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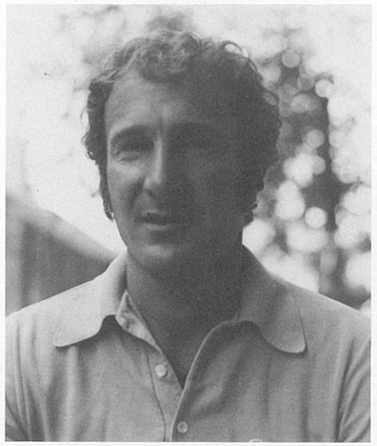
THE CASE FOR A DELAYED SERVICE TOSS

by John Kermit Gruberg



John Gruberg has established himself as an authority on the modern serve. He played college tennis at UCLA and Cal, where he majored in Communications. Gruberg has published poetry and written scripts used in television commercials. Originally from Berkeley, Gruberg makes his home in the San Jaoquin Valley of Central California, where he was the Fresno City tennis champion in 1975. In 1980, he was junior coach for Aruba, in the Netherland Antilles. Gruberg has competed and instructed on three continents.

In previous issues of this journal, John Gruberg has shown how the *footwork* of many contemporary servers has changed in their efforts to gain power. Some of these players also alter their *ball tosses* in order to make their serves more effective.

The photos included here depict well known players at or near the moment of ball release. By examining the position of their rackets, one can determine which tosses are more delayed and which are earlier with respect to the racket-lifting arm. When the lift of the racket is more complete (higher) at ball release, the toss is said to be more delayed. When the lift is less complete the toss is earlier and necessarily higher.

A synchronized (or early) ball toss is, by definition, higher and not only gives the opponent more time to read the hit, but it gives the server less time to contact the ball in the optimum hitting zone. A high toss means the ball will be hit during its descent and hence will go through the contact zone at a greater velocity than a toss which is the same height as the contact zone. Tony Trabert pointed this out in his instruction piece in the December, 1981 issue of *Tennis Magazine*.* The only problem was that the accompanying illustration of Trabert, at the moment of ball release, showed him with an early or synchronized ball toss (almost identical to the photos included here of Gorman and Pfister.) Hence, the racketwork of Trabert's lift and forward swing would have to be extremely rushed if he were to attempt contact at the apex of his ball toss. It is more likely, therefore, that Trabert actually makes contact below the apex of the ball toss. (Not that he wouldn't be correct in his coaching advice.)

Trabert did point out that slowing the tossing hand is a good remedy for lowering an excessively high ball toss, but because it is difficult to slow the tossing arm without also slowing the lifting arm, it can be more beneficial to think of actually delaying (starting later) rather than just slowing the tossing arm.

Five months later

Five months later, Vic Braden also emphasized contacting the ball at the apex of the toss. Braden's article was entitled "Three New Discoveries about the Serve". *(Tennis Magazine,* May, 1982) He did a good job of reviewing the concept, but there was no mention of how the hitting arm prepares for such an optimum low toss — that is, by lifting early and/or delaying the toss.

A delayed toss not only allows more time for the shoulder and body to get set and dig in prior to contact. McEnroe takes full advantage of this time, exhibiting a tremendous knee bend and upward thrust going into contact. (There can be no doubt that a thrusted serve and a delayed toss compliment each other.)

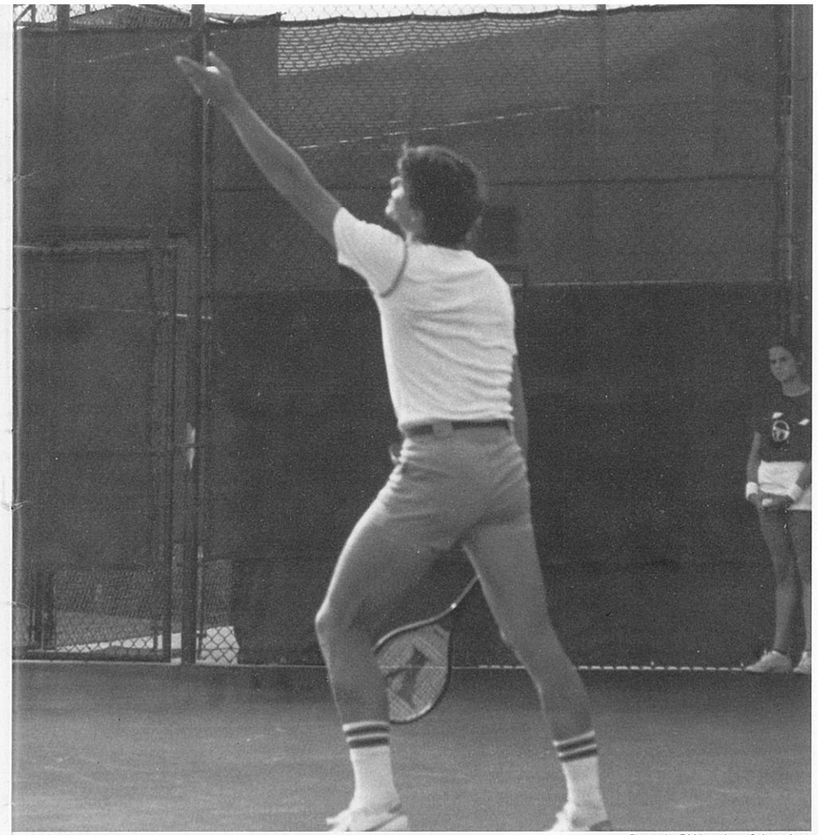
Of course, an even more elemental advantage of such delayed action is that the toss in itself may be more carefully and perfectly controlled, once a player becomes accustomed to the separateness of the motion.

Not only are changes taking place in service footwork, but the arms, also, are going through changes. John McEnroe's service toss is delayed more obviously than any other top player. After his address, McEnroe's racket arm lifts deliberately, and only after that does his tossing arm begin its upward swing. Roscoe Tanner's toss is even more severely delayed in relation to his lift, but because Tanner's motion in its entirety is so quick, it is difficult to observe specifics.

Tanner, by the way, also speeds the racketwork of his lift, which has the overall effect of widening even further the gap between racket lift and ball toss. Rather than speeding the lift, however, most players utilizing this technique prefer to think of lifting early and tossing later. In this sense the ball toss is delayed with respect to the racket lift.

The obvious advantage of a delayed toss is that the hitting arm can be more ready to strike as soon as the tossed ball is released from the fingertips (see photo of Roscoe Tanner.) The result is that the ball toss need only be as high as the racket head will reach in its swinging arc.

*The concept of a delayed toss was first introduced by this author in the July, 1981 issue of ADDvantage Magazine.



Photos by DM Loughran & Associates

◁ Hank Pfister's toss is much earlier. The ball will have to travel high enough to allow time for his racket to complete its lift and swing forward into contact. Contact will be on the ball's descent, and Pfister's opponent will have more time to read the direction of the hit.

Roscoe Tanner has delayed his service toss, allowing his lifting arm more time to complete its racketwork. He is almost ready to swing at the ball as it releases from his fingertips. Tanner's opponent will have very little time to read the direction of his serve, for the toss will be low, just high enough to make a full extension and contact the ball at the apex of its ascent. ▽

Delayed vs synchronized

Traditional tennis instruction espouses a ball toss which is simultaneously synchronized with the racket lift. The tossing arm and the lifting arm are thought of as swinging out of the address position together in a kind of scissors action. They are envisioned as falling and rising together. It is true that there is a naturalness and rhythm to such a synchronized motion, but the important disadvantage is that because the hitting arm is not as ready to strike at the moment of ball release, the ball must be tossed higher to allow

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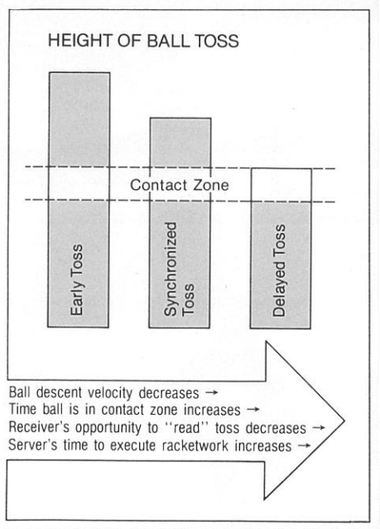
enough time for the finish of the lift and the forward acceleration of the racket. Hence, a ball tossed with a synchronized lift is hit below the apex of the toss.

Teaching pros who teach a synchronized motion are kidding themselves if they think their students will be able to contact the ball at the top of its ascent (without uncomfortably rushing their swings.) Of course, there are also players who toss first and then lift — their early ball tosses will be necessarily even higher than those in which the arms work in a synchronized manner, since the greater amount of racketwork remaining after the moment of ball release will require even more time for completion.

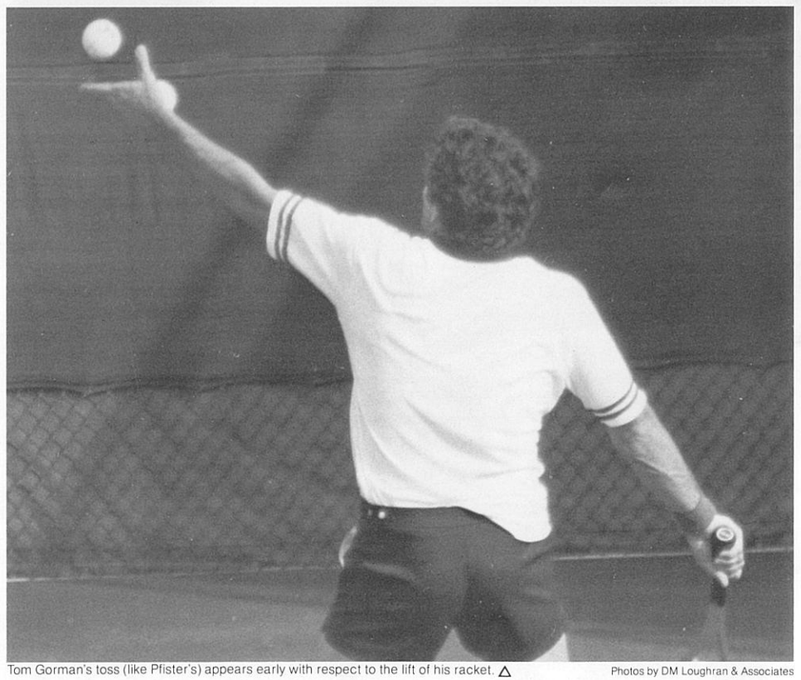
Besides John McEnroe and Roscoe Tanner, other players who exhibit a delayed service toss include JIMMY CONNORS, GENE MAYER, STEVE DENTON, JOHN NEWCOMBE, STEVE DOCHERTY, and CHUCK BLECKINGER. Females brandishing a delayed toss include BILLIE JEAN KING, TANYA HARFORD, and HANA MANDLIKOVA.

Players whose synchronized (or early) motions result in excessively high ball tosses are IVAN LENDL, BUTCH WALTS, ANDREA JAEGER, SILVIA HANIKA, CHRIS EVERT LLOYD, and TRACEY AUSTIN.



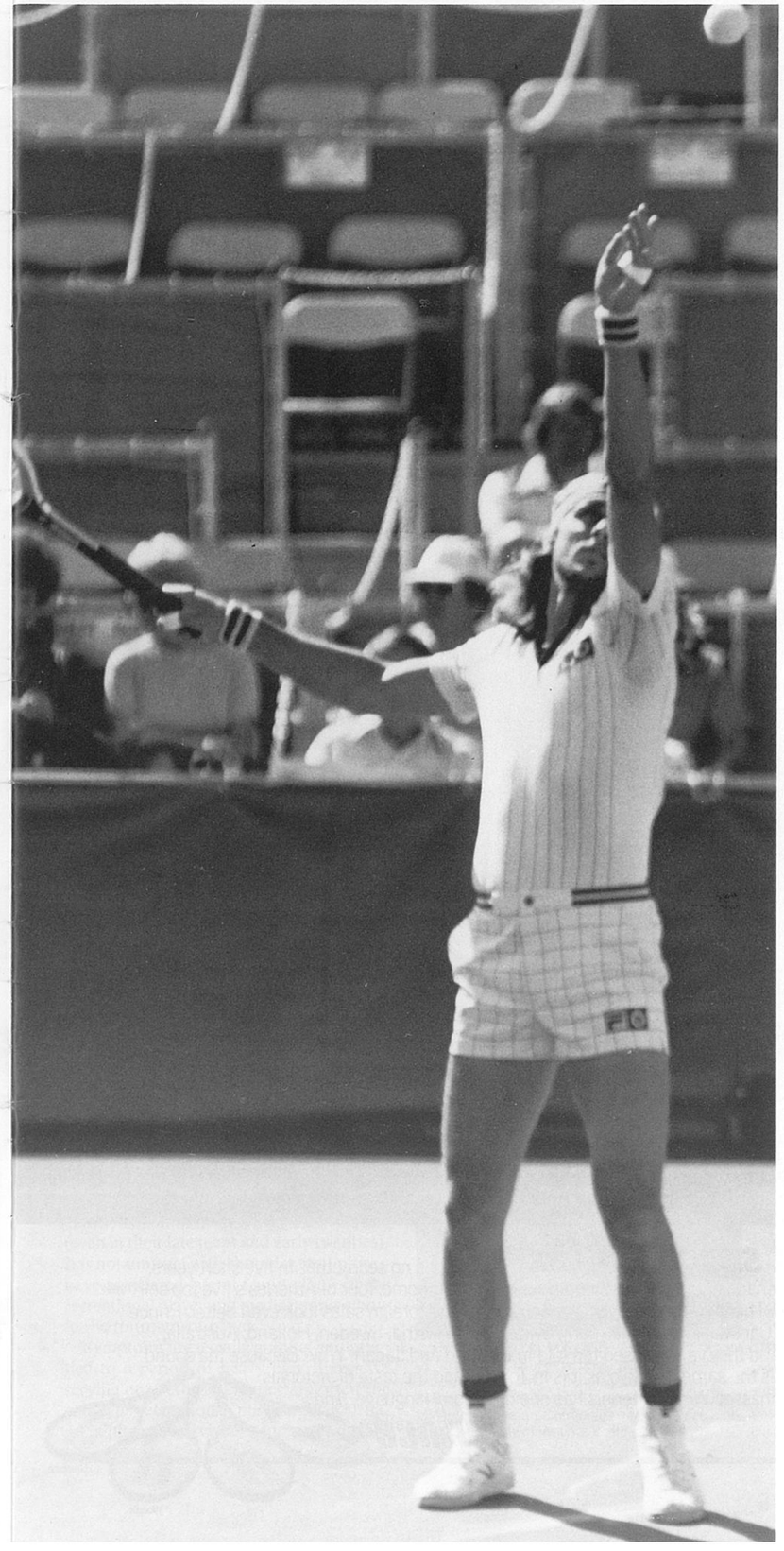
Synchronized Toss: From the address position, the tossing hand and the lifting hand accelerate away from each other at the same rate and at the same time.
Early Toss: Tossing hand accelerates prior to and/or at a faster rate than lifting hand.
Delayed Toss: Tossing arm accelerates later and/or slower than lifting arm.
Note: In many cases where the hands move together and pull away from each other simultaneously, the toss is to be considered delayed rather than synchronized. The reason is that in these instances the hands are moving together first in the direction of the lift, and then they pull away from each other. Hence, the lifting arm has been given a head start, and the tossing arm has been effectively delayed.

Left-handers John McEnroe and Jimmy Connors exhibit delayed service tosses. The lifting action of their rackets is almost complete as the ball releases from their hands just above the level of their heads. Contact will be approximately at the apex of the toss. ▽



Tom Gorman's toss (like Pfister's) appears early with respect to the lift of his racket. △ Photos by DM Loughran & Associates

Bjorn Borg's toss is synchronized with his lift. The ball is ascending well above his head, and contact will be made during its early descent. If Borg's tossing hand was at chest level (prior to release) and his racket was at the same position in this photo, then he, too, would depict a delayed toss. ▷



USPTA AND TENEX SIGN ENDORSEMENT CONTRACT

The United States Professional Tennis Association and the Ferrari Importing Company, known as Tenex, have just completed an endorsement contract. This contract will include the USPTA's exclusive endorsement of synthetic tennis strings.
The strings are currently marketed under the names of "Gamma Gut", "Gamma-Graphite", and "Gamma-Ruff".

Gamma Gut is a revolutionary super-synthetic string with outstanding performance ability.
It is made by an exclusive patented Gamma irradiation process that changes the molecular structure and enhances playing characteristics. **Fortune** Magazine (May, 1981) reports that gamma irradiation increases golf ball drives by 25%. Similarly, Tenex claims that up to 25% increase in power and control can be obtained with gamma irradiated racquet strings and that **Gamma Gut** has higher elasticity than any other string, animal gut or synthetic.

The Professional Stringers Association Newsletter states, "Dupont Resiliency Test on Gamma Gut has 100% liveliness and resiliency compared to 70-80% for the others."