



The Healing Power of Juggling

Browsing through accounts of the voyages of discovery we come upon the occasional report by early travellers indicating that juggling fruit, nuts and balls was a widespread custom among most of the primitive cultures of Africa, Asia, America, Australia and the South Sea Islands (Mendner 1956). We also find numerous illustrations, sculptures or writings documenting the art of juggling in the ancient civilizations of China, Egypt, Greece, and the Byzantine and Roman Empires. Yet only in exceptional cases do we find any reference to the healing powers of juggling - as, for example, in a recommendation by Aurelianus in the 5th Century that ball games were beneficial to epileptic children. It is not until modern times that the medical profession and educational therapists are starting to tap the therapeutic potential of juggling. The list of symptoms that are now being treated in this way includes learning difficulties at school, mental retardation, physical handicaps, alcoholism and other addictions, geriatric complaints, arthritis, rehabilitation after accidental brain damage or paralysis, as well as hemiplegia (one-sided paralysis) after a stroke.

KLEE (1986) refers to optional activities such as juggling and acrobatics workshops being offered as a means of breaking through and overcoming the passivity of alcoholics and barbiturate addicts while in clinical care. Initial findings show that in almost all cases lack of co-ordination and slowness of reaction is a major problem for chronic alcoholics and drug addicts. It therefore makes sense to train their basic skill and concentration using simple ball games before leading them on to juggling proper.

A wealth of experience has already been gained in the United States. Roni LYNN (1987) makes systematic use of juggling in occupational therapy. When working with hemiplegic patients, she first activates the normally functioning side of the body by doing a side-by-side juggle, herself taking over the role of the paralysed arm. In a few isolated cases,

"Fun is the best cure for almost everything"

... this idea inspired the photos on pp. 4-8
Jugglers: Astrid Haentsch, Fritz Brehm
Photos: Bahman J. Börger, Frankfurt

after many hours of what is often frustrating practice, patients have gradually become able to use their handicapped arm and perform a rudimentary exchange of two balls. LYNN notes that the criss-cross pattern of juggling is a particularly useful exercise for people suffering from brain damage. When cascading, the balls are continually crossing the midline of the body, alternately stimulating the right and left hemispheres of the brain, which are thus compelled to be in constant communication with each other. Research by SERGENT (1983) revealed that beginners tended to activate the "analytical" side of the brain more (the left side for right-handers). This is because they have to concentrate hard on following the movements of the flying objects with their eyes. The more accomplished juggler, however, is able to shift the centre of brain activity to the right hemisphere, the "creative" side. This means that, unlike the beginner who is busy observing isolated details, the advanced juggler has a more global, holistic perception of the total juggling pattern. This rhythmic, holistic experience, as any juggler knows, has a calming, relaxing effect, bordering at times on meditation.

In therapy, the initial aim is naturally to improve the patient's ability to concentrate on the details of individual throwing and catching movements. The eyes first have to learn to focus on an object throughout the course of its flight. The slower the flight - that of a balloon or a scarf, for example - the easier it is for the eyes to "stay tuned" to the object. They report back to the brain its position, the direction of its flight or descent and its speed. This enables the brain to react appropriately to the situation by issuing the command to the hands to reach out and catch at exactly the right moment. With practice the patient gradually learns to improve his temporal and spatial orientation. At the same time, the eye muscles are trained to react with greater speed and precision, an improvement which is automatically passed on to the hands.

This is a crucial factor for children and young people suffering from dysfunctions of the eye muscles, including many of those who squint. Their problem is the lack of smoothness with which the eyeballs are able to pinpoint and track a moving object. In order to help these children, many of whom incidentally also have problems with writing, opticians prescribe visual tracking exercises which are carried out using various pieces of apparatus at a sort of "optical gymnasium". Because of its power to motivate children, juggling is surely one of the best exercises of this sort, provided that the learning method is well structured and proceeds gradually from basic to difficult to complex. I know of one juggler who, as a child, used to suffer from a malfunction of the eye muscles which caused him real problems with reading and writing in school. His eyes jumped involuntarily from side to side, so that even if he could latch on to the first letter of a word, he was only able to take in a few, if any, of the subsequent letters, and started to read by guesswork. An uncle, who was a circus artist, advised him to take up juggling. The ten-year-old practised with such passionate enthusiasm that he was



almost completely able to overcome his reading difficulties and became one of the fastest readers in his class. After leaving school, that particular young man decided to make juggling his profession and even went on to win a silver medal at an international circus festival.

Dr. Ingolf MORK systematically incorporates juggling into his work on improving the reading and writing skills of dyslexic children, but his is a different approach. He starts from the observation that children with this kind of difficulty often have problems with the visual perception of different spatial directions. This is a common syndrome among natural left-handers who have been forced to write with their right hand. Ambidextrous children, or those who have not yet developed a preference for one hand or the other, also frequently get the orientation of the letters muddled up. They read d for q or p for b, or dairy instead of diary. Given that these problems can often be traced back to an unstable or disrupted preference for one side, MORK always tries to bring out the in-born preference by emphasizing the use of that particular hand while juggling. Instead of the criss-cross pattern of the cascade, MORK exclusively teaches his children the shower, where all the throwing is done with the dominant hand, while the other hand is always catching the balls and passing them over to the preferred hand. This forces the brain to allow one hemisphere to dominate the other. Dr. MORK reports that within six months the pupils' reading skills show significant improvement.

More success stories are reported in connection with educationally subnormal and mentally handicapped children. Here exercise is less specifically aimed at counteracting a particular deficiency, as with the problem of left-or-right preference. Instead, the objective is permanently to reinforce the child's self-esteem, which will then have a general effect on his or her behaviour. Severely handicapped patients may get their first ever sense of achievement from being able to throw and catch one or two scarves, or balance a peacock feather on the palm of their hand. In this area, we have only just begun to chart the field of possible applications for therapeutic juggling. Perhaps this article will inspire juggling colleagues who work in education or therapy to experiment further on this fascinating subject.

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Incidentally... the latest (Spring) edition of *Jugglers' World* contains two interesting articles on the same subject:

- a personal account by Lorraine Slama, a special education teacher at the Benedictine School for Exceptional Children, about her experiences there;
- an essay on the connection between juggling and self-confidence, written by physical therapist Barrett Dorko.

