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Developing Speed and Flexibility

While speed is not a result of flexibility – great speed of movement is impossible without extreme flexibility; thus training for speed must involve training for increased freedom of movement and increased ranges of movement.

Freedom of movement is primarily determined by two factors – the existing power-to-weight ratio, and the muscular fiber to fatty tissue ratio.

Ranges of movement are primarily determined by two other factors – the type of exercises employed, and the amount of resistance used in such exercises.

In both cases, several other factors are involved as well – but these are factors that little or nothing can be done about, so they need not concern us here; most such factors are hereditarily determined – neuro-muscular reaction time, bodily proportions, tendon attachment points (which affect leverage), and other factors.

Short of outright starvation, it is literally impossible to remove the last visible trace of intramuscular fatty tissue – but this is neither necessary nor desirable; however, excessive amounts of such tissue must be removed if great freedom of movement is desired. And the removal of such tissue will be a long step in the direction of improving the power-to-weight ratio –although it is only one of several required steps.

Fortunately, the additional steps required for removing excess fatty tissue also result in power increases – as well as increasing possible ranges of movement. And the exercises that are required for building great strength also produce increases in ranges of movement. Thus it is easily possible to concentrate on one goal – the building of a very high power potential –while also increasing both freedom of movement and ranges of movement.

Having improved all three factors – power, freedom of movement, and ranges of movement – as much as possible within the limitations imposed by bodyweight restrictions, speed of movement will then be at its optimum level. At least insofar as directly involved physical factors are concerned; thus additional improvement will depend upon improvements in "form" and the development of conditioned reflexes, so-called "muscle memory."

While it is certainly true – as I have tried to make clear in preceding chapters – that there is no significant difference between strength and endurance, that most such "differences" are merely apparent differences which fail to stand up to the light of careful investigation, it does not follow that exactly similar results will be produced by light forms of exercise and heavy forms of the same exercise.

To a large degree, this is true simply because the resistance employed in light exercises is not sufficient to force the body parts into positions that will produce increases in the existing ranges of possible movement. For example: when performing bent-arm pullovers on a flat bench with a light weight, the elbows will seldom be forced much if any beyond the forehead –and little or no improvement in the possible range of movement will be produced. Likewise, since the involved muscles will not be working throughout their entire possible range of movement, it will be impossible to induce a maximum demand for either muscular mass or strength increases.

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However, if a much heavier resistance is employed in the same exercise, then the elbows may be forced to a point well behind the head – and much greater increases in power, freedom of movement, and ranges of movement will be produced.

An even more striking example is immediately apparent if we consider the stiff-legged deadlift; many heavy individuals find it impossible to touch their toes with their finger-tips without bending their knees – and no amount of light exercises will do much to correct this condition. However, after a few months of practice of heavy stiff-legged deadlifts, most subjects can reach a point at least several inches below their feet – and some subjects can touch their elbows to the floor from a standing position without bending their knees.

And the practice of the movements required to build such great flexibility will simultaneously result in great increases in both power and freedom of movement – the muscles will become stronger because they are being worked over a greater range, and the fatty tissue which previously restricted freedom of movement will be removed to a great degree.

Thus – directly contrary to widespread popular opinion – it is obvious that very heavy movements are actually a requirement for developing speed of movement, rather than a practice to be avoided. A particular individual might be quite fast in spite of the fact that he has never practiced any sort of heavy exercise – but the same subject would have been markedly faster if he had engaged in heavy exercises.

During one of the Olympic games, careful testing of the involved athletes clearly proved that a weightlifter was by far the fastest man competing in any sport – and that most of the weightlifters were considerably faster than the non-weightlifters.

Great power is literally impossible without great speed of movement; and the higher the power-to-weight ratio, the faster the resulting speed – all other factors being equal.