receive all these things - extends the safety zone and allows us to communicate ourselves more easily.

Dr. Colin, aka. Greg Wells, workshop leader, takes this on a step: "The sense of fun and learning from 'play' gives the participant a chance to build up individual confidence and a team atmosphere. Try building a 30 person human pyramid without teamwork." Certainly it's one of the few non-threatening sports: while some jugglers are very competitive, you certainly don't have to be; particularly in passing, it is very much harder if you work against each other. I see passing as creating a visual pattern by the mutual co-operation of two or more people. Sometimes it is necessary to tell the other person(s) what is wrong with their throw - mostly it is a question of seeing what kind of rubbish you are sending them! You have to be aware that the pattern depends on all parties working well. You have to take responsibility for your own actions. Dr. Colin again - "I feel I too have learnt how to work with others, in a team, rather than following my usual tendency to go it alone. And to be responsible for another's safety and well-being."

## The difficult pupil

...anyone who's done workshops will have met these! There are roughly two types, the sort who have struggled and fought the 'system', and those who have struggled and 'failed'. One extrovert, the



A well balanced individual, John Lee. Pic. David Burd

other introvert - and both can find a new way through juggling. The fun element, and the desire to do something different from others, can get their interest. The lack of competition encourages them to continue, and with a bit of luck both groups will succeed - possibly the first thing that they have ever succeeded at. This fact alone boosts confidence and encourages a positive attitude to learning other things; as we've heard, the very act of juggling enables them to learn more easily, by integration, by establishing a method of learning, by giving the tools for success. As teachers, we can assist by pointing out that juggling is a way for them to teach themselves - the 'rules' are therefore self-imposed - and progress is down to you... Twenty minutes of juggling - not just an exercise but something you will improve at - is a 'win' for you. And the fact that you improve also boosts the left brain self-image!

While teaching I often say "That's great, you've got it! Now breathe..." Each stage of learning something new can be hard. At some point you realise that you're no longer struggling and it's all happening as if on automatic. By concentrating on the end result, i.e. relaxed, easy movements, you can speed up the process. Breathing is really useful! And, by now I'm sure you realise, steady breathing = stress release = integration, etc. etc.

Juggling demands stillness in activity. The least effort also implies the least movement: if your throws are accurate, you won't need to move wildly for the catch. ...Also the least mental activity (or perhaps more selective mental activity) - all your attention has to be on the task. Outside stimuli have to be shut out, concentration and relaxation combined. At the end of a workshop I often feel a curious blend of tiredness and energy; my muscles feel tired because I've extended my body vocabulary (although they quickly recover, unlike, say, digging the garden), though in my head I feel refreshed, and can think more clearly. On the occasions when I miss my weekly 'fix', or we simply didn't do much juggling, I feel deflated - my head hasn't had a chance to 'holiday'.

### More advanced juggling

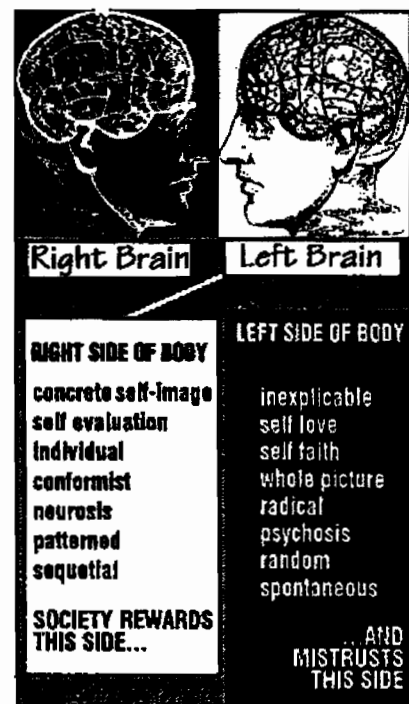
Every stage of increasing your skills is like the first time you juggled. Do you remember that overwhelming feeling when you suddenly managed a cascade? If you've forgotten, watch a workshop - see those wide grins, hear the shrieks of triumph and delight! We still go through the same bit-by-bit working-out, then the putting-together... until finally we can DO it, not just see that it's possible.

At first there's not enough time to fit the trick in. Make time! Apparently the mind works at a slower rate than the body - for example the eye can re-focus 100 times a

minute - and the arm muscles are also very fast. Juggling speeds up the reactions anyway (some pilots are taught juggling for this reason); if we then stop working every move out and cut out any irrelevant stimuli, we can allow the body to work at its own natural speed, not holding it up with unnecessary thought! Thus when working on 5/7/9/11 balls - or clubs! - the illusion is of loads of activity at once, when actually each object is dealt with one at a time. This is obviously why I'm not a numbers juggler; I don't believe yet that I can do it... instead of switching off my mind, it keeps nagging at me "Oooh, look at all those balls! You'll never be able to cope with all those!" I digress. Basically, if you have the vocabulary, the only thing stopping your progress is your failure to see the whole objective, uncluttered with how to pay the mortgage and will someone let the cat out?

So why aren't we all amazing jugglers? Partly I feel that we can't all gain the physical vocabulary. Some of us are too old, some are too fat, (is this being 'Size-ist'?), have permanent injuries - whatever. And for many of us, we simply don't have enough head-space or time. What we can all do is to make better use of our practise, and relate what we've learnt to every other situation.

Which leads to the other side of the question. Why aren't we all totally together people? A dominant right side of the brain can lead to too much awareness; the sequential, logical, contained side to juggling just might be the only thing keeping the left brain in touch with the right. Think how much worse we'd be if we didn't juggle!



### On the case

**Dr. Colin** aka. Greg Wells, runs workshops in circus skills for children of all abilities.

"I was pushed off a 25-foot cliff and broke my back... they told me it would be two years before I could walk again. I taught myself to unicycle 8 months later." Simple! He also does shows, with fire-eating and exploding suitcases - your usual relaxed sort of performer. Greg really values the benefits he gets from working with disabled people. "It's easy for us to spin a plate, so not very interesting, but for some people it's totally new, exciting and immense fun. And for someone to get out of their wheelchair and onto the Pedal-Go - it's brilliant. They may need 3 people to hold them on, but they get such a kick from it." He's done workshops for TVX Schools, a Sussex consortium dealing with physically & mentally handicapped, deaf children, and so on. His second workshop for the Red Cross is coming soon. These are for 15 young people between 12 and 20 years old, each with a personal helper from the Girl Guide/Boy Scout or First Aiders organisations. "It's fun," Diana Churchill, the Red Cross organiser, told me, "and everyone is able to take part. These are youngsters with very mixed abilities, all able to experience new things." The helpers probably gain a lot too.

**Iain Wolfe** is an occupational therapy student. He was an art therapist but is now re-training. He works with patients who have committed crimes due to mental illness, or have become afflicted while in prison.

"They can be schizophrenic, psychopathic, violent, or just basically anti-social; unable to work, talk, relate with others. I tried juggling just for fun last Christmas, and to my surprise it had some very positive results. Since many of the patients have to go back to prison, juggling may be one of the few things they can do 'inside', to relax them and keep them sane. Not all prisons will allow this - but where it is permitted, won't they be amazing jugglers when they come out! Schizophrenia, for example, is partly internal conflict which may be balanced out while juggling; and since many mental traumas relate to past or future events, juggling, by keeping the focus on the 'now', can be a break. I have one patient who says that when he's juggling it feels like 'time off' from the gremlins that are otherwise persecuting him. "Some of the patients will spend 7 or 8 hours alone in their rooms. They are allowed to come and go as they please within the secure unit: our job is to gain their interest in something - anything - and try to build up a relationship. I have a large, high-ceilinged workshop space with nice views (through the wire...) which is inviting. Perhaps because juggling is

'in', or because of my own interest, they do leave their rooms for an hour to juggle with others. For some, this is the first non-aggressive face to face contact that they have had for some time. It involves co-operating and communicating with others. Many of the young men are very assertive and macho, and won't do anything that they can't be brilliant at. The dominant roles change when they see a quiet, withdrawn person outshine them - and there is mutual respect as a result. I doubt that the authorities would ever allow it, but I would like to get an arsonist juggling with fire! This must be the only fun, legal use of fire...! (This makes sense to me! Think of all those pyromaniac fire-jugglers you know - PT)

"There is a downside: if someone displays compulsive, obsessive behaviour problems, juggling can make things worse. One person tried to learn, getting throws out but no further, 1.2.3.4 - 1.2.3.4 - for 5 hours... If they are avoiding reality in some way, again juggling aids - that wish *funni - di*. I'd like to see some scientific tests done to really find out what is happening when we juggle. To be proven, there has to be an observable, repeatable change - which excludes the 'people being different' element. Perhaps they will one day do a 'Cat Scari' (Archers listeners will have heard of this...) with radiological glucose, which would show as colours flashing on and off as the person juggled.

"Once you can juggle - or any other physical task - then the point will come when the messages to catch or throw bypass the brain altogether. So you have a remembered reaction to the stimulus." Perhaps someone reading this could extend this thought? For instance, if you are passing clubs, whilst the action of 'catch' left to right self and perfect single spin 'throw', may become reflexes, there are still dozens of minor corrections being made, none of which are totally predictable.

**Peter Mansfield** teaches the Bates method, vision training for people with eyesight disorders.

"I use many different exercises: juggling is one of them, although often just one or two balls, or four, passing them around. There are other ways of achieving the same end, but juggling is streamlined and economical. There are three main areas to work on: the relationship of central and peripheral vision; focusing; and interaction between right and left hemispheres of the brain. With juggling the peripheral vision is clearly enlarged, and if the patients can get to pass the balls, they have to look through the pattern. With three balls I get them to juggle while looking in a mirror, or simply at the room around them. Following a moving target obviously gets them to focus and re-focus. They develop spontaneous tracking and focusing.

"The hands act as switches for either side of the brain. One exercise is to juggle with a patch over one eye. Contrary to popular belief, you can judge depth, speed and distance with one eye! It involves lots of mental activity, while the total information is reduced. One eye is often suppressed - and one side of the brain - so when each eye gets to work individually, the whole picture can be connected. And it's fun! A 50 or 60 year-old probably hasn't done any ball games for 20 years, learning becomes play. I start with 'the Drop', the emphasis being on the throw, not the catch. Thus you move away from 'trying to juggle' - or trying to see, towards 'just look'. It also occupies all the attention which is very important."

**Anthony Attenborough**, Peter Mansfield's 'mentor', uses juggling himself, and trains his pupil teachers to do so too. "It should be introduced into schools as a basic principle for children, because it's fun, relaxed, and excellent for hand/eye co-ordination. With children under 10, half the session is games in one form or another. Particularly simple passing - one, two, three, maybe four balls, and juggling if they're interested. For adults, demonstrate juggling as part of the workshop. The general principle of one at a time is clearly shown. Juggling is a means to an end and its demonstration. To counteract left and right brain 'dissection', you need a specific bilateral activity. For example throwing 'under the leg' with 3 balls, passing under the opposite leg. Many find this hard to do without stress.

"More advanced juggling pinpoints other benefits: passing clubs in a 3.3.10, there are your own and your partner's patterns, which change, but you have to stay with the pattern. Concentration, plus relaxation - and in a non-competitive task. Therefore you have more room to be aware - there's the specific focus, needed for adaptation, and the all-round awareness. (Is this why throwing clubs is so satisfying? Finding one's place in the whole scheme of things??) This applies to anything - craft activities, throwing a pot, sports, drawing too: I teach people to draw by getting them to draw without thinking. What they see relates to their hand movements. Art schools used to have the same function. Young people need to feel that they can succeed at something, to be given an option they can cope with"

**Karen Wentworth** is an Alexander Technique teacher. She makes no claims to be a good juggler, but is sufficiently enthusiastic about the benefits of juggling to bring an 'expert' over from Germany (Jan, a street juggler, who came to train in AT and is doing some workshops with Karen). "The purpose of AT is to learn how to prevent tightening and tension - the anticipatory organisation of muscles prior to movement. It takes a long time, but it's an investment for life: the technique can

be applied to any activity, it's an educational process rather than a therapy; not someone doing something to you, but self help. It's a re-training of the self by the self. Juggling makes this process visible, you can see if the wrong message has been sent. It gives you constructive observation, constructive choice, you re-experiment - and the results can be seen immediately."

(If someone learning juggling repeatedly makes the same mistake, it helps to ask them what they are doing and what they think they are doing! i.e. make them aware of their body movements, and give them the option of changing them if incorrect. You can become a better teacher by watching people's movements more closely, even very basic things, such as whether the hand is pointing out or in - one for cascade pattern, the other for reverse cascade.)

"The word drop is often synonymous with stress: if you can cope with a drop, in this instance balls or scarves, you can cope with anything. If someone tends to worry a lot, well, it's difficult to worry about dropping a scarf! The first message for organisation of muscular tension goes to the neck: stop that, and you prevent tightening further down. Anything that is such fun and so relaxing has to be good for you!"

So where has this taken us? Juggling is relaxation, concentration, integration, communication, co-ordination, demonstration, self-awareness, adaptation, spontaneity... and still lots of fun...



Grateful thanks to the following for some fascinating conversations and some quotable quotes!

**Anthony Attenborough:**  
128 Merton Rd., London, SW18 5SP  
Dr. Colla - 0273 813464  
**Simon Francis**, devil's advocate!  
**John Henry**, applied kinesicologist  
**Peter Mansfield:** 0273 452623  
**Karen Wentworth:** 081 6733853  
**Iain Wolfe:** c/o Ashen Hill, Hellingly Hospital.

**Anyone interested in the Alexander Technique try:**  
STAT  
20 London House  
266 Fulham Road,  
London SW10 9EL Tel. 071 351 0828  
SAE for list of registered teachers

David Richardson will be giving a talk on Sports Injuries at next year's Manchester convention - and he says he's going to improve his juggling by then! He worked at Foottime as resident osteopath, but fortunately was also very busy at several clinics!