

THE SPORT OF ROWING

To the readers of *www.row2k.com*

With the **IRA** coming up this weekend on the United States regatta calendar, I thought it would be interesting to go back and explore the early days of this venerable institution. This excerpt concerns the beginning of the greatest dynasty rowing history and the man whose name became synonymous with American rowing for half a century: **Hiram Conibear**.

The following .pdf is in the format intended for the final printed book. The color you see will be duplicated in the limited collector edition. All these excerpts are from the third of the four volumes.

Incidentally, all the excerpts that have appeared on row2k during the last six months have since been revised as we work toward publication. The most recent drafts are now posted in the row2k archives.

The **limited collector edition** of my new book, *The Sport of Rowing*, from whence have come all these excerpts, sold out in April in about a week. Thanks so much to all of you who have showed such faith in the book.

The paperback **standard edition** remains on sale at:

www.row2k.com/rowingmall/

This edition has all the same content as the collector edition. The illustrations are in black and white, and the price is much more affordable.

Both editions will be published in October.

And remember, you can always email me anytime at:

pmallory@rowingevolution.com

Many thanks.

Part VII
The University of
Washington Dynasty

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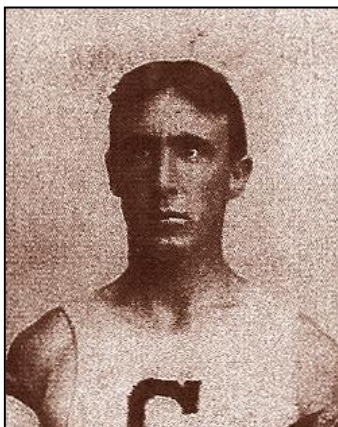
44. Hiram Conibear

Early History – The Inspiration for Conibear’s Technique

The greatest rowing dynasty in American collegiate history started inauspiciously at the end of the 19th Century in a most unlikely place: **Seattle, Washington**, literally and figuratively as far away as one could get in America from the rowing Meccas of Poughkeepsie and New London.

In **1899**, **E.F. Blaine**, a lawyer and land developer who had moved there from Ithaca, New York, “knew of Cornell’s successful rowing program and wanted to start a similar program at [the **University of Washington**]¹⁵⁴² to take advantage of Seattle’s mild weather, accessible water, and tall young men, mainly of Scandinavian descent, whose families had moved to the area for its logging and fishing.

“Blaine donated \$200 to start a rowing program at Washington, and later Blaine and other Seattle businessmen spent \$650 to build two training gigs and a boathouse for the UW crew.



Young, *Cornell Navy*

Mark Odell

“Washington hired its first crew coach in **1903**, **James Knight**, the football and track coach who had rowed at Princeton,”¹⁵⁴³ but in the summer of **1905**, the Associated Students of the U.W. concluded that they did not have the funds

necessary to continue paying for a crew coach, and the team had to depend on the services of two volunteer coaches, **Mark Odell**,¹⁵⁴⁴ the 5-seat from the 1897 IRA Champion Cornell crew, and another fellow named **George Strange**.

“Little is known about George Strange. Years later, Mark Odell said he believed that Strange had rowed at Yale. Strange was identified as ‘a member of that [Toronto] Argonaut Crew which had such a reputation at the St. Louis Exposition crew races.’ [A

George M. Strange rowed in the Canadian Silver Medal eight in the 1904 Olympics in St. Louis.]

“Odell and Strange donated their time to coaching Washington rowers because of their love of the sport. Early morning turnouts were held so the coaches could go to work afterwards.”¹⁵⁴⁵

“Rowers were taught the Cornell rowing techniques developed by Coach **Charles**

¹⁵⁴² Known familiarly as the **UW**, which is often written by others as “UDubya” or “UDub.” Their athletic mascot is the Husky and their colors purple and gold, though their blades are painted white. The beautiful University of Washington campus in Seattle is surrounded on three sides by water: Union Bay, the Montlake Cut and Portage Bay. Lake Washington and Lake Union are within easy rowing distance. Winters are mild but rainy.

¹⁵⁴³ Lundin, p. 27

¹⁵⁴⁴ See Chapter 35.

¹⁵⁴⁵ Beck, *Rowing at Washington*

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Courtney¹⁵⁴⁶ which dominated East Coast rowing. Odell brought to the shores of Lake Washington his experiences learned rowing on Cayuga Lake under the 'Old Man.'

"An article on Washington rowing later reported that Washington's crew program 'started' under Mark Odell, and Odell's obituary said that he 'organized a rowing club which was instrumental in establishing rowing at the University of Washington.^{1547,1548}



University of Washington Archives, Conibear Shellhouse

Connie

Hiram Conibear, Physical Education Professional

Hiram Boardman Conibear (1871-1917), destined to play a major role in rowing history, was born in Illinois in 1871 to middle-class immigrants from England. In his youth, he had excelled in sports, but after high school, at his father's urging he reluctantly entered a business college in Dixon, Illinois. Finding this not to his liking, he eventually got permission from his father to leave school and "enter the employ of the Ide Manufacturing Company of Peoria.

"This concern, formerly producers of fine watch-repairing machinery, had entered the bicycle field. In 1891, it was maintaining a racing team of bicycle riders who traveled about the country entering bicycle races, which were popular in the

¹⁵⁴⁶ See Chapter 31 ff.

¹⁵⁴⁷ Evans, Walter, Hiram Conibear: Revolutionizer of Crew Racing, Bicentennial Biographies, *Seattle Post Intelligencer*, spring 1976; Mark Odell, Insuranceman, Succumbs, *Seattle Times*, June 26, 1963

¹⁵⁴⁸ Lundin, p. 28

'90s. Conibear soon was assigned to this group of riders and a little later was himself given charge of training and managing them.

"Later, he helped develop the great 'Stearns' team of riders. The trainer of this group of athletes was a Dave Shaffer, who, at the time, had no small reputation as a handler and developer of men, and he passed on to young Conibear much of his lore."¹⁵⁴⁹

By 1896, Conibear had chosen a relatively new career goal: **university-level physical education professional**, and for the following decade he relentlessly and methodically pursued his objective. There being few phys-ed programs to follow at major universities in those days, Conibear had to prepare himself mostly through on-the-job training.

That year, he became the trainer for the track and football teams at the **University of Chicago**, then a power in college athletics. He worked under Amos Alonzo Stagg, a

¹⁵⁴⁹ Beck, Ch. V, p. 3

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pioneer of American football.¹⁵⁵⁰ As head trainer, he accompanied the Chicago track team to Paris to compete in an international meet held in conjunction with the Exposition Universelle de 1900.

In 1901, he was hired by the **University of Illinois** as track coach and football trainer and even filled in as head football coach for the final game of the 1903 season.

Late in 1903, he accepted the position of head of the Department of Physical Training and Athletics at the **University of Montana** and produced league champion track and football teams during his second year.

While working in Missoula, as a sign of the seriousness of his commitment to his career, Conibear spent the summer of 1904 pursuing a course of study at the **Chautauqua School of Physical Education**.¹⁵⁵¹

The following summer of 1905, he continued his studies at Chautauqua, and “here he had his first contact with the ancient sport of rowing. Under **Dr. Albert H. Sharpe**,¹⁵⁵² he spent four weeks training for a four-oared barge race with the Shadacoin Club of Jamestown [New York].”¹⁵⁵³

Dr. Sharpe was a Yale graduate, Class of ‘02, who had rowed his freshman year and been coached by recent graduates under the supervision of head coach John Kennedy.

At that time, Yale was following Bob Cook’s quasi-English Orthodox Technique.¹⁵⁵⁴

According to Conibear, at Chautauqua Sharpe “‘gave me my first lesson in the art of pulling a shell’ and inspired ‘me with an enthusiasm for rowing and some of the knowledge gained from his own experience at New Haven, which have stood me in good stead ever since.’”¹⁵⁵⁵

After serving as athletic director at Montana for two years, Conibear returned to the **University of Chicago** in the fall of 1905 as head trainer for football and track, and during the summer of 1906 he served as trainer for the **Chicago White Sox** professional baseball team as they won the World Series.

While at Chicago that year, he became friends with a former University of Washington football quarterback named Bill Speidel, who was there studying medicine. Through Speidel’s contacts with the UW Athletic Manager, **Lorin Grinstead**, Conibear was offered the position of UW Assistant Director of Physical Training, and coach of track and trainer of football.

After ten years of pursuing his professional goals, Conibear next moved to Seattle. He would spend the rest of his life there.

How Conibear actually became the Washington rowing coach has been lost in time. Legend has it that he was chatting with Grinstead on the sidelines of a varsity football game during the fall of **1907** when the fact that the university had no crew coach came up.

Failing to mention his Chautauqua training, Hiram Conibear in his best aw-shucks Midwestern drawl, said something like, “I never did nothing but row a boat

¹⁵⁵⁰ Mendenhall, *Coaches*, Ch IV, p. 2

¹⁵⁵¹ Then and now, Chautauqua is a destination resort in Western New York State world renowned for its educational programs, coincidentally on the shores of the lake which was site of the Hanlan/Courtney match race where Courtney woke up to find his boat sawed in half. See Chapter 11.

¹⁵⁵² Lundin, p. 30. By 1923, Dr. Sharpe became Director of the Ithaca School of Physical Education. He later became the Athletic Director at Cornell University.

¹⁵⁵³ Beck, Ch. V, p. 5

¹⁵⁵⁴ Conibear, p. 315. See Chapters 34 and 35.

¹⁵⁵⁵ Qtd. by Mendenhall, op.cit., p. 8

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around a lagoon in Chicago, but if you want me, I'll do what I can."¹⁵⁵⁶

As they say, the rest is history. By 1908, Conibear had given up his track and football duties to devote full time to the crew.

Hiram Conibear, Crew Coach

Once he had taken over the Washington rowing program, Hiram Conibear applied himself to the profession of crew coach with the same singleness of purpose that he had previously applied to his pursuit of a career in general physical education.

Back then, in the University of Washington Library there was a single volume on rowing. It was **Rowe & Pitman!**¹⁵⁵⁷ Conibear immersed himself in its pages, underlining passages and writing in the margins.¹⁵⁵⁸

So Connie's education in rowing included Golden Age English Orthodox thought, including exposure to the British disdain for Cornell's and Yale's techniques during their appearances at Henley ten years earlier.

Coincidentally, the shell that Cornell had rowed at Henley in 1895 and in Poughkeepsie in 1897 was one of two used eights that Charles Courtney sold to Washington the very spring before Connie took over.¹⁵⁵⁹

Lundin: "Conibear described his initial coaching technique as follows: 'I have to yell and cuss a little in order to bluff my way along until I have a chance to grasp what I'm trying to coach.'

¹⁵⁵⁶ www.huskycrew.org

¹⁵⁵⁷ See Chapter 15.

¹⁵⁵⁸ Mendenhall, op.cit., p. 7, Ulbrickson, p. 14. Unfortunately, the book with Conibear's annotations has been lost.

¹⁵⁵⁹ Ulbrickson, p. 93

"Given Conibear's rowing limitations, it is fortunate that Seattle had experienced volunteer coaches available. Odell continued his assistance to Washington's rowing program."¹⁵⁶⁰

Connie's Experiments

Conibear also performed some now legendary experiments. "With a skeleton borrowed from the biology laboratory he discovered for himself the anatomical movements which a stroke required of an oarsman: where, how and when the maximum drive could be applied to the oar."¹⁵⁶¹

"Conibear placed a broom handle into the skeleton's hands to serve as an oar. He moved the skeleton through the motion of a stroke noting the position of the bones at each stage."¹⁵⁶²

Another of the famous Conibear stories describes how he used an upturned bicycle to help himself develop his rowing technique, and we can easily reconstruct what he did.

All bikes in those days had a rear wheel without a derailleur, which had not yet been invented.

So when Connie turned his bike upside down, if he spun the front wheel, it would have kept going without slowing down much at all, but the rear wheel would have had the extra drag of turning the chain and pedals.

So Conibear must have turned his attention to the rear wheel, which slowed down as a boat slows down in the water on the recovery.

You can get the same effect with a modern bicycle by turning the rear wheel

¹⁵⁶⁰ Lundin, pp. 30-1

¹⁵⁶¹ Mendenhall, op.cit., p. 32

¹⁵⁶² Lundin, p. 31

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back-to-front so that it does not freewheel and turns the pedals as Conibear's did.

According to **Mendenhall**, "From the wheel of an upturned bicycle steadily spinning with a continuous pat of his hand, he came upon the critical nature of the recovery if an even run to the boat was to be maintained."¹⁵⁶³

If you try it yourself, you will quickly discover, as Conibear must have, that it is best not to "pat" the wheel but instead to urge the tire along with your hand through around 90° of its rotational arc.

Al Ulbrickson, stroke of the 1924 and 1926 Poughkeepsie Champion Washington crews, was too young to have met Conibear, but when he became a Washington oarsman he had the bicycle experiment passed on to him.

According to Ulbrickson, the first thing Conibear learned was that it was hard to get hold of the tire to begin the "stroke."

Ulbrickson: "For instance, when he used a stroke slower than the wheel's speed, a drag or check resulted. . . . Bit by bit, it came to him that in order to keep the wheel spinning smoothly and continuously, his palm, the instant it struck the tire, must be traveling at a speed equal to or greater than the speed of the revolving wheel."¹⁵⁶⁴

Applying the same principle to rowing, Conibear concluded that the blades must



J.R. Eyerman, *Life Magazine*, June 20, 1949 / Getty Images

In 1949, the UW freshman crew recreates **Connie's skeleton experiment**.

enter the water *at the speed of the water or greater*, the same conclusion that **Steve Fairbairn** came to with his "Jesus Bell-Note" entry.¹⁵⁶⁵

Ulbrickson: "Next he found it helped considerably toward the end of the stroke, to give a little snap to his palm."¹⁵⁶⁶

Recreating the experience that Conibear must have had, you will discover for yourself that once you have developed the skill necessary to begin each "stroke" by contacting the spinning tire with your hand at the proper speed, the wheel will respond

¹⁵⁶³ Mendenhall, op.cit., p. 8

¹⁵⁶⁴ Ulbrickson, p. 93

¹⁵⁶⁵ See Chapter 19.

¹⁵⁶⁶ Ulbrickson, p. 93

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to continuous pressure from your hand during your 80-90° stroke arc. At the end of each stroke the wheel is going pretty fast, and it's all you can do to keep up with its speed for a final send.

From this, Conibear independently developed the idea of Fairbairnesque *Schubschlag* acceleration during the stroke, leading to a “boiling puddle” sent away at the end of each stroke.

And his experiment is as accessible and as intuitively persuasive today as it must have been a century ago.

Pilgrimage to Poughkeepsie

Broussais C. Beck, stroke of the 1910 Varsity, a major early financial supporter of Husky rowing and a good friend of Conibear's, later wrote in *Rowing at Washington*: “In 1908, I had the good fortune to accompany him to the Hudson to spend several days before the Poughkeepsie race in the rowing atmosphere. The reception he was given by the coaches of the participating crews was a revelation.

“Without exception, every coach was more than kind and courteous, and even many of the various crewmen came to recognize him and make us welcome about their floats.

“I sat for hours listening to ups and downs of discussions between **Courtney** of Cornell and Conibear. I remember going along very humbly on a hot afternoon into the dusky interior of the long shellhouse where the Cornell boats were kept, while Courtney gave us a full exposition of his ideas on rigging shells for the various types of men and strokes. All the while, Conibear had his two-foot carpenter's rule unfolded and was busy measuring and noting important distances.

“Conibear learned by experience every day, and experts were glad to help him

because he was so matter-of-fact about his need of their help.

“None of these coaches knew Conibear in the slightest before he introduced himself. Yet at Poughkeepsie, every single one was not only exceedingly agreeable but also much interested in Conibear's tale of the far western struggle to establish rowing. They were uniformly glad to spend energy and time helping this western visitor to an understanding of their sport.

“We went up to New London to see the last of the Yale-Harvard season. Never will I forget the quiet welcome extended by Yale Coach [**John**] **Kennedy**, and when he took us out in the coaching launch, my cup was certainly full.”¹⁵⁶⁷

“Conibear remarked after the [Harvard-Yale] race that ‘his crew ought to have been in it.’”¹⁵⁶⁸

After observing the Harvard-Yale Race on June 25, in which Harvard paddled home the winner after the Yale stroke collapsed after three miles, Conibear returned to Poughkeepsie to view the IRA Regatta on June 27. Syracuse, stroked by **Jim Ten Eyck, Jr.**, Ned's younger brother, came from behind Columbia and Cornell in the last two hundred yards to win by a deck in what *The New York Times* called “the most desperate struggle in the history of college rowing.”¹⁵⁶⁹

After the racing was over, Conibear accepted an invitation to return with Courtney to Ithaca.

Beck: “Conibear was clever, and knew enough to visit the one man who could teach him the most about rowing. He spent the better part of a week in Ithaca in what

¹⁵⁶⁷ Beck, Ch. V, pp. 10-11

¹⁵⁶⁸ Lundin, p. 34

¹⁵⁶⁹ Syracuse Wins Great Varsity Eight-Oared Race on Hudson, *The New York Times*, June 28, 1908

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George Grantham Bain Collection (Library of Congress) Prints and Photographs Division (LC-B2-2709-18)

1913 Poughkeepsie Regatta Varsity Race

1 Syracuse 19:28.6, 2 Cornell 19:31.0, 3 Washington 19:33.0,
4 Wisconsin 19:36.0, 5 Columbia 19:38.2, 6 Pennsylvania 20:11.2

amounted to a crash course on rowing and crew coaching.”¹⁵⁷⁰

The Cornell of the Pacific

Just two years later in 1910, “acknowledging the school’s debt to its mentor in Ithaca, *The Tyee* [the annual UW yearbook] stated: ‘Washington has made a mighty stride toward the goal of her ambition, to become the ‘Cornell of the Pacific.’ Her rowing traditions have a broad foundation upon which to become fixed . . .

Washington bids fair to become the premier rowing institution in the United States.”¹⁵⁷¹

In 1913, when Connie felt the team was strong enough to merit making the cross-country train trip east for the first time to actually participate in the Poughkeepsie Regatta, he would “secrete himself along the shore and take voluminous notes on important rivals. Cornell, under Pop Courtney, was the favorite. . . . Syracuse, under Jim Ten Eyck, also was reported as unusually strong.”¹⁵⁷²

¹⁵⁷⁰ von Wrangell, personal correspondence, 2005

¹⁵⁷¹ Lundin, p. 33

¹⁵⁷² Ulbrickson, p. 95

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www.huskycrew.org:

“Washington trailed early, but at the three-mile mark began to move. Clipping by Pennsylvania, Columbia and Wisconsin in the final mile, the crew fell short, about a length behind the winner, Syracuse, and runner-up Cornell.

“Although Elmer Leader¹⁵⁷³ rowed a good portion of the race with broken foot straps, it was more a case of inexperience and a late sprint that cost Washington the victory.”¹⁵⁷⁴

That year, “Ed Leader¹⁵⁷⁵ and Rusty Callow,¹⁵⁷⁶ both future coaches at Washington and elsewhere, rowed 2-seat in the eight and 3-seat in the four, respectively.”¹⁵⁷⁷

Origin of Conibear’s Technique

“Conibear himself, when asked what style of stroke he advocated, was said to have growled in reply, the ‘get-‘em-there stroke.’”¹⁵⁷⁸

Let’s see. Courtney had the “hard pull” stroke. Ten Eyck had the “get-there stroke.” Now we have the “get-‘em-there stroke.” It’s no surprise that these men enjoyed each other’s company very much every year in Poughkeepsie.

There are many theories about who should get the credit for being Hiram Conibear’s inspiration.



George Grantham Bain Collection (Library of Congress) Prints and Photographs Division (LC-B2-2710-18)

Conibear in Poughkeepsie, 1913

Kelley: “At the height of the discussion of his stroke, there were those to hold that he had taken it from others. The most popular theory was that it was, in essence, the old **Bob Cook** stroke from Yale . . . Certain Cook principles seem to have been incorporated in the stroke as rowed by Washington under Conibear.”¹⁵⁷⁹

Analysis of the Conibear Stroke will reveal that it actually had very little in common with the Cook Stroke.

Mendenhall: “Some of Conibear’s admirers, chauvinist in their own way, have seen his stroke as totally original, especially owing nothing to Cook or Courtney. Obviously, Conibear used anything he could get his hands on or devise for himself – digesting, refining and discarding as he went along.”¹⁵⁸⁰

Conibear, himself, wrote, “It has always been natural with me to observe and

¹⁵⁷³ brother to Ed Leader. See below.

¹⁵⁷⁴ *www.huskycrew.org*

¹⁵⁷⁵ See Chapter 52.

¹⁵⁷⁶ See Chapters 53 and 64.

¹⁵⁷⁷ Beck, Ch. IV, p. 11

¹⁵⁷⁸ S. Pocock, p. 56

¹⁵⁷⁹ Kelley, p. 228

¹⁵⁸⁰ Mendenhall, op.cit., p. 15

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experiment, arriving at my own conclusions in Yankee style.”¹⁵⁸¹

Conibear also learned from his athletes. For instance, when 6’2½” 189cm 194lb. 88kg¹⁵⁸² **Max Walske** ‘16, “the finest physical specimen Connie had ever seen,” arrived as a freshman, he insisted on swinging to the entry position with only his inside knee between his elbows [now nearly universal in modern sweep rowing]. Rowing books of the time called this a fault, but “it had worked so well, had proved so natural, the method became a part of Connie’s ‘comfortable’ system.”¹⁵⁸³

Mendenhall: “Thus, in the early years the Washington stroke was constantly evolving. Since Conibear came to the sport so late and so suddenly, he recognized ‘the endless opportunity for experiment’ and acknowledged that ‘no one is ever in a position to say that he has the last word.”¹⁵⁸⁴

Stan Pocock, who literally grew up in and around the Conibear Shellhouse, recalls one of Conibear’s greatest rowers: “When **Rusty Callow** was asked just what the Conibear stroke was, he said that he had no idea. As far as he could recall, Connie was demanding something different each of the three years he rowed for him.”¹⁵⁸⁵

Mendenhall has also written of Conibear: “His enthusiasm often pushed him too precipitously from one extreme to another. For instance, his look at the Eastern crews in **1913** led him to experiment with an excessive body swing forward for the entry.”¹⁵⁸⁶ The **1914** crew did less well in

Poughkeepsie [a distant fifth out of five crews],¹⁵⁸⁷ and the next year Washington lost to a good Stanford crew.

“In **1916**, with [Freshman Coach] **Ed Leader** arguing for a less exaggerated, more comfortable swing forward, Washington beat California [in their dual meet] by sixteen lengths”¹⁵⁸⁸ and Stanford by seven lengths to win the Pacific Coast Intercollegiate Rowing Championship and complete an undefeated season.¹⁵⁸⁹

However, the inconsistency in the results of this period might well have been influenced more by the varying quality of oarsmen than merely by variations in the technique Conibear was teaching.

This surmise is supported by the fact that in the very month that the Huskies did so poorly at the 1914 IRA, supposedly due to extreme body angle forward, Conibear published an article in *The Outing Magazine*¹⁵⁹⁰ in which he described his rowing technique in detail. On the subject of body swing forward, Conibear recommended a moderate +25°, in sharp contrast to Cornell’s +30° and Syracuse’s +45°.

To my knowledge, no films of the 1914 IRA have survived to confirm this surmise, but as we have already found in turn with English Orthodoxy and with Fairbairnism, no technique can remain rigid *and healthy* for long, so it would be no crime if Conibear was constantly learning and adjusting throughout his career.

¹⁵⁸¹ Conibear, p. 315

¹⁵⁸² www.huskycrow.com

¹⁵⁸³ Ulbrickson, p. 95

¹⁵⁸⁴ Mendenhall, op.cit., p. 8

¹⁵⁸⁵ S. Pocock, personal correspondence, 2005

¹⁵⁸⁶ Syracuse won over Cornell and Washington in 1913. See the Syracuse technique under Jim

Ten Eyck with +45° body angle forward, Chapter 41.

¹⁵⁸⁷ prompting the school to rule out future trips to the IRA for at least three years.

¹⁵⁸⁸ Mendenhall, op.cit., p. 9

¹⁵⁸⁹ They did not compete in the IRA.

¹⁵⁹⁰ See Chapter 46.

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45. George and Dick Pocock

Family History – Ernest Barry – Emigration to North America

On March 23, 1911,¹⁵⁹¹ young **George Pocock** (1891-1976) and his older brother Dick emigrated from England to the Pacific Northwest, financed by the remnants of the £50 purse George had been awarded three years earlier as the winner of the sculling championship of London, prompting him to say later, “I rowed my way from England to Canada.”¹⁵⁹²

The two Pococks were born and raised in the world of boats and boat building. In the 1840s their uncle had built the very first experimental keelless racing shell.¹⁵⁹³

Their maternal grandfather, “old Grandpa Vickers,” had been a builder before their father, in 1874 fashioning, for instance, the *Lady Alice*, a custom sectional boat which Sir Henry Stanley¹⁵⁹⁴ took with him on one of his African explorations.¹⁵⁹⁵



George Pocock Rowing Foundation
Dick Pocock in his
Doggett’s Coat and Badge, 1910

While the Pocock boys were growing up, their father, **Aaron Pocock**, was employed as the boatman at Eton,¹⁵⁹⁶ “and Dick and George learned to row there alongside the toffs of the college.”¹⁵⁹⁷

George Pocock: “Eton is a prep school with 1,100 boys and 650 shells, and my Dad was the head boatbuilder. At Eton, they take their rowing in seasons, eights first, fours next, pairs next and then singles, and when the singles get going you can almost walk across the river on singles. There was only one outside race, and that was one at Henley in an eight. They competed in the Ladies’ Plate.”¹⁵⁹⁸

After they grew up, both Pocock brothers became professional sculling champions, Dick winning the Doggett’s Coat

¹⁵⁹¹ G. Pocock, qtd. by *KCTS-TV*

¹⁵⁹² www.huskycrow.com

¹⁵⁹³ Kelley, pp. 235-6

¹⁵⁹⁴ In 1871, James Gordon Bennett, proprietor of *The New York Herald*, sent Stanley on his first trip to Africa searching for Dr. David Livingston, a celebrated African explorer and missionary who had not been heard from and was presumed dead. After two years of

searching, during which time Stanley’s reports were printed in *The Herald*, Stanley located his quarry and greeted him with the now famous line, “Dr. Livingston, I presume.”

¹⁵⁹⁵ Kelley, p. 240, Dodd, *World Rowing*, p. 97, S. Pocock, p. 39

¹⁵⁹⁶ Mendenhall, op.cit., p. 33. See Chapter 3.

¹⁵⁹⁷ Chris Dodd, personal correspondence, 2011

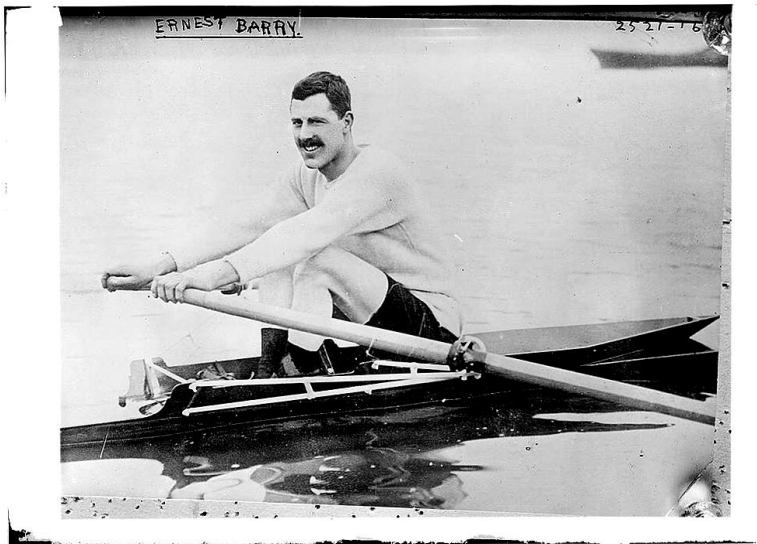
¹⁵⁹⁸ G. Pocock, qtd. by *KCTS-TV*

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and Badge in 1910, so they were well acquainted with the Thames Watermen Stroke as well as with English Orthodoxy.

Later in his life when he was asked to describe the “Pocock” Stroke, George said it wasn’t *his* stroke at all. “No, I learned this from **Ernie Barry**. He was the greatest who ever rowed. My father sent me down on the shore of the Thames to watch him when I was a boy. When I was ten years of age [1901], he’d say, ‘Go down and watch Ernie.’”¹⁵⁹⁹

Rowing historian **Göran R. Buckhorn**: “As a professional waterman, Barry won the Doggett’s Coat and Badge Race in 1903



George Grantham Bain Collection (Library of Congress) Prints and Photographs Division (LC-B2-2521-16)

Ernest James Barry in mismatched socks

and took the British Championship title in 1908.”¹⁶⁰⁰

Ernest James Barry (1882-1968) first rowed for the World Professional Sculling Championship in 1910 on the Zambezi River in Rhodesia, where he lost to Richard Arnst of New Zealand, the reigning champion. He later beat Arnst for the title in 1914 and defended it for two years until the beginning of World War I.

After the war, he lost and then regained the title in 1920, after which he retired.

Buckhorn: “Appointed a royal waterman in 1913, in 1950 Barry became Royal Barge Master to King George



Stan Pocock

With Good Wishes
“Geo”
From old Pal
Ernie Barry
Jan 27th, 1937

¹⁶⁰⁰ Göran R. Buckhorn, *Three Men in a Boat, Rowing & Regatta*, August/September 2009, p. 54

¹⁵⁹⁹ Qtd. by Scott

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VI and later to Queen Elizabeth II. As a rower, Barry was superstitious and raced in an odd pair of socks, one in the colours of Vesta R.C. and the other in the colours of Thames R.C.”¹⁶⁰¹

Emigration

“The idea of leaving England to seek their fortunes germinated with Dick, two years George’s senior. At first they talked of Australia, but finally settled for the Canadian Northwest, where they had heard there was suitable wood in abundance.”¹⁶⁰²

George Pocock: “My brother and I were apprenticed to my Dad, and when the apprenticeship was over, you go far afield to try to carve out your destiny, as it were. Things in the old country were too old. You’ve got to go to something new.”¹⁶⁰³



University of Washington Archives,
Conibear Shellhouse

Tokyo Tea Room, Seattle

A year after arriving in Vancouver, British Columbia, and at the urging of Hiram Conibear, who ordered twelve shells for the University of Washington, the Pocock brothers moved their boatbuilding business south to Seattle, setting up shop in

the “Tokyo Tea Room,” left over from the 1909 Alaska-Yukon Exposition.

George Pocock: “He said that he wanted twelve shells. Well, sure he *wanted* twelve, but he could hardly scrape up enough money to buy *one!*”¹⁶⁰⁴

George and Dick kept experimenting to improve their boats. In 1966, **George** reflected back on more than half a century of boatbuilding: “The first five we built for Washington, and by the fifth one **Ed Leader** was coach, and he said, ‘This boat is faster than any boat in the shellhouse.

“We used to use Spanish cedar, but we adopted the Washington red cedar in 1927 and found it was the finest cedar for the job that there is.

“The thickness of the hull is 11/64ths, and that isn’t plywood. That’s one thickness. We now [1966] use a thin film of fiberglass on the inside to eliminate the ribs because the ribs caused a ripple on the outside of the shell. Now with the fiberglass and no ribs, it’s a perfect mold like a fish.

“We’ve sold them in Japan and Sweden and Brazil. Canada, of course. We sold a lot in Cuba before Castro, and we’ve sent them to New Zealand.”¹⁶⁰⁵

After the Pococks arrived in Seattle, there was no question as to where Conibear could look first for guidance in rowing technique. Georgetown coach **Tony Johnson** has often spoken of this era of rowing history with his good friend **Stan Pocock**, George’s son.

Johnson: “Washington oarsmen wouldn’t have seen other people rowing. They wouldn’t have known anything except what they were doing themselves. They were isolated, off on a tangent. What I was struck with was that the arrival of the

¹⁶⁰¹ Buckhorn, op.cit., p. 54

¹⁶⁰² *Rowing News*, December 1956, p. 8

¹⁶⁰³ G. Pocock, op.cit.

¹⁶⁰⁴ Ibid.

¹⁶⁰⁵ *KCTS-TV*

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Pococks, George and Dick, had enormous influence on all of that.”¹⁶⁰⁶

Mendenhall: “In his sixth season [1913], Conibear had already achieved an impressive record of victories: four out of six races against California and Stanford . . . Already a master of training and conditioning, Conibear had worked out the fundamentals of the rowing stroke.

“The Pococks were able to contribute not only excellent equipment but the best stylistic elements out of professional sculling.”¹⁶⁰⁷

George Pocock’s first desire was to convince Conibear to change the rowing stroke he had been teaching.

George: “We had been out with him a great deal and persuaded him to modify his over-actioned stroke [too much body arc] to get it more like a Thames Waterman

Stroke.”¹⁶⁰⁸

Conibear’s challenge then became to assimilate Pocock’s advice into what he had already learned from Dr. Sharpe, from Charles Courtney and from his own research, and then adapt the result to “American conditions,” which meant long slides, big athletes, long race distances and the rough conditions at courses such as Lake Washington and Poughkeepsie.¹⁶⁰⁹

Conibear remained very interested in the Cornell technique, but he saw it through the prism of George Pocock.

Ulbrickson: “He agreed with everything Courtney said, except in one respect. “The extreme [layback], he figured, was hard on the stomach and legs. In other words, it was not ‘comfortable.’ Connie wanted comfort in rowing.”¹⁶¹⁰

¹⁶⁰⁶ Johnson, personal conversation, 2005

¹⁶⁰⁷ Mendenhall, *Coaches*, Ch. VIII, p. 11

¹⁶⁰⁸ Qtd. by Mendenhall, *op.cit.*, p. 11

¹⁶⁰⁹ Mendenhall, *Coaches*, Ch. IX, p. 9

¹⁶¹⁰ Ulbrickson, p. 93

46. The Conibear Stroke

How It Got Its Name – Description

Stan Pocock relates how the Conibear Stroke got its name. Apparently during the mid-1920s, years after Connie’s death, sports writer **George Varnell** of *The Seattle Daily Times* persuaded the paper “to run a contest to find a name for the style of rowing being used so successfully by the Washington crews,” which was “noticeably different” from that being used by East Coast colleges of the time.¹⁶¹¹

The name “Conibear” won hands down.

Stan: “I believe its selection was meant to be in commemoration of Conibear’s unquenchable enthusiasm and dedication to the sport at Washington.”¹⁶¹²

“Thus, the Conibear Stroke was born. Largely a figment of the imagination, it had little or nothing to do with the style of rowing advocated or taught by Conibear.

“If there was any consistency in Washington’s style of rowing, it came through George Pocock’s knowledge of the style used by some of the old professional scullers of England . . . [H]e always referred to Washington’s rowing style as the ‘**Thames Waterman’s Stroke**.’”¹⁶¹³

“One thing that nags at me, however, is a possible misconception given by likening what my Dad (and I, myself) taught to the Thames Waterman’s Stroke of old. He preferred to call it that rather than having his own name hung on it, but he might better

have described it as the ‘**Ernest Barry Stroke**’ because there *was* a difference.”¹⁶¹⁴

There were several differences, as will be discussed in detail later in this chapter and in Chapter 47.

But the question remains: Did Hiram Conibear really subscribe to the Ernest Barry Stroke? What stroke technique did Conibear actually teach?



University of Washington Archives,
Conibear Shellhouse

Pocock shack in Vancouver

George Pocock, recalling how he met Hiram Conibear in 1911: “My brother and I had this little shack out in Coal Harbor up in Vancouver, and we were building a boat. If people wanted to come out and see us, they had to get into a wherry that we left on shore and row out to our houseboat. I looked out the window and saw this fellow with a huge shock of red hair and a big black turtleneck, and at first he was down on this side, then he

¹⁶¹¹ S. Pocock, p. 55

¹⁶¹² S. Pocock, personal correspondence, 2005

¹⁶¹³ S. Pocock, p. 55

¹⁶¹⁴ S. Pocock, personal correspondence, 2005

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was down on that side, then he pitched forward, then he pitched backward, and I turned to my brother, Dick, and said, 'I think we're going to have to fetch this fellow out of the water.'

"Then the boat hit the houseboat, and that was Hiram Conibear, and *that* was the Conibear Stroke!"¹⁶¹⁵

In June, 1914, three years after he met George Pocock, Hiram Conibear wrote an extensive article called **Coaching a Varsity Crew** for *The Outing Magazine*, a periodical which covered a variety of sporting activities from 1882 to 1923, and in the article he described in great detail the stroke he had developed.

The **recovery** began with arms sharply leaving the chest at the release while the body remained motionless. After the hands reached the knees, the oarsman "starts forward on his slide and at the same time starts forward with his shoulders. When he is half way up on his slide, his elbows should be past his knees. He keeps changing the angle of his body so that the slide does not stop at one time and his shoulders at another, but the stop comes at the same time.

"The shoulders are moving at the same speed from the time he comes to an erect position until he has dropped his oar into the water. His slide has been decreasing in speed from the bow end to the stern end of the slide."¹⁶¹⁶

The fast-slow rhythm also had the effect of adding acceleration to the hull right after the release, presumably extending the surge of the pullthrough. This matches the technique of Charles Courtney, one of Conibear's mentors.¹⁶¹⁷



VBC Collection, MSCUA, UW Libraries

Hiram Boardman Conibear

Pocock eight-oared shells of the time were built with tracks that ended at a line perpendicular to the pins. Slide lengths allowed sufficient knee compression for longer-legged athletes to achieve vertical shins and for some individuals of shorter stature to drill extra holes for their footstretchers and go as far as +10° past vertical.¹⁶¹⁸

As for body angle forward, "I don't allow my men to twist in the waist. They just swing in the hips. I rig my boats for a full reach of thirty-six inches to the stern of the rowlock."¹⁶¹⁹ This works out to about +25° of body angle forward rowing 0° through the pin, quite moderate for that time, when Syracuse as well as English

¹⁶¹⁵ *KCTS-TV*

¹⁶¹⁶ Conibear, p. 318

¹⁶¹⁷ See Chapter 31.

¹⁶¹⁸ This I report from personal experience.

¹⁶¹⁹ Conibear, p. 318

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Orthodox-influenced crews would swing forward as far as +40° to +45°.

On the **pullthrough**, “I want my man to just drop his blade into the water and start leg drive, back and arm pull. . . . I want all the power possible to bow of the oarlock – back, legs and arms. [Concurrency!]

“The legs are the strongest muscle group we have, and I cannot for a moment see the advantage of the English style of slighting leg action in order to put greater emphasis on the work of arms and back.

“Of course, in order to get the best out of the stroke I have described and to reap the full benefit of the leg drive, it is necessary for the oarsman to have a strong back and arms.

“From the time the oarsman starts to pull when out for the long reach, he must pull with his back all the time. Elbows should be at the side at the same time the legs are straightened out. . . .

“Don’t let up on the leg drive when you begin to increase the power applied from back and arms.”¹⁶²⁰ [*Schubschlag!*]

At the end of the stroke, the oarsman “will lay back until the beveling hand – the outboard hand – is over the knee, not past it or beyond it but exactly over it [which equals layback of about -20°].”¹⁶²¹

This amount of layback was less than the average of the time. As a point of comparison, Cornell and Syracuse employed

layback of -30°, and Yale, Harvard and Navy as much as -45°.

Overall, Conibear’s crews swung through a total of 45°, considerably less than Cornell’s 60°, Penn’s 70° and Yale, Syracuse and Navy’s 75°.

Mendenhall’s take on the *Outing* article: “Conibear stressed the importance of a smooth, flowing combination of the leg drive with a strong back and arms, and concludes with a lyrical description of the joys of single sculling, surely a reflection of the Pocock influence.”¹⁶²²

The part about the single sculling surely does indicate the Pocock influence, but the part about the “smooth, flowing combination” of legs, back and arms gives the impression of being in complete contrast to the writings of George Pocock, which seem to recommend *sequential use* of legs first, then back and arms.

Coordinated, concurrent use of legs and back seems to indicate the pivotal influence of **Charles Courtney** rather than George Pocock.

However, we shall soon see that Pocock’s true position was in favor of a smooth, “one cut” pullthrough, very much like the one that Conibear adopted.¹⁶²³

It is now possible to summarize in detail from the many sources available the fundamental features of the stroke that Hiram Conibear taught late in his career:

- Leg compression was to 0° shin angle.
- Body angle forward was limited to about +25°, visibly less than their competitors.
- Layback was -20°, also quite a bit less than the -30° of Courtney and Ten Eyck and the -45° of Glendon and English Orthodoxy.

¹⁶²⁰ Conibear, pp. 318-9

¹⁶²¹ Ibid. This quote can be confusing. Conibear was not suggesting that the rower should actually assume the described position at any time during an actual stroke. He merely meant that if you want to determine the correct amount of layback while sitting motionless in a boat, just lay back with your arms straight until your outside hand is even with your knee. That’s the correct angle for you to achieve while rowing.

¹⁶²² Mendenhall, *Coaches*, Ch. IV, p. 12

¹⁶²³ See Chapter 47.

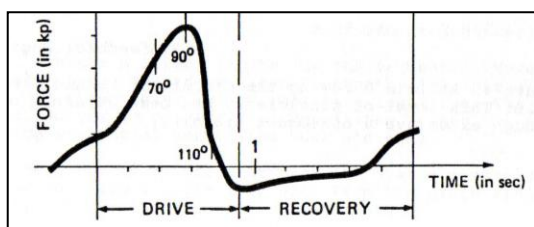
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- Posture was erect but not rigid, with bodies swinging from the hips.
- The recovery began with fast hands out of bow.
- On the recovery, back swing was concurrent with slide motion.
- The slide decelerated into the entry without hesitation, allowing time for the boat to run.
- The blade was dropped in without front- or back-splash.
- Legs, back and arms initiated the stroke concurrently, followed through concurrently and finished concurrently.

Summary: 0°, +25° to -20°, 0-10, 0-10, 0-10

A Serious Misunderstanding

Rowing historian and coach **Thor Nilsen**¹⁶²⁴ has described the Conibear approach to force application as “the catch soft but building up to maximum pressure.” It may have seemed so to him, in contrast to the aggressive *Kernschlag* catches of some of his own late 20th Century crews, but a soft catch was never in Conibear’s words or Conibear’s intent. Remember, he demanded “all the power possible to bow of the oarlock,” i.e. during the first half of the stroke.



Körner, 1978 FISA Coaches’ Conference

GDR graph of late force application.

However, since virtually every approach must have been tried at least once during the last two hundred years, soft catches building to a strong release must indeed have existed

¹⁶²⁴ See Chapters 121, 123 and 145.

during history, but, to my knowledge, no major crew¹⁶²⁵ has *ever* been successful with this approach, and so no examples have been passed down to the present.

In researching all the theoretical possibilities, German Democratic Republic scientists considered late force application along with the more prevalent early force application (*Kernschlag*) and even force application (*Schubschlag*).

Körner: “There is a decidedly soft taking-up of the pressure on the blade. Maximum pressure is situated pretty far back (about in the area of perpendicular to the shell). It is possible to get high forces right up to the release only if the oarsman ‘tears at’ the finish starting at the middle of the pullthrough. [Such an approach] attains a relatively non-continuous force curve.”¹⁶²⁶

The late force application approach seems to be a mutant version of *Schubschlag* mentality, perhaps by a coach observing an opposing crew and attempting unsuccessfully to reverse-engineer their stroke.

Or, more likely, it has only been merely the **misunderstanding** by *Kernschlag* coaches of things they thought they saw in a *Schubschlag* crew. This was certainly the case with the Thor Nilsen quote above.

The True Author of the Conibear Stroke

Many have described George Pocock as the sole author of the Conibear Stroke, but history demonstrates that this is less than the full story. Conibear’s descriptions of the ideal stroke differed substantially from George Pocock’s written descriptions of the Thames Waterman’s Stroke. It would be more accurate to recognize that the Conibear

¹⁶²⁵ Slovenian World Singles Champion **Iztok Čop** is the sole exception I have discovered. See Chapter 123.

¹⁶²⁶ Körner, p. 7

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Stroke was the result of crucial early consultation with **Charles Courtney** reinforced by having former Cornell rower **Mark Odell** as a volunteer assistant in Washington program. Add in the influence of **George Pocock**, and Conibear had everything he needed to supplement his own innate intelligence.

Hiram Conibear: "It has been natural for me to ask my own questions and think for myself. Because most everybody may have accepted some theory has not made me accept it, unless I could see why it was right.

"Probably I have made mistakes in the past on this account, and maybe I've worked out some ideas on my own hook which will be interesting."¹⁶²⁷

R.I.P.

Hiram Conibear has remained a cipher during the last century partly because he wrote less while George Pocock wrote more,

and because he died young.

On September 9, 1917, Hiram Conibear tragically "broke his neck falling from a plum tree in his backyard."¹⁶²⁸ Rowing at the university had been suspended due to World War I.

Stan Pocock: "Dad told the story that on the day of his death, Conibear came into the shop with a crazed look in his eyes, declaring that 'I'm not done yet!'

"Whatever scheme he had in his mind, by that evening he was gone."¹⁶²⁹

He was forty-six years old, but his early passing meant that his greatest contribution to rowing history only came later from the disciples he sent out the proselytize the world.

In his wake came a rowing dynasty at the University of Washington, and his heritage was continued and spread across the country by three generations of Conibear followers.

¹⁶²⁷ Conibear, p. 318

¹⁶²⁸ Mendenhall, op.cit., p. 12
¹⁶²⁹ Pocock, p. 51

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47. The Ernest Barry Stroke

The Writings of George Pocock



J.R. Eyerman / *Life Magazine*, June 20, 1949 / Getty Images

George Pocock (right) riding with Ulbrickson

Over the years, as the Conibear Stroke was taught to generations of Washington oarsmen, **George Pocock** was a constant presence. Husky oarsmen knew that a change was in the offing whenever George appeared in the coach's launch.

George Pocock's influence on Hiram Conibear and on the coaches who followed him was not merely on the fundamentals of boat moving but also on attitude, philosophy and the subtle details of watermanship.

Stan Pocock: "Dad's most intimate contact was with the oarsmen themselves. I can dimly recall being at the shellhouse as a small child and seeing him surrounded by the men asking questions after turnout. I even remember his describing on one occasion the stroke as that of taking 'one *helluva* cut at it,' one of the very few times I ever heard him use a cuss word. That probably stuck in my memory more than what he was describing about the stroke itself."¹⁶³⁰

George Pocock had his own unique point of view on rowing technique, based on a lifetime of sculling, but he never openly disagreed with any Washington coach.

Unless he was asked, he kept his mouth shut.

¹⁶³⁰ S. Pocock, personal correspondence, 2005

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George Pocock Rowing Foundation

George Pocock in his later years

Charlie McIntyre:¹⁶³¹ “George and Dick were out of that old British school. They practiced that humility, and they didn’t volunteer, and they didn’t tell you anything until you asked them, and once they asked, that was truly the beginning of Washington rowing.”¹⁶³²

Stan Pocock: “I’m almost sure he never told **Al Ulbrickson** [Washington coach 1927-1959] what he must do, but I can recall in later years when the two of us would be in the back of the launch, he would be shaking his head at what he saw.”¹⁶³³

As we shall see, the only crew that George Pocock ever coached himself was the Washington Jayvee Coxed-Four at the

1948 Olympics,¹⁶³⁴ and the oarsmen noticed no significant technical or stylistic differences when George took them over from Ulbrickson.

So the question remains: What was George shaking his head about when he went out in the launch with Al?

I asked **Stan**, who replied, “I think I can speak with authority, for I consider myself a true disciple of his. We spent many happy hours daily discussing the technique of rowing as he and I labored, building the racing shells all the rowing schools were using in those days.

“I sought in my own coaching what we both agreed as being the ideal rowing stroke. I tried to act upon the various drills that he would suggest to Ulbrickson on the occasions when he went out with him in the coaching launch.

“These drills often improved what was going on in the boat. The other thing he did was to look over the several crews to spot those men he thought were rowing well and draw Al’s attention to them.

“The following are some of the things he aimed for. Note that I’ve started with the end of the drive and the beginning of the recovery, that portion of the stroke that he felt strongly was being sadly neglected in the rowing of the day.”¹⁶³⁵

Ferryman’s Finish

1. No swing of the body into the bow after the legs were down.
2. No washout at the release.
3. Beginning the recovery ‘on the oar,’ that is, with a slight curling of the head and upper shoulders toward the stern as the hands are squeezed in toward the belly.
4. With the legs braced against the stretcher and the lower back held firm, the

¹⁶³¹ a transplant to Seattle from Philadelphia. See Chapter 87.

¹⁶³² Charles McIntyre, qtd. by Scott

¹⁶³³ S. Pocock, op.cit., 2005

¹⁶³⁴ See Chapter 61.

¹⁶³⁵ S. Pocock, p. 162

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shoulders open as the arms complete their squeeze into the belly.

5. Before touching the belly, the inboard hand (nearest the rigger) begins the feather.

6. At the same time, the outboard hand begins its push toward the stern, in effect working in opposition to the pull of the other hand and the head begins its movement out of bow.

7. The blade actually comes free headed toward the bow. (Washington's blades have traditionally been white – not the school's color – to make it easier to spot washing out, that is, the blade appearing above the surface of the water before heading toward the bow.)

This is the ferryman's finish.

Stan Pocock: "I wanted my crews to initiate the movement of their heads and shoulders out of bow 'on the oar,' using the last bit of oar pressure against the water to do so, rather than to pull themselves out with their feet."¹⁶³⁶

George Pocock: "When putting the squeeze on as the hands are coming into the sides of the body, and the body is laying back about -30° from the perpendicular, bring the body upright as the last few inches on the squeeze are reached, always keeping a firm pressure on the legs.

"This puts the body in balance without resorting to the sin of pulling on the bootstraps with the feet. A sculler should never pull his body weight up with his toes. This stops the way of the boat."¹⁶³⁷

Ten Eyck and Pocock disciple, former Syracuse coach **Bill Sanford:** "We used the 'feet out of the footstretchers' drill to emphasize the need to keep pressure on the blade all the way to the finish. You don't need the straps to prevent you from falling back if you are pulling the handle into your chest."¹⁶³⁸



Stan Pocock

Stan Pocock in 1955

Rowing philosopher and 1947 Harvard stroke **Frank Cunningham,**¹⁶³⁹ another Pocock disciple, has also described the ferryman's finish: "At the latter end of the stroke, he will discover that he can change the direction of his body before the blade leaves the water.

"At the end of every pullthrough, rowers somehow have to bring their bodies to a full stop and then start their bodies sternward. One potential method is the strenuous use of their abdominals levering against the toe straps.

"It does not occur to these rowers that the shoulders have a much better purchase on the weight of the rapidly-moving torso than the abs, nor that they can make this counter-move while the oar is still bent."¹⁶⁴⁰

¹⁶³⁶ Ibid.

¹⁶³⁷ www.pocockrowing.org, p. 3

¹⁶³⁸ Sanford, personal correspondence, 2006

¹⁶³⁹ See Chapter 63.

¹⁶⁴⁰ Cunningham, *Rowing Forum*, p. 5

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Pocock and his followers did not use the 19th Century term “ferryman’s finish.” They called it the **sculler’s release**, and it had many facets, taking advantage of the bend a rower could put into the shaft of the old Pocock wooden oars.

George Pocock: “As [the] last squeeze is being exerted and while the squeeze is on, start turning the wrists and shoot the hands and arms away as quickly as you like, the quicker the better.

“There is only an instant in which to take advantage of the aerated water, almost a hole, behind the blade, caused by this last squeeze. This is the reason the wrists must start turning before the power is off, while the bend is still in the loom

“Just turn [the handles] slightly, relax the grip a bit and the water will kick them flat as the hands and arms shoot away.”¹⁶⁴¹

Pocock disciple and two-time Olympic Champion **Conn Findlay**:¹⁶⁴² “They used the bend in the oar to get the oar out.

“What does the bend in your oar do for you when you’re trying to release the blade? It allows the handle and the blade both to go toward the stern at the same time, and that’s the release that the Pococks taught.

“What you do is you think about pushing away the handle before the blade has finished its travel, so the stroke is finished by the oar shaft straightening while the handle is already moving the other way, so that’s why you cannot see the blade turn over.

“You don’t have to do anything with the oar at the release. If you just let go of it, it will take itself out. There’s a hole behind, and as soon as it closes, it flips the blade over, and it’s sitting on the surface of the water.

“If you lift any water off the horizontal, the boat has become heavier by the force it took to lift that water.

¹⁶⁴¹ Pocock website, p. 2

¹⁶⁴² See Chapter 82.

“A clean release is not foamy. It looks like a bunch of grapes. There is moving water in it, but it is absolutely flat.”¹⁶⁴³

Stan Pocock: “It was easy to discover whether an oarsman had the right idea by watching what happened after being given the command, ‘Way enough!’

“If his oar handle stopped up against his belly, he had it all wrong. The spring of the handle out into the recovery and the leaning of the body toward the stern before stopping was the key. We liked to talk of wanting to experience a certain sense of surprise when a full recovery did not follow.

“In my own coaching as the years passed, I even went a step further by insisting that the crews continue on out to a full slide and full reach before stopping.”¹⁶⁴⁴

The ferryman’s finish also helped put the boat in proper fore-and-aft trim.

Stan: “The virtue of that quick [hands away and body over early in the] recovery pays off here. A shell will not run very long with the weight in the bow, but will run out longer when the bow is higher.”¹⁶⁴⁵

Among early American collegiate coaches, the ferryman’s finish was embraced by **Jim Ten Eyck**¹⁶⁴⁶ and opposed by **Ellis Ward**,¹⁶⁴⁷ **Charles Courtney** in his later years,¹⁶⁴⁸ **Richard Glendon**,¹⁶⁴⁹ **Hiram Conibear**¹⁶⁵⁰ and the first two generations of his followers.¹⁶⁵¹

It was in the amount of layback that the Thames Waterman’s Stroke of the late 19th Century (-45°) differed from the **Ernest**

¹⁶⁴³ Findlay, personal conversation, 2005

¹⁶⁴⁴ S. Pocock, personal correspondence, 2005

¹⁶⁴⁵ www.pocockrowing.org, p. 3

¹⁶⁴⁶ See Chapter 41.

¹⁶⁴⁷ See Chapter 36.

¹⁶⁴⁸ See Chapter 39.

¹⁶⁴⁹ See Chapter 51.

¹⁶⁵⁰ See Chapter 46.

¹⁶⁵¹ See Chapters 52 through 63.

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British Movietone news, 678, 5/8/30, Bert Barry's Boat Christened

Bert Barry

1927 World Professional Singles Champion and nephew/protégé of **Ernest Barry**

+5°, +30° to -30°, 0-9, 0-9, 0-10

No splash at entry. Rhythm was acceleration entry-to-release.

Ferryman's finish was very subtle

Barry Stroke (-30°) that George Pocock taught.

Stan Pocock: "Though similar, in that in both [approaches] the rower came 'out on the oar' at the release, the former saw an exaggerated swing of the entire back into the bow and then out, while in the case of the 'E.B.' Stroke, there was no movement whatsoever of the lower back once the legs were flat.

"Rather, the legs and back together formed the brace against which the arms, in combination with the contraction of the shoulder blades completed their squeeze.

"This latter action resulted in a slight movement of the head toward the stern and accomplished the beginning of the recovery.

"Much more subtle than 'bucking over the oar' to recover one's balance at the end of a long swing of the body into the bow on the drive, as did the archetypical Thames Waterman, the 'E.B.' concept accomplished the same thing without the downward forces imparted to the boat that the late swing of the back in and out of bow did.

"We learned it through endless miles of rowing with our 'feet out' drills.

"Incidentally, the upward curve of the clogs [in Pocock shells] was there for a purpose in that they provided something to continue pushing against once the legs were down. I consider the flat shoes of today a step backward.

"Oh well . . ." ¹⁶⁵²

The Recovery

Findlay: "The most important part about the stroke is the release, not the catch, because at the release the main thing you want to do is not to slow the boat when you can't work on it until the next catch." ¹⁶⁵³

Stan Pocock continues:

8. Early hands out of bow, actually a continuation of the release.

¹⁶⁵² S. Pocock, op.cit

¹⁶⁵³ Findlay, personal conversation, 2005

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9. Hands well beyond the knees and body over the middle before the slide starts out of bow.

10. Body at full extension by the time the seat reaches the stern stops. No stretching out for more reach before the catch.

In George Pocock's own words, beginning at the release, you should "shoot the hands and arms away as quickly as you like, the quicker the better. When the arms are straight . . . follow with the body, changing its angle, almost as if the arms draw the body forward; and follow with the slide, almost as if the body angle pulls the slide forward."¹⁶⁵⁴

Unintended Consequences

Mike Spracklen recalls: "When I was a lad, I used to go to Henley in the '50s and '60s, and I used to watch the American crews, Yale and Cornell particularly, and the American crews were so impressive, you know, the way they went about things, how they'd come down and put their boat in the water.

"The American coaches would call out, 'Get out of the bow! Get out of the bow!' as they went up the tow path. The crews would row very lively out of the bow to get the bow to rise up and plane, and then poise over the feet. The Pocock boats were bowed like bananas, so the bow used to really run right up at speed, and the way they rowed all fitted in with getting out of bow for the Pocock boats they rowed. It all made sense."¹⁶⁵⁵

Charlie Grimes, 5-seat in the 1956 Yale Olympic Champion Eight:¹⁶⁵⁶ "The Pocock boat that Yale brought over to Henley in 1957 was our 1956 Olympic boat, and [our coach, Jim Rathschmidt] came to me and said, 'We have an offer to buy the

boat. They call it a banana boat because it has a definite bend to it, but don't you think we should keep our Olympic boat?'

"I said, 'Jim, you've got to be crazy. If you can get anything for it, *sell it!* The boat has flown a lot of miles, and it's *sprung!*

"*Leave it in England. You'll set back English rowing quite a ways!*"

"So we did that."¹⁶⁵⁷

Mike Spracklen: "I remember going to Eton College, where Frank Claret was building boats, and he told me they were trying to build boats so they would plane on top of the water as the Pococks did.

"But later when I came to North America and I met George Pocock, he told me, 'We don't build boats like that. We build them straight, but Western Red Cedar bows.'

"And I said, 'But the guys in Britain are trying to *copy* the bend in your boats!'

"He said, 'That's what happens to red cedar. We build them flat, but when they mature, that's the natural way. The cedar hull expands, and the cockpit doesn't."¹⁶⁵⁸

No matter the original intent, getting their Pocock shell to plane over the water became the ultimate goal of all American crews in the first half of the 20th Century.

Stan Pocock: "Always row as though you are trying to help the bow climb out of the water. To put it another way, never do anything to push the boat down into the water. Keep the waterline constant."¹⁶⁵⁹

Hesitation

11. Slight hesitation ('pause') before the catch.

¹⁶⁵⁴ www.pocockrowing.org, p. 2

¹⁶⁵⁵ Spracklen, personal conversation, 2005

¹⁶⁵⁶ See Chapter 67 ff.

¹⁶⁵⁷ Grimes, personal correspondence, 2006

¹⁶⁵⁸ Spracklen, personal conversation, 2005

¹⁶⁵⁹ S. Pocock, op.cit.

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FISA 1964 Film

Sculler's Catch (or Slip Catch)
Conn Findlay, 1964 Olympics

George Pocock: “The boat is running; let all the useful run of the boat be used up before the next stroke.”¹⁶⁶⁰

Stan Pocock: “Later I came to see this hesitation as leading to a tendency for Washington crews to shorten their reach as the stroke went up in a sprint. There just is not time to slow the slide and still keep full reach at the higher rates. Slowing the slide

¹⁶⁶⁰ www.pocockrowing.org, p. 3

is fine at the low stroke rates and is important in learning balance on the recovery.

“Here is where my father and I parted company to some degree.”¹⁶⁶¹

Later in the book we will discuss at length the trade-offs involved in this and other choices in rowing technique. Suffice it to say that a pause at the entry was another area where Washington coaches from Conibear through Ulbrickson disagreed with George Pocock, but when I arrived at Kent School in 1958, **Tote Walker**¹⁶⁶² was coaching a distinct hesitation prior to entry, at least during training.

When I arrived at Penn five years later, so were Freshman Coach **Jim Beggs**¹⁶⁶³ and Head Coach **Joe Burk**,¹⁶⁶⁴ who by then had been corresponding with George Pocock for thirty years.

Sculler's Catch

12. Arms must be tensed and straight at the catch to avoid ‘hooking’ the elbows down and cutting the length of the stroke.

Achieving maximum reach with straight arms was relatively non-controversial, but George Pocock’s whole philosophy of rowing had a sculler’s sensibility. Every detail bespoke of a lifetime spent on the water.

As for the rollup, he would say, “let the water do it.”¹⁶⁶⁵

Stan Pocock: “My Dad was a great advocate of the ‘sculler’s catch,’ especially when rowing in rough water.”¹⁶⁶⁶

Conn Findlay, who was coached by Stan at Lake Washington Rowing Club in

¹⁶⁶¹ S. Pocock, op.cit.

¹⁶⁶² See Chapter 98.

¹⁶⁶³ See Chapter 81.

¹⁶⁶⁴ See Chapters 58, 65, 91 and 92.

¹⁶⁶⁵ www.pocockrowing.org, p. 3

¹⁶⁶⁶ S. Pocock, op.cit.

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the 1950s,¹⁶⁶⁷ describes the sculler's catch as follows: "What you do is put the blade on the water and start pulling on it by pushing with your feet. You let the bottom edge of that blade catch the water, and it will actually slip in your hands."¹⁶⁶⁸

As a consequence, some people called this technique the "**slip catch**."

Stan Pocock: "With the blades only squared as they were driven into the water, there was no longer any concern should the boat lurch off keel on the recovery and the blades touch – something bound to happen in windy weather. The blades simply skipped off the top of the waves. Reduced wind resistance was another advantage. Also, because the blades could be kept much closer to the surface, missed water at the catch was reduced to a minimum."¹⁶⁶⁹

Findlay: "The thing that nobody talks about is that in order to start moving the boat by working on the water, your blade has to match the speed of the water before anything will happen.

"If the boat's going six or eight or ten or twelve miles per hour, in order for the blade to go in, it has to miss water. If you had a street sweeper with a big brush, and if it was spinning and you were working on the surface of it, how would you get into the brush to give it a shove? [This is reminiscent of Conibear's bicycle wheel experiment, Chapter 44.]

"Most people miss water in order to get the speed up, so that when they get in the water they're moving that way, and you can see that by the stern splash.

"We always tried to get a bow splash because we used the scullers' catch to hook the water right at the end of the recovery."¹⁶⁷⁰

The Pullthrough

13. Catch initiated primarily with legs.

14. Try to use all three sources of power at once.

15. The legs and the lower back reach full extension simultaneously.

Concurrent use of all three sources of power was the hallmark of Washington rowing, indeed of all non-English Orthodox American collegiate rowing since Ellis Ward in the late 1890s and Charles Courtney after 1900.

However there was a subtle distinction between George Pocock and the Washington coaches. Husky crews would use their legs strongly, but they would blend the effort levels of legs, backs and arms such that all three could be seen to begin their motions at the entry.

Pocock believed in leg effort sufficient in the first half of the pullthrough to keep the arms straight and the back immobilized. This resulted in a **hybrid stroke** which gave the *appearance* of sequentiality despite the underlying concurrent effort.

Unfortunately, in his writings, George described the sequential *appearance*, and this has led to near-universal confusion among Pocock's legion of followers.

The Stroke as a Whole

Stan also mentions as hallmarks of his father's sweep technique:

- Solid water, flat puddles, that is, no cavitation.
- Try to get the ratio of recovery to drive 2 to 1 at the 24 spm cruising rate which was used in long distance work.
- As little vertical motion of the oar handle, arms and body as possible, commensurate with getting the blade in and out of the water.

¹⁶⁶⁷ See Chapter 83 ff.

¹⁶⁶⁸ Findlay, personal conversation, 2005

¹⁶⁶⁹ S. Pocock, p. 73

¹⁶⁷⁰ Findlay, personal conversation, 2005

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- Keep the blade close to the water, especially just before the catch, to avoid missing water.¹⁶⁷¹

They considered the end of one stroke cycle and the beginning of the next the point during the recovery at which the arms were straight out, the body angle well past center and the legs still flat.

George Pocock: “Note that all of these movements are smooth, flowing, and rhythmic. They must blend. Remember you are dealing with natural elements; water, waves and wind. They have a rhythm, and so must the sculler.”¹⁶⁷²

Virtually all coaches in history have agreed with Pocock on this point.

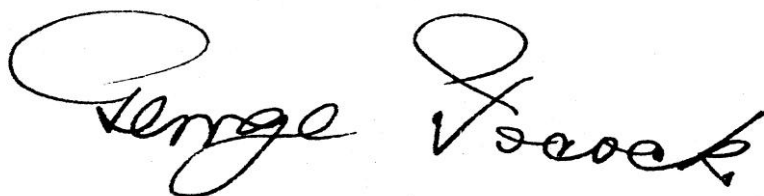
In summary, George Pocock was one

hundred percent supportive of and in synch with the Washington coaches, with whom he shared a shellhouse and a symbiotic relationship.

Nevertheless, there were three fundamental technical areas where Conibear and his immediate successors respectfully disagreed with him:

- The ferryman’s finish.
- Leg drive sufficiently strong to initially immobilize the back and arms.
- Arms kept straight in the first half of the pullthrough.

But Pocock’s unique strength was his watermanship . . . and his soul. On this there was no disagreement.

The image shows a handwritten signature in black ink. The signature is written in a cursive style and reads "George Pocock". The first name "George" is written in a larger, more prominent script, while "Pocock" is written in a smaller, more compact script. The signature is centered horizontally on the page.

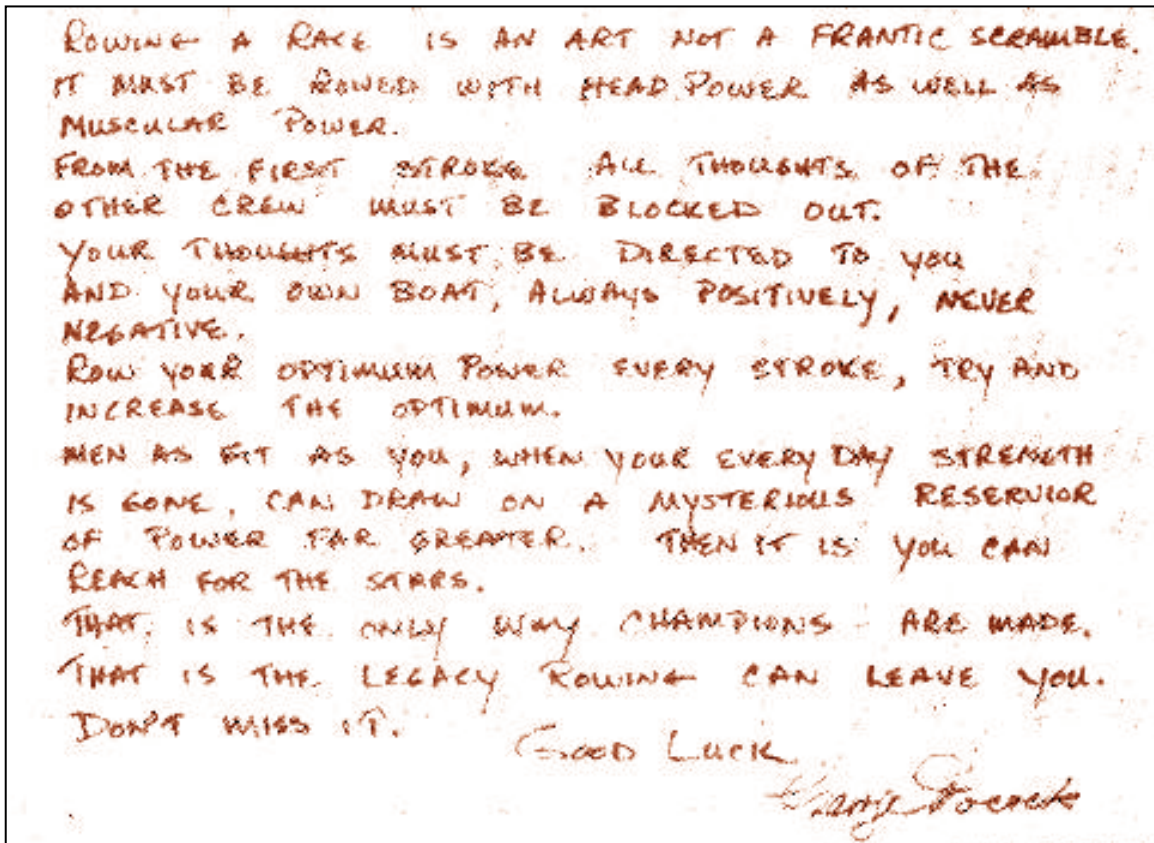
¹⁶⁷¹ S. Pocock, personal conversation, 2005

¹⁶⁷² www.pocockrowing.org, p. 2

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48. The Birth of Modern Orthodox Technique

Concurrent versus Sequential



George Pocock Rowing Foundation

Message written on **the wrapping of the Pocock shell**
shipped to Henley for the 1958 Washington crew.

The Misinterpreted Writings of George Pocock

Stan Pocock: "Dad's ideas and loyalties were truly catholic in nature; he was open to questions from everyone and gave advice to

anyone who asked, oarsmen and coaches alike.

"Over the years, while I was growing up, many of his evenings were spent in corresponding with any number of them,

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especially those coaches who had rowed as undergraduates at Washington.”¹⁶⁷³

And it is through his magnificent writings that his reputation and influence on American rowing has gone far beyond the generations of coaches who sought and received his technical and spiritual advice.

**It's a great art, is rowing.
It's the finest art there is.
It's a symphony of motion.
When you're doing well,
Why it's nearing perfection.
And when you reach perfection,
You are touching the divine.
It touches the you of you,
Which is your soul.**

The trouble is that his technical writings have been for the most part misinterpreted in the most fundamental aspect of the stroke, how to move the boat.

Force Application Revisited

Concerning the pullthrough, **George Pocock** has written, “with the arms straight and the body angle kept the same, drive the legs steadily (extend the legs smoothly) as this is the maximum power drive.

“The arms are used only as connecting rods to the body.”¹⁶⁷⁴

“You are right in starting your [pullthrough] with the leg drive. It has to be, but don't throw your shoulders in doing it. Keep them still at the forward position until the blade is under full pressure, and *then* bring them over.”¹⁶⁷⁵

“When the slide starts moving, it keeps going all the way back until the legs are flat, but those legs must go down slowly.

“Don't whang them down!

“As the oar reaches the right angle position to the boat, the back starts up and

the elbows break so as to keep the blade going through in one cut. If the arms are kept straight at the point when the oar is at right angle to the boat, the oarsman has to coast over this dead point . . . That is the point where the blade must be kept moving, otherwise you are going to get a double stroke.”¹⁶⁷⁶

“You must go through that high point by breaking the elbows down and getting one cut at it and therefore a shorter time in the water and loads of time for recovery.

“This ‘**one-cut stroke**’ is not a loafing stroke but takes a lot of pulling.”¹⁶⁷⁷

Here George Pocock and the Conibear coaches appear to have materially diverged, Pocock's writings clearly describing *sequential* legs, back and arm **motion**, Husky coaches teaching *concurrent* leg, back and arm **effort** from entry to release. On the surface, this is a huge and fundamental difference.

Or is it?

Stan Pocock: “Herein arises the cause of some confusion.

“Theoretically, if one is to get the oar through the drive as quickly as possible, (one cut!) the squeeze of the arms, the swing of the body and the push of the legs would have to happen at the same time.

“In practice, this cannot be.

“What actually happens is that while one *tries* to use all the related muscle groups at once, the legs, being strongest, move first while the arms, being the weakest, stay straight, and the back, straining to swing through, shows no change in angle.

“Then, as the boat picks up speed, the back begins its swing, while the arms remain pretty straight until about at the middle of the drive, when they must come into play.

¹⁶⁷³ S. Pocock, op.cit.

¹⁶⁷⁴ www.pocockrowing.org, p. 2

¹⁶⁷⁵ Ibid.

¹⁶⁷⁶ also referred to as a “two-part pullthrough.”

¹⁶⁷⁷ Qtd. by Newell, pp. 160-1

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“If they don’t, you end up with a double stroke, which guarantees a slow boat.”¹⁶⁷⁸

Concurrent versus Sequential

Stan’s description forces us to take another, much more thorough look at the whole issue of concurrency versus sequentiality.

As far as legs and back are concerned, so far in the history of rowing we already have seen the full range of possibilities, from **back motion only** at the entry in pre- and post-Fairbairn English Orthodoxy to **legs and back together** in Hanlan, Fairbairn, Warre, de Havilland, Bourne, Ward, Courtney, Ten Eyck and Conibear all the way to **leg motion only** in the Ernest Barry Style, the Jesus Style and the Fairbairn-influenced 1936 German eight.

What we have not fully grasped is that at both extremes and at every point in between, *both legs and back must be fully engaged from entry to release*.

At the legs-only end of the continuum, the back must be working to “brace” the legs. Otherwise, bum shoving, the British term, or slide shooting, the North American term, will result. At the back-only end of the continuum, the legs are likewise fully engaged to “brace” the back.

Harvard coach **Harry Parker**¹⁶⁷⁹ puts it this way: “In sound rowing, and I think there *is* such a thing, there are lots of different versions of it, and the wonderful thing about the sport is that it’s still the same. Sound rowing is sound rowing. It has been for decades and decades and decades, and it involves just a couple of basic things, one of which is a *really good coupling of the legs and back*. Some people will use the back earlier or more, but you *have* to be coupled. No matter what you do, you *have* to be coupled!

“Even when you start with the legs you *have* to engage the back, so that you are not just pushing the seat away

“The next phase is from the back to the handle, and the power that gets transmitted off the stretcher has to get transmitted to the handle, and in order to do that you have to have a coupling through the legs and the back, and you *have* to have a coupling from the back to the handle [i.e. the arms and shoulders also have to be engaged].

“There’s no way to get around that, and that’s one of the good things about the sport.”¹⁶⁸⁰

Andrew Carter, Professor of Biomechanics, and Head Coach at the University of Miami in Florida, has done extensive research into the relationship between muscle groups during the rowing stroke: “In fact, muscles are not recruited in the same timing as we see joints move. Some are acting isometrically [straining but not causing motion] while others are acting concentrically [straining and causing motion about the pivot point at a joint].

“A perfect example of this is the *erector spinae* group in the back. These muscles extend the vertebral column and are working all the way from entry to release, no matter what the technique.

“I know because I’ve measured it on the ergometer and on the water with electromyography.”¹⁶⁸¹

So in *all* cases, from one extreme all the way to the other, there is a concurrent blend or mixture of leg and back *effort*, like mixing colors of paint. If you think of legs as black and backs as white, you can adjust the amounts of each to end up with virtually all black or all white or any shade of gray in between.

¹⁶⁷⁸ S. Pocock, op.cit.

¹⁶⁷⁹ See Chapter 100 ff.

¹⁶⁸⁰ Parker, personal conversation, 2004

¹⁶⁸¹ Carter, personal correspondence, 2005

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So, as far as leg and back effort is concerned, **there is no such thing as sequential effort!** It's *all* concurrent.

So what's the big deal?

The big deal is that the words a coach uses can have a profound effect on the attitude that forms in the mind of the rower.

Stan Pocock describes a hybrid-concurrent effort which gives the appearance of sequentiality, while **George Pocock** in his time described the sequential result, and even though the two men were describing the same phenomenon, the identical technique, the impression each gave is very different.

This becomes a very important distinction, because the *concept* of concurrent effort in the mind of a rower yields a **force curve** pattern materially different from the *concept* of sequential movement in the same mind, *even if they both may yield a superficially similar outward appearance!*

It's this simple. If a rower *thinks* concurrent, he will tend to apply force continuously, even if he is taught to emphasize one muscle group over another.

If a rower *thinks* sequential, he will tend to apply force segmentally.

As **Steve Fairbairn**¹⁶⁸² believed, the word picture a coach paints for his crew can do more harm than good if it focuses on individual components instead of on the stroke as a whole.

Stan Pocock: "The danger in micro-describing the sequence of actions is that one can be led into a kind of 'connect-the-dot rowing,' as **Frank Cunningham**¹⁶⁸³ loves to describe it. If one is trying to take 'one cut' at it, there is simply not enough time to think about which follows what."¹⁶⁸⁴

What George Pocock intended was a concurrent effort 0-9, 0-9, 0-10 pullthrough, the only variation from the Conibear Stroke being the ferryman's finish, but if you interpret his writings *literally*, you get virtually the opposite word picture, 0-9, 4-9, 6-10, *and a very different force pattern!*

For instance, the instruction manual that **Concept2, Inc.** includes with its ergometers contains a literal restatement of George Pocock's writings: "Begin the drive by pressing down your legs. Keep your arms straight and your back firm to transfer your leg power to the handle. Gradually bend your arms and swing back with your upper body until you reach a slight backward lean at the finish. Pull handle all the way into your abdomen."¹⁶⁸⁵

In summary, Concept2's "official" sequential pullthrough is initiated by the legs only, with the back and arms joining in at mid-stroke and arms alone completing the motion. This was *not* the Pocock Stroke as George Pocock intended it, and one look at a health club rower will prove the point.

Better to see great oarsmen executing a technique very much in the spirit of George Pocock. The Australian 2004 Olympic Champion coxless-pair, **Drew Ginn** and **James Tomkins**, rowed with leg drive sufficient to immobilize their arms and nearly immobilize their backs. Their hybrid-concurrent effort/sequential motion pullthrough ended in a ferryman's finish. See the video frames on the following page.

Steve Fairbairn was very successful in communicating what he considered to be the ideal boat-moving mindset: "As he springs and stretches the body, he should . . . feel he is hanging stretched in the air, hanging between the rowlock and the stretcher, pulling at and *trying to climb the oar.*"¹⁶⁸⁶

¹⁶⁸² See Chapter 19.

¹⁶⁸³ See Chapter 63.

¹⁶⁸⁴ S. Pocock, op.cit.

¹⁶⁸⁵ Concept2, p. 12

¹⁶⁸⁶ Fairbairn *On Rowing*, p. 266

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Ideally, the oarsman should “make the blade cut evenly through the water, and, with a hard finish, row the blade out, making the water swirl up behind the blade as if it were boiling.”¹⁶⁸⁷

The following George Pocock quote is equally evocative.

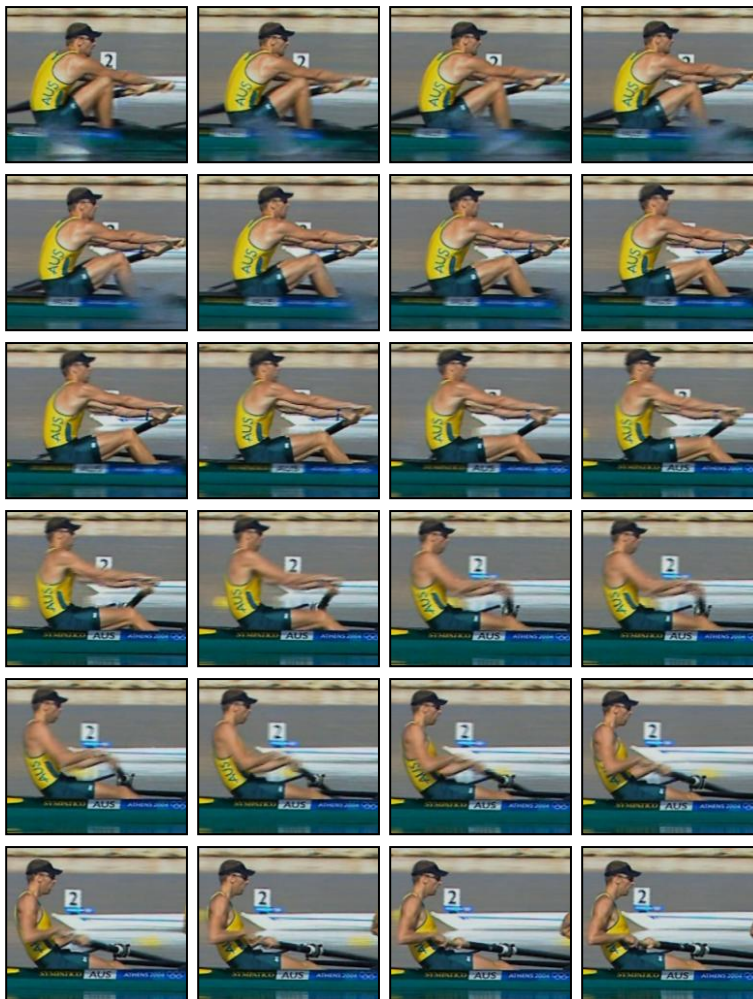
On the pullthrough, “the oarsman goes through much the same motion as he would if jumping up from a crouch.”¹⁶⁸⁸

Fairbairn climbing the oar versus Pocock jumping up from a crouch. In imagery and feel, there is little to choose between the Fairbairn ideal and the Pocock intent, but everything to choose between them and the *Concept2 Manual*.

You won’t get the Pocock “one cut” feeling if you actually imagine yourself triggering your muscles sequentially.

Segmented effort yields segmented results. By definition! This was discovered by Charles Courtney in his 1900 force curve experiment.¹⁶⁸⁹

But segmented effort was never George Pocock’s intent. This is yet another example of a technique which was mutated¹⁶⁹⁰ by being misunderstood so much as to be almost unrecognizable when it came to be interpreted by others.



FISA 2004 DVD

Australia Men’s Coxless-Pair
2000 Olympic Champion
Jim Tomkins
+15° to -20°, ferryman’s finish
Effort: 0-9, 0-9, 0-10.
Motion: 0-8, 3-8, 4-10

Modern Orthodox Technique

During the second half of the 20th Century, the sequential use of legs, then backs, then arms will spread far and wide, first through the proselytizing of **Allen**

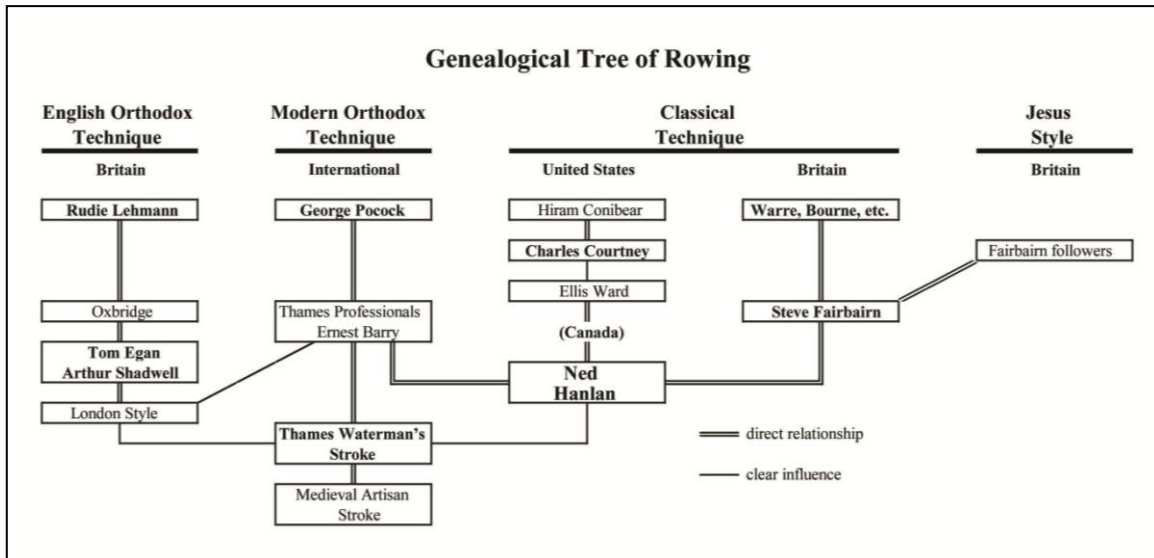
¹⁶⁸⁷ Ibid, p. 233

¹⁶⁸⁸ Wilson, pp. 18-9

¹⁶⁸⁹ See Chapter 38.

¹⁶⁹⁰ See the Introduction.

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Rosenberg,¹⁶⁹¹ then through Thor Nilsen¹⁶⁹² and a host of others.

Around the world, adherents to this approach to moving boats will believe in it and cling to it with a fervor not seen in rowing since the Age of English Orthodoxy. Accordingly, I refer to the 20th Century

legs-back-arms sequential approach to rowing as **Modern Orthodox Technique**, and even though George Pocock did not actually believe in its basic tenet of sequential effort, through his writings he is the true father of Modern Orthodoxy, a technique built on a misunderstanding!

¹⁶⁹¹ See Chapter 107 ff.

¹⁶⁹² See Chapter 123.

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49. George Pocock's Greatest Contribution

Subsidizing American Rowing



Courtesy William B. Tytus, Pocock Racing Shells

In 1916, World War I had been raging in Europe for two years, and the United States was poised to join in. Rowing at the UW and everywhere else had been suspended. There were no shells for the Pococks to build. The brothers found themselves in a desperate situation.

At the same time, **William E. Boeing** was establishing a company in Seattle to

build military airplanes and needed help with seaplane pontoons. According to Stan Pocock, when Boeing visited the Pocock shop and “saw the kind of work Dad and Uncle Dick were capable of doing, he hired them. They stayed with him through the war and for several years after it ended.”¹⁶⁹³

¹⁶⁹³ S. Pocock, pp. 50-1

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In 1922, the Washington coach was **Ed Leader**,¹⁶⁹⁴ and when he was offered the coaching job at Yale, he invited the Pococks to come along to the East Coast. George declined, but Dick accepted. That left George to carry on alone at Boeing as a foreman.

A few months later when the next Washington coach, **Rusty Callow**,¹⁶⁹⁵ came to George to ask him to build an eight, George agreed to do it in his spare time and on his days off if Rusty could find a spot on campus for him to work. Rusty offered the upper floor of the old seaplane hangar which the team was using as their shellhouse.

But when word leaked out, a story titled "Pocock to Build Shells Again on University Campus" appeared in the *Seattle Post-Intelligencer*, and George felt he had no alternative.

George: "I just could not stay with Boeing because a man cannot split his loyalties. In my case it involved, in the words of the poet, 'forsaking the substance and grasping the shadow.'"¹⁶⁹⁶

Stan: "When he first started out, he was struggling. He had to try and make a living after having left a *good* job at Boeing.

"When he built the first eight, he asked himself, 'What should I charge for it?' because he had few expenses. He was on his own in the university shellhouse and had no rent to pay, no insurance, so he checked into what the eights from England were costing because that was where everybody in the East was getting their shells.

"He knew **George Sims**.¹⁶⁹⁷ They had been apprenticed together. He thought he was the best boatbuilder he ever knew. At any rate, he wrote to George and asked him, 'What are you charging for an eight these

days?' The answer was \$1,250 [which must have yielded a reasonable profit considering his lack of overhead].

"But that stayed the price of a Pocock eight all through the Depression up until World War II, and when we started up again in '45 . . . still the same.

"It turned out that a portion of the pay that he and Uncle Dick had received while working for Boeing had been paid in Boeing stock, and as that company grew, my dad slowly realized that he had become financially set for life. He was very conscious of trying to help out the sport of rowing financially, and so he passed his good fortune on and kept selling shells at 1922 prices.

"After I joined the business, I can remember him and me sitting down and trying to adjust our prices. We were paying our guys more and more . . . and so we brought it all the way up to \$1,375!

"And that's where it stayed again for a *long* time. That was the same price we were charging Harvard or Yale or *anybody*. That was the price.

"Well, nobody could compete with *that*, and so an unintended result of this was that nobody could go into the business! We got wind that Chris Craft were interested, but they backed out in a hurry. There was not enough in it.

"But that was not the intent at all. I know that for a fact!"¹⁶⁹⁸

Clubs, high schools, prep schools and colleges all bought Pocock shells. Pretty soon, virtually every eight in every boathouse in the United States was a Pocock.

George and Stan worked with everybody regardless of their financial condition. There were plenty of deals made, agreements to pay later, orders on account.

¹⁶⁹⁴ See Chapter 52.

¹⁶⁹⁵ See Chapter 53.

¹⁶⁹⁶ Newell, p. 65

¹⁶⁹⁷ boatbuilder in Putney on the Thames in London near the start of the Boat Race course.

¹⁶⁹⁸ S. Pocock, personal conversation, 2005

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Some boats never did get paid for, but still George and Stan sent the boats out.

Stan: “I remember we once got a letter from **Al Lawn**.¹⁶⁹⁹ He was coaching some high school on Long Island Sound. They were *digging clams* to raise enough money to buy an eight! What were we supposed to do?

“Another outfit was selling Christmas trees, and another outfit had Green Stamps.¹⁷⁰⁰ We even sold a boat for *Green Stamps!*

“These were kids and their coaches who were struggling to make the sport grow. We

felt an obligation to do what we could to support them.”¹⁷⁰¹



Pocock Racing Shells was essentially subsidizing the sport of rowing in North America, and did so from the 1920s all the way to the 1960s when competition from European and North American boatbuilders finally created a viable for-profit business environment for rowing equipment after half a century of unnoticed and underappreciated

charitable support from George Pocock and son, Stan.

A handwritten signature in black ink, appearing to read 'Stan Pocock'. The signature is written in a cursive style with a long, sweeping tail.

¹⁶⁹⁹ See Chapter 65.

¹⁷⁰⁰ Between the 1930s and 1980s, **S&H Green Stamps** were distributed as premiums for purchases made at American supermarkets, department stores and gasoline stations. They could be pasted into books and redeemed for products in a catalogue.

¹⁷⁰¹ S. Pocock, personal conversation, 2005

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50. Migration of the Conibear Stroke

Washington Grads Become Coaches Nationwide

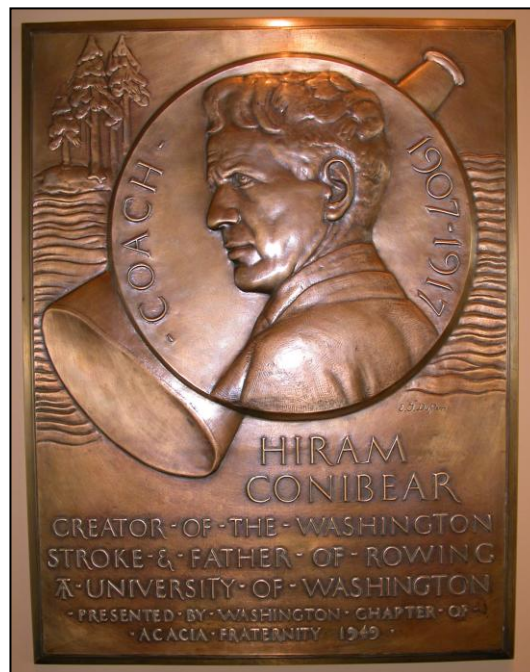
“Conibear” became the most famous name in American rowing during the first half of the 20th Century. Why? Why a man who died young with his full potential still ahead of him? Why a man in Seattle at the frontiers of American civilization? Why at the University of Washington, a state school founded in 1861 in a remote corner of the territorial American Northwest, an institution still in relative infancy compared to its Ivy League counterparts?

In his book, *Gun, Germs and Steel*, author Jared Diamond posits that the success of a particular culture on its march toward modern civilization was largely determined by happenstance, namely the climate, the geography and the availability of domesticatable plants and animals.

Similarly, happenstance blessed the University of Washington with year-round rowable water and at just the right moment a volunteer coach who had rowed for Charles Courtney. Most of all, the UW was blessed with the arrival of Hiram Conibear after a circuitous journey around the country.

Conibear was an incredible booster of rowing at the UW. Current UW Head Coach, **Bob Ernst**: “Crew is never a popular sport on a college campus, even this one where we are surrounded on three sides by water. It requires a lot of equipment and travel and brings in no revenue. Conibear was always getting into trouble with the administration, but he always had an angle.

“My wife is researching the history of women’s rowing at Washington, and she has read every issue of the college newspaper



Author / Conibear Shellhouse

Hiram Conibear

during Conibear’s era. He must have visited their offices every single day! There was always an article in there quoting him about how the crew got stuck in the fog the day before or about *whatever* was going on!

“Hiram Conibear was the ‘go-to’ guy for rowing. He did everything. He managed to talk his way into whole buildings from the Alaska-Yukon Exposition. He plumbed them and wired them himself so the team could have a boathouse and a dormitory where the members could live.

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University of Washington Crew Archives, Conibear Shellhouse

University of Washington Varsity Eight

Undefeated 1916 Pacific Coast Intercollegiate Rowing Champion

Bow **Clyde Brokaw** 5'11" 180cm 159lb. 72kg, 2 **Ed Leader** 6'0½" 184cm 174lb. 79kg,
3 **Paul McConihe** 5'11½" 181cm 173lb. 79kg, 4 **Tom Cushman** 6'0½" 184cm 179lb. 81kg,
5 **Max Walske** 6'2½" 192cm 188lb. 85kg, 6 **Chuck Newton** 6'2" 188cm 187lb. 85kg,
7 **Shorty Harr** 6'5" 196cm 188lb. 85kg, Stroke **Rusty Krumm** 6'0" 183cm 159lb. 72kg,
Coxswain **Ky Ebright** 5'7½" 171cm 115lb. 52kg

"At the time, no one could have foreseen the fact two future coaching legends were together in the 1916 Varsity boat. **Ed Leader**, who went on to coach at Washington and Yale, and **Carroll 'Ky' Ebright**, who defined California rowing from 1924 to 1959. In the five Olympic eight-oared events between 1924 and 1948, these two coached the crews (Yale and Cal) that won Gold in four of them. The only year they didn't, Washington did." – www.huskycrew.com

"In 1910, He had the mechanical engineers rowing against the electrical engineers. He had women rowing, and it was no beauty contest. He had them rowing their butts off. He inspired a whole generation of followers."¹⁷⁰²

Another fortuitous happenstance. On the East Coast, rowers from Harvard and Yale were often destined for careers in the professions, in business or on Wall Street.

Only the lumber and fishing industries beckoned for Washington graduates.

Rowing coaches at Ivy schools tended to be either gentleman volunteers like **Bob Cook**¹⁷⁰³ and **Gordon Sykes**¹⁷⁰⁴ or uneducated working class former professional scullers like **Charles Courtney**¹⁷⁰⁵ and **Richard Glendon**,¹⁷⁰⁶

¹⁷⁰² Ernst, personal conversation, 2006

¹⁷⁰³ See Chapter 27.

¹⁷⁰⁴ See Chapter 67.

¹⁷⁰⁵ See Chapter 31.

¹⁷⁰⁶ See Chapter 51.

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none exactly providing career role models for ambitious college graduates.

Mendenhall: “Courtney, for instance, despite all his victories really left no comparable school of followers [except Conibear himself!].”¹⁷⁰⁷

By contrast, the example of **Hiram Conibear**, one of the world’s first professional physical educators, led many University of Washington rowers to seriously consider coaching as an occupation worthy of a college graduate.

Remarkably, during the first five decades of the 20th Century, three generations of rowers at the University of Washington became coaches at virtually every major rowing program in the entire United States, and they brought three generations of the “Conibear Stroke” with them. This is a classic example of migration, one of the four processes of change in population genetics.¹⁷⁰⁸

Mendenhall: “Perhaps Conibear’s greatest achievement was the perfection of a system which assured the perpetuation of his technique and influence.”¹⁷⁰⁹

In 1946, in an article titled “A Sweep for Conibear,” *Time Magazine* reported on a race that the Conibear Stroke *couldn’t* lose: “Last week, for the first time, Eastern crews went west to race on Seattle’s Lake Washington. The largest crowd ever to see a sporting event in the Pacific Northwest – some 150,000 – hardly expected its Huskies to win, but Cornell, Harvard, M.I.T., Rutgers and California were all coached by Washington alumni and used the Conibear Stroke.”¹⁷¹⁰

(That 1946 race was ultimately won by Cornell, coached by Washington grad **Stork Sanford**, and with future rowing historian **Charles von Wrangell** in the 7-seat.¹⁷¹¹)

Mendenhall: “[All these Washington-grad coaches] were products of a system for teaching a successful rowing technique but also for organizing and supporting this particular sport, so demanding psychically as well as physically for all who take it seriously, so costly to maintain with no chance for income of its own, so rewarding to those who participate, yet so mystifying and even forbidding to the rest of the campus.”¹⁷¹²

Washington crews were the first West Coast team to come east to Poughkeepsie, and the press played up the cultural continent between rowing on the two coasts.

Glendon historian **Susan Saint Sing** has sagely pointed out that *The New York Times* used different language for the Husky crews, for instance:

Courage boiled high, and gray, cold waters were churned into white flecked foam by the fury of their efforts.

Saint Sing: “The word choice to describe Washington was more colorful and dramatic, again conjuring up images of the courageous, rugged frontier West in contrast to the more sophisticated, well-bred East.”¹⁷¹³

And the Huskies played on their mystique for all it was worth. When Coach **Rusty Callow** brought his first Washington crew to Poughkeepsie in 1923, the crew “handed out totem poles to the fans, who were heard asking, ‘Where on earth is Seattle?’”¹⁷¹⁴

¹⁷⁰⁷ Mendenhall, op.cit., p. 20

¹⁷⁰⁸ See the Preface.

¹⁷⁰⁹ Mendenhall, op.cit., p. 20

¹⁷¹⁰ A Sweep for Conibear, *Time Magazine*, July 1, 1946

¹⁷¹¹ See Chapter 70.

¹⁷¹² Mendenhall, op.cit., p. 20

¹⁷¹³ Saint Sing, *Breakthrough Kinesis*, p. 116

¹⁷¹⁴ Newell, p. 73

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And so the impact of the University of Washington transcends that of all other American colleges combined.

Harvard Coach **Harry Parker**: “It’s in the realm of legend. There was this great myth of giants coming out of the North Woods. A lot of these guys were lumberjacks, and so these great, powerful oarsmen from Washington, rowing this distinctive Conibear Stroke, and they were very successful because they had won a lot of the four-mile Poughkeepsie championships, so a big, big legend got built up, and the myth doesn’t die easily.”¹⁷¹⁵

The Conibear Stroke was promoted by **Al Ulbrickson** at Washington, **Ky Ebright** at California, **James Ten Eyck** at Syracuse, **Norm Sonju** at Wisconsin, **Pop Courtney** and **Stork Sanford** at Cornell, **Joe Burk** at Penn, **Ed Leader** and **Rusty Callow** at Washington, Penn and Navy, all of whom learned from Conibear at the University of Washington.¹⁷¹⁶

This quote from Philadelphia Boathouse Row historian **Joe Sweeney** is in keeping with the myth. The truth is that Conibear consulted Courtney instead of the other way around. Jim Ten Eyck had a personal friendship with Conibear and George Pocock, but never attended Washington, and he was coaching and winning long before Conibear arrived on the rowing scene. Ulbrickson, Sonju and Sanford were second-generation Husky Conibearites, having been coached by Rusty Callow, who along with Leader and Ebright, had indeed been coached by Conibear himself. Burk was also coached by Callow, but at Penn.

Perhaps the most astonishing thing is that in his quote, Sweeney left out more than *thirty* other UW grads who later became head coaches! Worthy of special mention



University of Washington Crew Archives,
Conibear Shellhouse

Rusty Callow in 1915

are **Tom Bolles**,¹⁷¹⁷ coach and athletic director at Harvard, and **Jim Matthews**, coach at Penn and originator of lightweight crew in America, both from the Callow era at University of Washington, and **Gus Erickson**, who became national coach of

¹⁷¹⁵ Parker, personal conversation, 2004

¹⁷¹⁶ Sweeney, p. 5

¹⁷¹⁷ See Chapter 63.

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Sweden in the 1950s.¹⁷¹⁸

¹⁷¹⁸ Dodd, *World Rowing*, p. 127