

Wet Shaving Systematics:  
A Primer on the Roberts Method of Wet Shaving (RMWS).  
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Part 1

The Amazing World of Wet Shaving

Since it was first seriously introduced to the world four years ago, wet shaving has attained the status of an international sensation. The world, it suddenly seems, is full of wet shavers. Even the British have returned to shaving brushes and pot bellied shaving mugs. Sales of double edge razors and shaving brushes have reached uncharted levels. Super badger brushes are trading at premiums that would make a New York investment banker blush. Even my own 3X wet shaving forms (the standard cutting sequence for wet shaving), which first appeared on my own website four years ago, are now available on numerous websites. After near extinction a generation ago, wet shaving has once again leaped into the driver's seat of history. Let us give thanks.

The timeless qualities that make the wet shaving experience so valuable to the individual shaver now resonate throughout the world. Wet shaving's grace and refinement have long attracted zealous practitioners. For them, wet shaving's new popularity comes as no surprise. To us, the true believers, wet shaving's new popularity is long overdue. The miraculous powers of wet shaving have never really been seriously disputed. We have always known that wet shaving not only revives the spirit of the individual man. It restores to manhood itself the dignity of its full and passionate object.

That the world is only now discovering the joys of wet shaving must be regarded a stupendous irony. To paraphrase Nietzsche on the matter: great ideas are sometimes born posthumously.

Emerging from its obscure origins three centuries ago in Europe, wet shaving now extends its happy influence to all quarters of the world. The Internet has made this hopeful prospect a reality. Let us toast the Google brothers and their amazing information machine.

Today, wet shavers—and the products they use---abound in countries as disparate as China and Italy. Anywhere mankind is found, wet shaving is lovingly practiced. Straight razor shaves are routinely offered in both London and the dusty bazaars of Marakesh. Japan has long been the home of a vibrant wet shaving trade; one that I suspect exhibits all the earnest discipline and excellence typical of that remarkable people. Nearly all shaving brush badger is produced in China. Across the world, wet shaving is practiced with surprising assiduity in both New Zealand and Iceland.

Wet shaving's impressive uniqueness is also reflected in its international product range. Both England and France, for example, produce excellent shaving brushes. Rooney, Simpsons, Vulfix and Plisson dominate the list. Italy yields an array of outstanding shaving creams. Merkur Solingen of Germany produces excellent shaving cutlery. Japan offers one the most outstanding double edge blades in history: the Feather super platinum. Even humble Turkey has entered the lists of outstanding double edge blades with its revival of the old Derby brand from Britain (a magnificent blade, to be sure). In the realm of distinctive fragrances for men Geo. F. Trumper of London has no credible rival. Even the United States has now joined this distinguished list of countries brand with HydroLast, chemical free wet shaving products.

In the United States wet shaving's influence now extends to every corner of the men's luxury grooming industry. This trend has been mirrored by a proliferation of both traditional and wet shaving goods on the Internet. The general media—especially TV---is also taking a substantial interest in the subject. Cory Greenburg's brief but important NBC television segment last year on wet shaving was a historical watershed. Millions of Americans saw Mr. Greenburg sweep an entire tabletop of mass market shaving products into the dustbin. What he left behind clearly revealed our present state of shaving grace: a shaving brush and several British style shaving creams. Since then an unprecedented number of new shaving products have become available—a few good, some bad, most indifferent.

The prolific increase in specialty shaving goods is, generally speaking, a positive thing. That most of these products have little to do with wet shaving in any meaningful sense is largely inconsequential at this point. New markets are always shaped by new products. On balance, a steady increase in products generally translates into increased users of those same products. The law of averages suggests that at least a few of those products will create happy customers. And since happy customers are the lifeblood of sound business, this result is a good thing. In the end, however, it will be customers who decide which products live and die in the bloody coliseum of free enterprise.

Most new shaving products suffer from a misplaced emphasis on packaging over purpose. Nearly all of the so-called "high end" shaving products sent to me for review are devoid of shaving benefit. I suspect that my complaints in this regard are much in line with the customers who buy them. The products themselves are garishly over packaged. An excess of packaging typically obscures a product which, all things being equal, is no better than the worse available somewhere else. More unhappily, the field of specialty shaving is overrepresented by "designers" of expensive shampoos and greasy hair mélanges. Though often colorful as personalities, these individuals know as much about shaving as King Kong for playing Bach.

The bulk of these complaints can be distilled to one common cause: For those now entering the field of new American shaving, the learning curve is too steep to sustain those happy dabblers who merely want to play at the game. From a simple perspective, the subject of shaving appears both familiar and entertaining. Men shave; therefore men should be natural experts on the subject. This belief is patently absurd. Mere shaving experience no more makes an expert than a boundless love of women makes one a Casanova. In both instances the individual is fooled by dull the force of his belief. Where excellence in shaving is concerned, though, mere belief is of little help. The subject itself—and the myriad contents by which it is understood---requires the same time and diligent effort demanded of any great profession if excellence in its practice is to be achieved.

Even the best new shaving products usually arrive in the world burdened by questions. Where wet shaving is concerned these questions usually cluster around three very specific points of interest. These are: 1).What is wet shaving? 2).What is its benefits? 3). How does one go about properly learning to wet shave? These questions are important; finding answers to them is more important. My purpose in this primer, therefore, is to provide answers to these questions. Along the way, I hope

to also spark a lifelong passion for this extraordinary method of personal grooming. From greater learning increased mastery is realized.

On the most basic level, wet shaving is usually described as the use of a badger hair shaving brush, heavy cake soap and single blade razor for shaving. Indeed, this description sufficed to define the term "wet shaving" for the better part of two centuries. Today, however, it forms but one of several different possible views of the subject.

The spare description above does not attempt to define wet shaving (I do that later in this primer). It is enough, however, to move us on to a more complete discussion. This covers the more formal elements of the wet shaving process itself. These elements comprise the following sequence: 1). Cleanse the beard; 2). Cut the beard; 3). Condition the skin. I use C3 as shorthand for this sequence. We will revisit this process several more times this primer.

(Note: Those familiar with American shaving history will no doubt object to my appropriation of the term "wet shaving" to my subject. Gillette, they will insist, used the same expression for over half a century to market its own products. Which expression, then, possesses clear primacy in the matter? Having not steeped myself in arcane research on the subject, I can not justify one usage over the other without inviting challenge. However, Gillette has not used the expression "wet shaving" in relation to its products in over fifty years. This clearly suggests that it has abandoned the field to superior usage. Thus, the distinction I offer between the form of wet shaving described in this primer and the form Mr. Whipple now uses will no doubt be apparent to the reader).

Historically speaking, the badger hair shaving brush has always been central to the wet shaving process. This item alone, however, is hardly sufficient to meet our needs. A shaving brush, by itself, no more makes one a wet shaver than possessing a tennis racket makes one a "tennis player." The use of the shaving brush must also be coupled with a robust buffering system—one that supports the blade transit through the beard and across the skin line---and a suitable piece of double edge cutlery (not just any razor will do). The relationship between these three elements will form the bulk of this primer's subsequent content.

Newcomers to wet shaving often tell me that they already wet shave since they shave in the shower. This is a fallacy more common than water itself. Shaving in the shower has no more to do with wet shaving than eating grapes with drinking wine. Indeed, since "shower shaving" fails to achieve even a 50% beard mass reduction, I dismiss it outright as little more than wasted time,

wasted water and wasted effort. At the same time, we should acknowledge that nearly all shavers start their wet shaving journey equipped with little more than a simple shaving brush, soap and basic double edge razor. I started with these same implements many years ago, myself; any beginning shaver will profit from doing so as well. Once these basic implements are mastered, it then becomes possible to advance to higher forms of wet shaving that provide superior results

In this primer I attempt to provide a consistent and reliable roadmap, if you will, to the many happy destinations wet shaving beckons us. At first glance, much of the information in this primer may seem unrelated to the subject of shaving in any form. Some of it will appear unduly abstract. All however will be found abundantly relevant to the subject.

Readers of this primer will encounter information relating to the new emerging niche industry of specialty shaving and its various sister technologies. This information, though deeply interesting, I have kept to a necessary, but relevant, minimum. Some consideration of it is nevertheless wholly relevant to our discussion. However, none of the elements discussed below should be treated as mere errata to our main subject. Even the elementary wet shaver needs to possess some understanding of the V2 ratio, hydroplastic buffer, 3X cutting forms and the concept of wet mix. No man comes to the magical kingdom of wet shaving but by these.

## In Search of the Perfect Shave

The central importance of shaving in the cultural life of mankind is widely acknowledged, but still poorly understood. According to everything we know, man has been shaving in some form for at least 10,000 years. Back then Aruk of Stonehenge used flint, pure water and warmed fat from the glands of a Mastadon to clear his beard. Aruk was a great shaver. In the language of wet shaving we would call him a "steel blade ninja." Aruk lived large. He drank from the skulls of his enemies, roared with laughter in the face of death; danced naked in the moonlight. Aruk's libido was the size of a watermelon—even trees feared his passionate embrace. But Aruk knew wet shaving as he knew his women—intimately and often.

Aruk was no friend of modernity. Being an expert wet shaver, he was instinctively suspicious of electric razors. The mere sight of shrink wrap made him wild. Offering him a can of Foamy was worse than insulting his ancestors. Aruk was no Bic shaver, either. He owned more double edge razors than all his tribe. And based on my researches I am convinced that Aruk not only shaved better than today's miserable wretch with a plastic blade stick. He also attracted the willing pleasures of far more beauties with his clear, glossed look. This meant that Aruk had many wives, many children and many opportunities to cast forth his genes on the river of life. As a fellow wet shaver, I understand Aruk. Like King Gillette a century ago, he is a wet shaving brother. But Aruk and his kind have passed from the scene. Their place is now taken by the cadaver called modern man. It is this pathetic beast who thinks that shaving is the thing you do while sitting on the toilet.

Today's modern shaver has at his command an arsenal of shaving bilge enough for all of Xerxes' legions. Yet for all his modern shaving surfeit, he still can not shave. In truth, he has neither the light nor wisdom to shave in any form--- wet, dry, or by machine. And though he imagines the perfect shave, he can never know it in fact. He has often heard that joyous shaving is so simple; yet as ancient Asian wisdom reminds us, simple things are often very hard to do well. Modern man can not shave because he is struggling to think outside the bun.

Yet modern man— with his tubercular chest, adolescent stubble and mumbling stupefactions--still longs for the perfect shave. He cries in the night for the spirits of shaving bliss to visit his forlorn visage. Yet, the spirits of shaving bliss do not come; nor shall they. To the hapless stumbler called modern man--- to him the gates of the palace of shaving wisdom have been impenetrably closed.

The perfect shave. Where does it abide? How does one get it? How does one get it more than once? Mankind searches for shaving wisdom the same way that Buridan's ass starved in the midst of plenty. He first tries this; he then tries that. With infinite choices before him, yet he always chooses poorly. When it comes to shaving, modern man is a painful case.

The search for shaving perfection is among the oldest of worldly pursuits. And still the pursuit is unfinished. Today, there are more errant souls in search of shaving perfection than ever. But though the truth is put before them, still they continue to worship false gods. It is in the service of this vast and bedeviled crowd of that I have spread my cloaks and dedicated my professional life. There is a kingdom of gold waiting for anyone who can lighten the load of mankind's suffering by one

ounce. If it is true that a better mousetrap, will bring the world to your front door, then surely a superior shaving experience will bring humanity's other half there as well.

Several years ago, a movie called "The Perfect Storm" was briefly popular. Starring George Clooney (a star possessed of a great beard, but little skill in clearing it) the movie describes the plight of a small fishing vessel that struggles to endure the onslaught of a deadly, deep water storm. Most of the movie is dominated by endless scenes of heaving waves, blasting winds and sharks gleefully awaiting the next sailor to be pitched from the deck. Cool at the helm, Captain Clooney is unruffled as his fragile vessel plies 40 foot waves and endures the raw violence of the deep. Throughout the ordeal, the crew unflinchingly believes in the captain and his seasoned sailing skills. The audience also believes in the captain. They expect the storm to pass followed by a happy ending at some tropical port. But, alas, both the ship's crew and the audience will be wrong. The ship will find a watery grave. By movie's end, the sharks dine with delight on the bobbing carcasses of the good captain and his crew.

Throughout The Perfect Storm, we are often reminded that no ship can survive "the perfect storm." During these rare events, everything in nature conspires to destroy any sailing vessel caught in its watery grasp. The wind, the rain and the heaving ocean all combine "perfectly" into one irresistible cataclysm. For those fortunate enough to survive, there can be no thought to ever venture forth onto the deadly water again.

Like the perfect storm, the perfect shave is also a creation of its mighty master. The master in this instance is the man holding the shaving brush and single blade razor. If there is enough water to float the steel and sail the brush, a happy port is always in view. And like good sailing, the perfect shave does not occur impromptu. Mere accidents will not shape its course of everyday success. Perfect shaving, like skillful sailing, is achieved through a rich synthesis of experience, commitment and know-how acquired through long and assiduous effort. Imbued with the skills of wet shaving, the master of the house is always his own best groomsman.

Considerations of the perils of the "perfect storm" led me to ponder the equally daunting challenges of attaining the "perfect shave." In the process, I found myself carefully identifying, analyzing and cataloging the chief ingredients of the perfect shave—what they are; how they happen; why they happen. I discuss these elements in more depth later in this wet shaving primer.

Excellent shaving is good for mankind. Poor shaving leads the bulk of humanity unto great perils. That our nation's leadership is largely incompetent is easily seen in the fact that they are incompetent shavers. I believe that when a man is shaving contently, he is reluctant to wage war, prefers the attention of beautiful women to the clamors of combat and finds the world a better place withal to spend his time. Had man learned to shave properly in the beginning, he would still be swaying with the mangos in the Garden of Eden. Instead, he took up the electric razor and discovered his own nakedness. Thus we are not surprised that Eve quarreled with her wretched man. She thought he was a wet shaver, or so he said. But he lied. A million years of misery later, mankind has finally slouched its way back to shaving the right way---The wet shaving way.

### The Benefits of Wet Shaving

G.K. Chesterton once observed that anything worth doing well is worth doing poorly. The acute wisdom of this remark can be seen in the long and uneven history of wet shaving.

We know that men have wet shaved in some form for centuries; we also know that they generally shaved with very imperfect skill. Most of humanity wet shaved. But their understanding of water, steel and precise motion was generally inept. Yet through the ages he persisted in his efforts to join water and metal into a symbiotic medium strong enough to cut one of the toughest materials on earth—his own beard. What compelled man to persevere in the pursuit of so elusive and uncertain a venture? The answer is simple: wet shaving produces outstanding results—even when done poorly. Several reasons explain this fact.

The first—and perhaps most important—benefit of wet shaving is the ability to capture the uniqueness of one's own shaving experience. Only wet shaving delivers this kind of customized possibility. I call this phenomenon "personal shaving" (in honorific recognition of Michael Polanyi's great book "Personal Knowledge"). Customized shaving means that the shaver controls both the process and the product of his shave. By degrees, the wet shaver achieves control over every nuance of his own shaving experience. He alone decides how close, comfortable and enjoyable today's shave will be. In this way, the wet shaver not only shaves better; he also lives better.

The second benefit is more specific than the first. This involves the vast improvement in the overall look and feel of one's skin that wet shaving creates. A mere glance at the skin of a long time wet shaver offers sufficient proof of this fact: a smooth flowing skin, unblemished complexion, and a generally healthful look. Wet shaving's benefit to male facial skin is a fascinating and important pursuit; it is also one that I have studiously engaged for most of my career. If there is a true fountain of youth for a man's appearance, it will be found in the daily regimen of wet shaving

Finally, wet shaving offers the most intense grooming experience presently available to a man (at least in this life). No barber shop in the world can rival the rich and luxurious experience that wet shaving routinely provides. Round after round of hot wet mix, combined with the gentle, pleasing strokes of a single blade razor, all induce deep sensations of peace and well being. These blissful stimuli remain with a man the entire day. With merely the touch of a hot shaving brush, they return once more in all of their fresh and living fullness.

A man who does NOT wet shave need not concern himself with the dismal prospect of life in a future hell--- he is already living it.

Europe, and particularly England, can rightfully claim to be the birthplace of "traditional" shaving. And it is this form of shaving that is usually associated with the idea of "wet shaving." However, the conflation of these two forms is a fallacy. In fact, both traditional and modern wet shaving share little more than history in common.

The main source of confusion between the two forms centers on the shaving brush itself. Yet the role played by the shaving brush in both forms is could not be more different. The form of shaving brush appropriate for both styles varies significantly. In essence, the traditional shaving brush is small, and generally made of coarse badger bristle. The brush is most often used to move the wet lather around the face; in sum, the shaving brush is used as little more than a face spatula. In modern wet shaving, conversely, the brush is very large, generally comprised of much finer scaled badger bristle (called super), and is used to build a "cutting mix." The important distinction between these two forms-- "traditional" shaving and its modern variant called "wet shaving"—will be developed in more detail throughout this primer.

The evolution of shaving over the last three centuries can be accurately divided into four distinct phases: Traditional (1700-1905), Double Edge (1905-1970) Multi-blade (1970-2000) and ModernWet Shaving (2000-).

Phase One—Traditional shaving: Until 1905, traditional shaving used the open blade (cut throat) razor, super fattened soap and badger hair shaving brush. Traditional shaving in this form was the unique preserve of most barbershops for several centuries; in many parts of the world it continues to be avidly practiced in its original straight razor form.

Phase Two: Modern shaving: This period can be roughly divided into two eras of nearly equivalent length: the first, beginning in 1905 covers the era of the double edge (holy of holies). This is followed in 1972 by the era of so-called "pivot blade" razors from Gillette. Gordon McKibben (Cutting Edge, Harvard Business Press 1998) provides an excellent analysis of the origins of this sadly misguided foray into techno shaving bombast:

"The major product success (of Gillette in 1972) was the twin blade Trac II razor, an innovative shaving system that ended forever the primacy of King Gillette's double edge blades. The story of Trac II began in the Reading laboratories in England in early 1964, when Dr. Norman C.Welsh ...experimented with tandem blades, a type of razor head on which one blade followed another in a twin-blade configuration.

...Welsh (later) noted in that in spring 1964 he had discovered the "hysteresis effect," that is, when a blade engages a whisker it extends the whisker in the hair follicle before cutting it, and there is a finite amount of time before the stubble fully retracts...if a second blade reached the stubble before it retracted it would produce a closer shave."

The discovery of "hysteresis" (a strange, unshaven word to be sure) gave birth to the world's first shaving monstrosity: the Atra twin blade razor. This razor mounted two narrow blades in a tightly coupled, fixed blade platform. Their facing edges allowed whiskers to be cut on an up stroke as well as a down stroke. Use of the Atra required shavers to "scrub" the beard in a back and forth manner. Gillette justifiably considered this an unsuitable arrangement and promptly went to work developing an alternative single cut shaver using the code name "Rex." Under this secretive guise, the Atra fixed blade platform was converted to a "pivot head" system called the Atra II. By the latter

1970s, Atra in its entirety was again re-invented as the Trac II system. The fecund womb of this last incarnation would in time give birth to both the Sensor (1990) and the Mach 3 (1995). (In April of 2005, the Gillette company was sold to Proctor and Gamble—a manufacturer of distinctive toilet papers. This event ended the modern era in shaving and inaugurated the advent of what I derisively label “Mr. Whipple” shaving).

Developments in razor and blade manufacture within the past century forced traditional shaving out of its old, accepted role. Chief among these changes is the replacement of the original double edge blade invented in 1905 by the American King Camp Gillette. Today, many older Americans still fondly recall the “mug, brush and double edge” of the post WWII era. Yet, for most of the last generation, the venerable double edge blade has largely disappeared in America. Its place has been taken by any number of the “pivot blade” systems mentioned above. Curiously, though the double edge is a largely extinct presence on American store shelves, elsewhere in the world it is the ONLY blade available. Why is this? I examine these various considerations in greater detail below. (For those readers who may live in a house built a generation ago, it is still often possible to see the “blade vent” inside the medicine chest. Such vents were used for discarded “double edge” blades. They are a quaint reminder of a time in America when the “girl next door” was without tattoos and predators still lived in the wilds).

As a result of these changes, over the years, traditional shaving forms have been modified for mass appeal. First, the original straight blade was largely dropped to be replaced by the double edge. This latter was subsequently dropped in favor of a long series of tepid alternatives. These included at various times, the Gillette Atra razor, Trac Two, Good News, the Sensor, Mach 3, etc. Sometime in the 1970s, Schick introduced the injector blade concept. Interestingly, the injector blade was one of the very few great shaving ideas to follow the double edge. Unfortunately, Schick never grasped the excellence of its creation and soon abandoned it. In general, these accommodations have produced little more than refined shaving misery at a higher price.

In the discussions below, I present both a short history of wet shaving along with the basic principles of its most refined practice. For several years many of these have been known as the Roberts Method of Wet Shaving (RMWS). More recently, many of these same practices have passed into general adoption.

Several of the principles discussed in this primer first appeared in elementary form in my first collection of essays on the subject called *Shaving Graces* (Internet 2002). The positive reception to that work far exceeded even my most sanguine expectations. Within only a few weeks of its appearance its readership had even extended to Asia. Since then, however, much of the technical content of *Shaving Graces* has been rendered quaintly obsolete by new advances in the practice of wet shaving. Some of these advances have in recent months assumed the shape of independent disciplines in their own right. The role of water in wet shaving, for instance, is a subject whose information mass doubles every three months. Finally, my RMWS methodology has inspired the first wet shaving journal (Internet) [www.methodshaving.com](http://www.methodshaving.com).

The positive implications of these developments however have not come without cost. Amidst the plethora of new techniques and product innovations there has been a significant loss of general understanding. This is particularly the case where new shavers are concerned. Frankly, much of this confusion results from the mass of new theoretical insights we have realized in the last several years. These insights, to be sure, have been profoundly helpful. However, an overarching order must be imposed on this recalcitrant mass of shaving riches. It is the purpose of this primer, therefore, to provide a kind of "state of the art" perspective for shavers of untried experience. Experienced shavers may wish to skip the thin historiography of shaving that follows in favor of the primer's more substantive theoretical matter.

Today, wet shaving is advancing from a settled cottage business into a dynamic niche industry in its own right. Its growth has been driven as much by public fascination as by the expanding demands of the practice itself. In the wake of this development, however, the gap between present theory and best practice has enlarged considerably. In attempting to bridge this gap, new models have been devised. Over the years these models have been enriched by the contributions of numerous shavers. Their insights have brought forth new standards for product and process improvements of great value. During the past decade's "golden age" of wet shaving decade my own principles of velocity, volatility and hydroplasty have also been developed. These concepts are examined in greater detail below.

That wet shavers are more delighted with their craft today than ever before there is little doubt. However, all are in continued search for more knowledge. As the old, worn out standards of conventional shaving recede, new and more exciting prospects come into view. But as with every advance in human excellence, the high ground is not taken without considerable effort and ingenuity. Fortunately, the world of wet shaving is not short of energetic pioneers.

For advanced shavers seeking specific information regarding the principles of modern wet shaving, this primer will prove helpful.

Many of wet shaving's most recent developments are discussed at considerable length in this primer; others I have deliberately neglected out of considerations of length. In all I have tried to balance technicality with ease of understanding; pleasure with purpose. I originally set out to produce a complete treatment of the subject of (wet) shaving; however, the text quickly reached a prohibitive length.

For a niche industry barely four years old, modern wet shaving has already produced an amazing number of sub-specialties. If as Adam Smith teaches, the division of labor is governed by the extent of the market then surely wet shaving is approaching a kind of vanishing point in its increasing returns to both scale and scope. In this regard I am often asked what I personally envision the future direction wet shaving will take. By way of a productive answer I respond with a few terse observations:

First, over the next several years I expect to see the rapid development of a home grown, US based wet shaving industry. The present robust health of the business not only warrants it, but necessitates it. The era of massive importation of shaving brushes, creams, razors etc from abroad has found a receptive commercial echo in America. The infant US wet shaving business was conceived and long nurtured in the lap of the great European shaving luxury brands. Other firms--- Trumpers, Plisson, Simpsons, Castle Forbes, Edwin Jagger--- provided the commercial root and staff in the early days of the US shaving market. Without the nurturance of those firms, shaving life in the United States would have progressed no further than the butcher block and the barber pole.

The US has already given birth to two major brands, HydroLast in wet mix media and Shavemaster in shaving brushes. A major distributor--- Ray's Dupont's outstanding Classicshaving.com---is also an indispensable US asset. Moreover, a surprising number of regional specialty barber and shaving shops have also appeared throughout the US. Chief among these are

Art of Shaving in New York and Truffitt & Hill in Chicago. These developments should continue to grow both in scope and scale over the next decade. (Probably the most persevering—and altogether decent—shaving enterprise in the United States is the humble, but invaluable, Col. Icabod Conk of New Mexico. Those marvelous folks have sung the glories of wet shaving for several generations. If America possesses only one true national treasure it is Col. Conk. If one percent of U.S. companies did business like Conk, capitalism would enjoy perpetual glory. Since one percent we have not, call Conk and be happy).

At this point, at least, American innovation in the marketing of specialty shaving goods outstrips its European counterparts. This fact is only superficially surprising, however. Innovation in any form has never been a distinctive feature of traditional shaving—particularly the European varieties. In most instances it has been an anti-feature. This view, however, has changed greatly in recent years. Particularly in the United States, the long staid approach to wet shaving has been overwhelmed by the new and different.

Finally, it is often said that opinions make markets. And this is doubly true where wet shaving is concerned. More than ever, images relating to wet shaving can be found throughout the men's fashion media. Wet shaving also commands a ubiquitous presence on the Internet—the primary source for nearly all new developments in the field.

Increasingly American wet shaving is viewed as exemplifying the best in shaving pleasure in ways previously unthought. Today wet shaving is capturing not only popular opinion but also the markets that inevitably reflect it. As the popularity of wet shaving continues to grow, new dimensions in the form will inevitably emerge. Indeed, we see this process unfolding even now. For instance, the invention of the high velocity shaving brush and parallel developments in the new field of wet mix hydroplasty have effectively split the European and American approach to wet shaving along permanently divergent lines. This fact however has less to do with the quality of European and British goods than with the intensely heterogeneous nature of American wet shaving itself

Despite its expansive appeal, the wet shaving industry must still be seen as merely a diminutive pearl in the vast bowels of the luxury market oyster. Like any tiny image repeatedly magnified, the wet shaving business is still embryonic in scope. Only its perspectives seem gargantuan. Compared with consumers of gourmet chocolates, for instance, the number of wet

shavers is incredibly small. I suspect that the entirety could be comfortably gathered around one shaving brush. Some may even regard that sum as overlarge.

The small absolute numbers of shavers must, however, be set against the level of sophisticated thought the subject of wet shaving currently commands. In this regard, thought leadership in wet shaving is rivaled only by biotechnology. The sheer fascination of its subject is I believe wet shaving's most potent attraction. Once the tendrils of interest in wet shaving have fastened on the mind, a kind of delirious enslavement to its pleasures is instantly induced. Nor are those pleasures merely skin deep. Unraveling the mysteries of mix velocity for instance can be as challenging as master's chess or stock derivatives.

Increasingly the horizons of wet shaving are expanding both theory and practice far beyond anything we ever thought possible. Not a few of these involve complex skills and technologies of a very high order indeed. Indeed, when considered within the context of wet shaving, any subject becomes instantly fascinating. Even water, perhaps the most prosaic of organic subjects, is presently under intense study as we seek to unravel its profound role in wet shaving.

The range of subjects that justly fall within the category of "wet shaving" now exceeds the capacity of any one individual to credibly expound. I clearly remember a time when most that was relevant to wet shaving could be efficiently stored in one mind. Today, I find myself in the role of humble student to those whom I once taught to hold a razor. Several of these have gone to establish their own place in the sun: among them, Adam Mendelson now edits the world's first wet shaving journal: [www.methodshaving.com](http://www.methodshaving.com).

### The Origins of Traditional Shaving

In my earlier collection of essays, *Shaving Graces*, I recounted the process by which traditional British shaving first came to America in the 1980s. The transplanting of traditional British shaving to America was both a fragile and uncertain process. And for over a decade it remained that way. The first shaving creams and brushes were brought to the US in suitcases. The scarcity of these early products can not be exaggerated. This fact of limited availability created two very difficult circumstances from the outset: first, it ensured an extremely limited market for specialty shaving

goods; second, it rendered them all depressingly expensive. Being an obscure novelty, traditional shaving had few advocates. No one knew how to sell such goods because none of us knew anything meaningful about them. Indeed, the very idea of using a shaving brush struck anyone under 50 as absurd.

In those days, the use of traditional shaving products was shrouded in a kind of perdurable mystery. To most of us they seemed like the indifferent relics one finds at estate auctions or the Salvation Army store. As a result, most of our understanding of traditional shaving was engorged with nonsense and confusion. Various bits of similar confusion still afflict thinking on the subject: We wrongly assumed for instance that double edge razors are expensive and dangerous. So, shaving with one requires the same skill as playing a violin. Thus, difficulty of mastery makes them cheap.

Double edge razors ended their reign at the end close of WWII. Some of us remembered that the narrow slit inside the medicine cabinet was for old double edge blades. Grandpa's old double edge razor kept its dusty place of glory on the bathtub mantle, accompanied by shaving mug and cracked shaving soap and shriveled brush. Why would anyone use such strange shaving paraphernalia? we wondered. Besides, who wanted to take more than two minutes to shave, anyway?

The sheer plethora of these ancient shaving tools, compelled us to inquire into both their provenance and purpose: who made them? Where did they come from? And, most importantly, did they really work? Why did grandpa never miss his daily shave? Did double edge razors and shaving brushes actually make shaving better? Was it indeed possible that deep within the womb of time the dead held secrets of shaving that were more precious than gold? Little did I know at the time that I would spend the sum of my professional life in search of answers to these questions.

Although everything about traditional shaving had an inscrutable air about it, it was the shaving brush that most deeply stirred the imagination. Did one use it wet, or dry? Hot or cold? Up or down? Was it really a brush or something more profoundly interesting and functionally complex?

The use of the shaving brush was as steeped in mystery as Stonehenge. It had been nearly a half century since anyone had seen a shaving brush in the United States. The double edge razor was a similarly inscrutable tool. Most of us were too young to have ever seen either one in use.

Until very recently, it was commonplace to refer to all uses of the shaving brush as a form of "wet shaving." That the mere addition of a badger hair had anything to do with improving shaving

was never explained to me or anyone else. The shaving brush itself can hardly be called a self-revealing entity. It is, in fact, more enigmatic than the face of the sphinx. Incredibly, I have known many men who have spent 50 years using a shaving brush—incorrectly. That they have been delighted with the results the entire time speaks volumes for the power of this marvelous tool to get the job done.

Unless properly trained in the use of a shaving brush, it can be harder to shave with a brush than without—wet or dry. It is, however, through the skilled use of a shaving brush that the average, unhappy, shaver, is transformed into a virtual magus of the grooming arts. For 15 minutes each day, he is, simply put, the happiest man alive. From this fact we can rightly conclude that the shaving brush is the centerpiece of all wet shaving. And for the beginning shaver, to be sure, its competent use is a required skill. This, then, is the first requirement of wet shaving mastery: learning the proper use of a badger hair shaving brush.

Exploring the mysteries of wet shaving brought other questions to the fore as well. Back then we asked: How did the mere presence of a badger hair shaving brush change the shaving process at all? And why, I asked, do we need a badger hair brush to shave in the first place? These questions invariably led to others. Why, I asked, are there three (some say four or even five) different grades of badger? If wet shaving is indeed wet, where does the water go? How does one properly use it? Why do we even need water in shaving? (The manufacturers of electric razors, in fact, insist that water in shaving is largely unnecessary. Former owners of electric razors always become the most devoted wet shavers).

The questions offered above remained unanswered for years. Once I embarked on my recovery of wet shaving from the sands of history, it became obvious that the subject itself was swathed in questions and enveloped in mystery. Incredibly, as recently as the 1990s, when I began my own professional thralldom with our subject, it was impossible to find any cogent explanation behind the use of the shaving brush. This fact astonished me, particularly given the impressive 300 year history of “wet shaving.” It was only after several years of careful analysis and first hand experience that I was finally able to unravel the mysterious elements of wet shaving. This primer presents a brief summary of what I discovered in the course of my investigations.

## Shaving Dry and Wet

It is a well known fact that the history of shaving is nearly as old as mankind. However, in the interest of brevity it is unnecessary for me to retell its full story. It is enough to say that for most of its history, shaving was done entirely without water.

In archaic times, men shaved by simply cutting off their beards. Shaving in this fashion was done with a knife wrought sharp enough to permit the facial hair to be cut as close to the skin as possible. The modern technique of close-in shaving, or "glossing" the skin with a steel blade, was both unknown and obviously impracticable. Given the problematic nature of removing facial hair with a knife intended for use as a weapon, we should assume that "knife shaving" was done infrequently and reluctantly. Nevertheless, this method of shaving prevailed for nearly 30 centuries.

Knife—or "open blade"—shaving eventually evolved into the more common custom of straight razor or "cut throat" shaving. It is this latter method that has been used by barbers for the last two centuries. However, the use of the open blade method had nothing to do with shaving per se; its use was restricted to the act of merely cutting the beard back to a length more in keeping with the generally accepted look of the day. In this regard we must remember that the idea of a spotless—or gloss finish—shave is very much an invention of the twentieth century. Indeed, it is an invention that has really only become attainable with the advent of modern wet shaving.

The transition of "knife" shaving to that of the straight razor can be clearly seen in the overall design of the latter. Unlike a conventional knife, the straight razor has rounded ends, a swivel handle and a beveled edge. Its overall design is suitable for close blade work around the vulnerable features of the face. And unlike a knife, the straight razor uses a steady scraping, not a cutting, motion.

I suspect that the manufacture of straight razors in the early 19<sup>th</sup> century began with the crude adaptation of hunting knives for the purpose of shaving. A hunter would kill and skin a rabbit; then he would celebrate the event by shaving with the same knife. To convert common knives into something suitable for shaving, however, it was first necessary to render the knife itself sufficiently benign when used against the face and neck. This end could be achieved by rounding the sharp end of the knife and reducing its overall length. The ultimate shape approximated that of a spoon endowed with a sharpened edge.

The birth of the straight razor inaugurated the enduring era of traditional shaving. From its birthplace in Western Europe about three centuries ago, it eventually spread throughout the wider world. And as I explain later in this primer, the practice of traditional shaving in this form continued with few changes until the year 1904; but more on that later. At this point I would like to briefly consider an innovation in shaving that is usually ignored. However, its importance to our story is greater than even the most informed shaving connoisseur would generally believe.

Though simple enough in the telling, the transformation of knife blade to straight edge razor was a stupendous one. It occurred, I suspect, in much the same way that the common hair comb evolved into the hairbrush. It was clearly not a spontaneous event. By modern standards of invention, the move from plain knife to refined shaving tool was no doubt a glacial one. Moore's Law is not applicable to shaving, But not unlike the evolution of the mouse into the horse, the long transformation of bare knife to refined shaving tool wrought big changes in the world of men's grooming.

The appearance of the first "shaving" blade not only brought an entirely new cutting system in to the world; it also created an entirely new industry. I have little doubt that the shaving process was greatly facilitated once men no longer had to be overly cautious regarding their nose and ears while wielding a piece of refined steel. Exactly when, however, the first mutton knife was transformed into a tool suitable for shaving I do not know. Perhaps one of my learned readers will kindly enlighten me on this important event in shaving history.

As already noted, this transformation did not occur spontaneously. To be sure, knife shaving had the distinct advantage of being quick and relatively effective, so long as no attempt was made to shave too close. With just a few strokes of the knife blade, coupled with a bit of practice, the average long beard could be quickly reduced to a close cropped shag. Shavers learned early, however, that any attempt to "work the steel" directly across the skin line was ill advised. Knives, they were soon reminded, were cutting, not shaving tools. And it was relatively easy to cut the ends of a beard using nothing more than the knife blade itself.

This crude but effective method was a variant of the original "dry shaving" approach. This was the same method had been around since the Iron Age. But as we have already seen, though dry shaving was perhaps convenient, it was definitely not close. Yet, it was precisely the ability to shave

directly against the skin, "wet style," that shavers craved. But advancing from dry to "wet" shaving without injury would not be a simple thing to do. More than a century would be required for that.

Eventually, it became obvious that profound changes in method would be needed if "dry shaving" was to ever fully evolve into the more desirable form of "wet shaving." Astute observers discovered that merely improving the sharpness of the steel blade was not enough. A better blade design or sharper steel in the grip only produced more frequent injury. Simply improving the overall design of the conventional knife would not be enough to close the gap between steel and skin. In addition to the steel blade another element was clearly needed. This element would necessarily mediate between the shaver's delicate skin and the often unpredictable action of the cutting edge itself. At the same time, this agent would have to be more durable than skin but vastly softer than steel. For shaving to advance beyond its frozen and unsatisfying state, a continuous bridge between both skin and steel was required.

At the time it was first considered, the "bridge" between the cutting edge and skin had no name. Today, it does. I created the expression "hydroplastic buffer" to describe this essential element of wet shaving. My original term for the same phenomenon—hydro-lipid substrate—I discarded as awkward, though descriptively correct. Since I offer a detailed treatment of hydroplasty later in this primer I will only briefly consider it here.

Hydroplasty involves the texturizing of pure water through the combined use of complex humectants. It is part of the new formulary science that lies at the heart of all modern wet shaving. It is through the effective use of hydroplasty that an effective bridge/buffer is created between the razor and the skin line during shaving. There can be no wet shave without the presence of an effective and stable hydroplastic buffer. Of greater importance, in order to function at the highest point of concentration it is imperative that no chemicals be used in the creation of the hp buffer.

Thus, long before the advent of modern wet shaving, the importance of a pure water based "bridge" between the razor blade and skin line was well understood. At first, pure water was used. However, it was found to be wholly unsuitable due to its rapid rate of evaporation. In the process of working with water, however, it was discovered that extremely hot water made for an outstanding cutting agent. But it not only evaporated quickly; it also lost its hot quality before the shaver could use it. After much trial and error, the shaving world eventually agreed that superfattened soaps offered the best hydroplastic bridge for the straight razor.

## What is Wet Shaving?

I define wet shaving as the use of a SINGLE TRACK BLADE in shaving.

This is the definitive fact of our subject. The central role of the "single steel blade" is the beginning of every conversation of wet shaving. It is also its terminus. Wet shaving, in its most pristine and substantive form, is always based on the skilled use of the single blade. The addition of a second blade instantly turns the perfect form of the wet shave into farce. Add a third blade and every dog will try to bite you. Add a fourth your neighbors will all move away. Add a fifth and no woman will bear your children. Multi-blades, Mach 3, Sensor, Atra, Trac Two, Bic, Star Trek, electric, horse drawn, atomic powered, blades of all kinds and considerations have no place in wet shaving. If you, dear reader, enter a shaving shop and someone attempts to sell you a super mambo, gigolo razor for wet shaving, he is turning you away from the anointed path. Curse the villain and leave his shop forthwith. Be also advised that the electric face beater that gushes forth lubricous liquids is not a wet shaving tool, either.

So, know ye, now and forever! A single blade cutting edge is the sole, acceptable cutting utensil in wet shaving! Exceptions to this rule there are none; nor should there be. The single steel blade! There is nothing more.

The single blade itself falls into two distinct groups. The first—straight razors—is largely extinct as a viable practice in the United States. So it will not be considered here.

The second---double edge blades---commands the passionate devotions of more than 80% of the world's shavers. If you plan to take up wet shaving as a lifelong mistress, you will be courting her with the double edge blade. You will not be using Mr. Whipple's fifty blade extravaganza. Nor will you be using a bladed electric face beater. Wet shaving always uses the single edge blade! There are no exceptions. If you, dear reader, are using an electric razor, yet claim that you are a wet shaver, you are not. If you are currently using a plastic blade stick, purchased from a place that also sells auto parts and fresh donuts, you are not a wet shaver. If you have recently acquired a razor that has more moves than a python's bowels, than you are not a wet shaver. A wet shaver uses ONLY one

single track blade. In our present world, the single track blade you will be using is the glorious offspring provided by the blazing genius of King Camp Gillette a century ago. Trust in him and his marvelous tool and thou will remain a wet shaver of sincere and abiding purpose. With over 500 different double edge brands around the world to choose from you should expect to be well provided with excellent blades for years. Verily I say unto thee, the double edge blade is the greatest invention since face-to-face copulation.

We propel our vessel of single blade steel across our shining face by using PURE HOT WATER. In wet shaving, water, is sacrosanct. In the absence of sufficient volumes of water wet shaving in the form described in this primer is impossible. Single blade steel is the alpha of wet shaving. Pure water is its beta. The miraculous interaction of single blade steel and pure water is the sum of wet shaving. This fact must be fully grasped before any success with wet shaving's more refined forms can be achieved.

Water is the foundation of the entire wet shaving process. It does so through its powerful capillary action at the molecular level. In much the same that electricity passes through pure copper more efficiently than through any other metal medium, so too does steel pass through water with similar efficiency. And it is the efficiency of water that facilitates the action of steel by both dramatically reducing the surface friction of the steel blade while at the same time softening the beard mass to promote cutting. In sum, the action of water in wet shaving effects two distinctly, yet parallel processes: the first I call the "suppository"—or softening--- action of the water on the beard mass. The best way to cut human hair is to first soften it with water. This is done through capillary infusion of water into the beard mass itself. When soaked with enough water for a sufficient period of time, human hair will eventually soften by absorbing water molecules into each follicular part of the beard. Thus, in much the same that a badger hair brush quickly draws water into the brush bucket, human hair draws water (albeit more slowly) as well.

At this point the reader may justifiably ask: if water is the perfect medium for wet shaving, why, then, do we not simply use water alone to shave? The answer to this question can be answered with one word: evaporation. Water evaporates faster than the beard mass can be safely cut. It does so as a necessary result of repulsion from the skin's natural acid mantle and low ambient

(environmental) humidity. No sooner is water thrown upon the skin than it immediately evaporates. Most is gone in less than a minute. Within seconds the beard mass has dried out.

And so the next crucial stage of wet shaving is reached. This involves the process by which water is "buffered" for use with differentiated (razor edge) steel. Water is buffered through the medium commonly known as a SHAVING BRUSH. The buffer must be suitably "texturized" to allow the steel blade to track properly. This function requires the blade achieve three equally important, yet unrelated, outcomes: 1). To move smoothly across the skinline. 2). To efficiently reduce the beard mass and 3). To prevent all injury to the skin.

The pure water buffering process is the continuous bridge that allows the raspiness of razored steel to work efficiently within a pure water medium. If the water medium is properly buffered the steel will track (cut) efficiently. Not only will it move smoothly across the skin line; it will also reduce the beard mass with an absolute minimum of effort.

In my original collection of essays—Shaving Graces—I referred to the phenomenon of buffering as the "hydro-lipid substrate." This term, though suitable enough back then, is now inadequate in light of our present understanding of the subject. The term I now prefer is the "hydro-buffer." I cover this subject in greater detail below.

Water can be effectively buffered for wet shaving in two distinct ways: through natural or chemical conversion. Natural buffering is achieved through the use of non-chemical emollients called fatty acids. These fatty acids occur in natural aggregations called "humectants." Humans are full of fatty acids; without them death comes quickly and horribly. In wet shaving, the benign action of fatty acids seduces the natural rapacity of the single steel blade, and converts it into one long gentle caress. But as with all of nature's finest jewels, the most desirable fatty acids are only found by those who seek them in their lush beds. But make no mistake, humectants always defend their virtue in myriad ways! I will note a few.

Humectants are never found; they must be fondly extracted-- cajoled is better-- from their elusive origins. If not drawn lovingly from their wombs, they turn spitefully sour. If overheated they first crack, then separate; if chilled they turn to brine. Once fouled, they befoul, in turn, everything that touches them. The stench of dead humectants is fearful. A dead whale in one's living room is more fragrant. Even Spermacetti smells better than rancid humectus. Once drawn and collected, they are nearly impossible to store for more than brief periods. Room temperature violates their

composure. Darkness diminishes them; light makes them cloudy. For these reasons humectants are assiduously avoided in the production of shaving products. Dead chemicals—the last resort of every spineless enterpriser—are therefore used in their place. But with chemicals in his shave, the poor wretch goes to hell. With humectants he goes to heaven. So, why have we not humectants in all shaving? Because man is weak, weak! He is also cheap, cheap! He will not use the better, when the more expedient offers itself. He refuses to engage nature on her own eminence. And so he cheats. And by cheating, he is, in the end, undone. He skims from the world's oily dregs what the fertile earth hath bountifully given him. In the guise of humectants God has already given man all he needs to wrap himself in the soft and scented envelopes of shaving bliss. But, being perverse, man chooses the course that leaves him poorer. He flings away the fruits of the earthly delights and slabs his jowls in acids and lubricants only fit for birthing cows. Without humectants man can not shave; this fact is written upon the tablets of life. But man, being foolish, goes to his chemical shave even as a dog goes to its vomit. And so Man shaves; he cuts; he bleeds. He calls upon God for relief, but the Almighty has moved on to more interesting things. He calls upon the Shavemaster, but finds no mercy there, either. He calls upon his women, but seeing that he can not shave, they have taken up with more manly types.

The replacement of chemical silicates with natural hydro-buffers holds forth the future of wet shaving around the world. And as I have shown, the facile adaptation of petroleum based products to this new standard will not work. The use of single edge blades of increasing volatility (sharpness) will render the presence of all chemicals in wet shaving a thing of the past.

Having concluded our discussion on the importance of pure water in wet shaving—the beta element—we now turn our attention once more for a closer look at single blade steel-- the alpha element. To ensure that our discussion is sufficiently brief, I will skip all considerations regarding metallurgy, honing and the finishing of steel blades. Instead, I will consider in more detail two basic matters: 1). The concept of "differentiated steel." 2). The central role of the double edge blade in wet shaving.

I created the term "differentiated steel" to capture the principle of "increasing marginal sharpness" of steel blades in wet shaving. A brief explanation of the subject will be sufficient.

Perhaps the greatest advantage that wet shaving commands over every other form of shaving is its capacity to accommodate the “next higher increment” in blade sharpness. This form of “frequency creep” in blade sharpness is always a distinctive advantage to any shaver striving to cut close. By using the proper buffering technique, the shaver can always advance to sharper blade than he is already using. The use of sharper steel in shaving is obvious: doing so gives the shaver the ability to cut faster, closer and more comfortably. A sharp, clean blade cuts faster because it cuts more efficiently. It cuts closer because it tracks more accurately, thus reducing the razor’s overall volatility. The natural product of both of these advantages is a more comfortable shaving experience. It is this experience that brings people to wet shaving and binds them to its enjoyments for life.

Despite the compelling evidence offered above, we are confronted nonetheless with an important conundrum. Given the conditions set forth above, can’t every shaver simply begin shaving with the world’s sharpest steel blades? Can he not simply go forth into the world, acquire the best blades from Ruritania, clap them into the jaws of his double edge, and proceed to enjoy a king’s pleasures? This is an appealing thought, but one that is devoid of living content. In sum, the answer is a clear—no. “Jumping steel” in this way can be a regrettable decision. And here is why: individual shaver skills vary to such degrees as to render any kind of general rule of blade choice impossible. Also, matching the blade frequency to the mix velocity (the V2 ratio, covered later) must be done correctly. This fact is not meant to depress or frustrate shavers reading these words. They are actually meant to inspire—and they should.

The principle described above—the “creeping increment”---actually involves a natural, dynamic hierarchy between water, steel, and hydro-buffer. And it is within the tight triangulation of water, steel and the vaporous sheath uniting them that the rarefied power of the single blade is potently unleashed. I call this triangulation the “manifold” and it is a place both profound and exhilarating. It is also a place both real and palpable.

Creeping a single steel blade means that one is constantly exposing the human face to the very real hazards of blade injury. This is an obvious fact to any shaver. At the same time, however, if the floating nexus between blade, skin and hydro-buffer is properly controlled, a steady burst of piquant shaving pleasures is forthcoming. Mastery at one blade frequency can be further augmented by movement to the frequency of yet the next blade power. With continued mastery further advancement to the next higher frequency is possible. At each frequency stage new, spectacular

sensations are experienced. These sensations have always reminded me of the “runner’s high” experience so often described by marathoners. To be sure, we can not run a marathon everyday, yet we can always wet shave.

Right now, the prospect of advancing to the next “blade power” is merely a visionary indulgence. Hundreds of different double edge blades are manufactured around the world, all exhibiting an infinite range of qualities. Knowing which blade possesses the most suitable frequency is impossible. Attempting to assess the quality of a double edge blade by country of origin is ridiculous. Some of the finest double edge blades are produced in countries that are without plumbing. By extension, the double edge blades available in America are of a quality so poor that even a man afflicted with mange will not use them. Like draught on the prairie, wet shavers across America pray for superior double edge blades, yet the country produces none. When tapped, the holy stones of American shaving innovation only bring forth scorpions—not brilliant blades. Between New York and San Francisco there is not one double edge blade that even a dog would sniff. And so we must stand in the shadows of the pyramids to buy excellent blades from the fedahyin or seek them in Istanbul. For wet shavers the dearth of great double edge blades in America is unbearable. (What is the most perfect double edge blade in the world? I am frequently asked. To date, there is only one, in my opinion: the new “Derby” blades from Istanbul. Their excellence so far surpasses any other blade as to not admit of comparison. In fact, the Derbys are so fine that their excellence actually increases with continued use).

Presently, I am at work by slow stages to codify the double edge blade (the King’s gift to mankind) into some form of reliable “table of frequencies” for use by shavers around the world.

At the same time, I am satisfied that the scope of such an enterprise easily rivals that of the genome project itself. Yet, having brought the idea to the world, it is my hope that others will happily join me in bringing this important project to fruition.

### Some Historical Observations on Wet Shaving

It is a curious fact that despite its three centuries of continuous use in various forms, wet shaving itself still remains largely undefined as to its proper and specific principles, procedures and best products. In fact, as enduring ideas go, wet shaving is perhaps the most popular, yet inchoate, expression in the world lexicon. Several reasons can be offered to account for this strange phenomenon.

First, the practice of wet shaving has long been an idea in search of a clear concept. For three centuries wet shaving has been an end looking for a means to its satisfactory realization. This lack of both conceptual and procedural definition has rendered the entire wet shaving option largely irrelevant as a solution to the average man's own personal shaving concerns. Devoid of any consistent definition, wet shaving has not surprisingly been discounted as an object of fleeting historical interest. As a result, the subject of wet shaving has been generally treated as a tedious residue of traditionalism, mere form without function; a tedious ritual without purpose. Happily, this view of the subject is already undergoing a rapid—and long overdue—change.

Second, responsibility for the failure—extending over many generations--- to create a practical wet shaving methodology must be laid at the feet of the barbering profession. As noted earlier in this primer, barbers have been largely the sole practitioners of wet shaving for most of its long history. As keepers of the temple of wet shaving they have preserved its outward forms while despoiling its spirit. They are like Lenin's embalmers, always fussing over the putrid remains of a thing that should have been dispatched to oblivion long ago. And so I say, the future of wet shaving will not be found in barber shops. It will flourish in the personal grooming habitués of the uncommon man.

Barbers first began practicing wet shaving in primitive form as early as the middle 18<sup>th</sup> century. Impressed by its excellence, they quickly set out to monopolize it for the singular benefit of themselves and their profession. The creation of such fraternal control over the practice not only preserved its most important qualities. It ensured that the wet shaving arts were passed on to later generations without diminution. That the old world barbers coveted wet shaving in this way, not only attests to their clear grasp of wet shaving's amazing power. It also reveals the impressive degree to which enlightened self-interest informed their decision to monopolize wet shaving in the first place. And it is to their persevering efforts that we are today beholden.

Ultimately, wet shaving flies in the face of the modernist obsession with everything cheap and superficial. And it is for this reason that modern industrial enterprise has exhibited little interest in the complex nuances on which the excellence in wet shaving ultimately depends.

On our way to a clear understanding of wet shaving it is first necessary to briefly describe the general merits of wet shaving. These merits fall within three distinct categories. 1). The overall superiority of wet shaving (why it works). 2). The extensive range of its positive effects (its benefits). 3). The intrinsic superiority of wet shaving's inner logic (its consistency of results) over every other shaving form. I will elaborate each claim in order to establish as clearly as possible its importance to the individual shaver.

Wet shaving is the only customized concept in shaving ever created. This means that it possesses an inherent capacity for continuous improvement at the margin. Thus shavers with very full beards can shave as effectively as those with lighter beard mass. As a wet shaver, it is always possible to improve the next shaving experience in the best possible manner conducive to the shaver's own personal preference. Wet shaving is, in short, individual shaving excellence on demand. Moreover, the tools of wet shaving—badger brush, double edge razor and appropriate wet media—are universal. This means that excellence in wet shaving is judged in much the same way in Japan as it is in the United States or Australia.

The basic mechanism of wet shaving is both universal and efficacious—hence it's international popularity. First, it provides the shaver with a highly reliable method for softening the beard mass prior to shaving. Second, it stands the beard for efficient reduction through the rotating action of the shaving brush itself. Third, it produces a robust "heavy water platform" (hydro- buffer) through the rapid infusion of high velocity mix.

The importance, in particular, of this third element can not be overstated. By infusing the beard mass with high volumes of water, the wet shaving process creates the "wet effect." This action forms a "buffer" or second skin between the blade and the shaver's sensitive skin line. As a result of this "hydroplastic buffer," it is possible for the shaver to achieve a degree of closeness in reduction than would otherwise be possible.

The combination of these various elements therefore prepares the shaving terrain properly beforehand. In other words, the shaving terrain itself is brought to a level of sufficient wetness to

both soften the beard mass. This, in turn, ensures the sustained wetness of the cutting mix. It also protects the skin during continuous blade to skin contact (subduction).

Thus, in its purest form, wet shaving presents us with one of the most astonishing systems of problem management ever devised. I use the term "management" for the simple reason that the "shaving problem" itself is never completely solved. A man's beard always grows back. A beard never cuts exactly the same way twice. And shaving products---even the world's best---must be used in dynamic combinations for best results.

The compelling logic of wet shaving can be best appreciated by comparing it with the glaring illogic of the conventional "shave in a can" approach. In this regard, the latter is decidedly inferior in three important respects.

First, it is incapable of delivering sufficient volumes of water to the shaving terrain. Second, it is incapable of providing superior results across the broadest possible spectrum of variable shaving conditions. Third, it is incapable of continuous improvement over time. In other words, its results are both uncertain and unsustainable.

The inelastic nature of conventional "shave can" methods render them unresponsive to improvement. Its inability to deliver sufficient water to the cutting surface (combined with its caustic chemical ingredients) is also the number one reason for razor burn. By extension the restriction of water flow to the beard strictly limits the cutting capacity of the razor. This means that only the lightest range of beards can be adequately removed using the conventional "shave-can" approach. Proper wet shaving corrects all of the above problems.

### A Brief History of Modern Shaving

Shaving---or the manual reduction of men's facial hair through the controlled use of water and steel--- is the oldest known form of personal grooming in the world. It also entails one of the most complex regimens to which human beings can subject themselves.

It is believed that human beings have been shaving in some form or another for nearly 10,000 years. Yet, for the entirety of that term, the actual shaving process itself has changed less than the surface of the moon. This amazing consistency in the forms and functions of shaving across the ages

are really without parallel in history. Imhotep, the ancient Egyptian barber would be right at home in the modern barbedashery.

At the same time, shaving is the only male grooming form that is practiced internationally. It is also one of the few markets in the world in which the demand for shaving related goods and services increases every year. One half of humanity shaves; most prefer to do so as proficiently as possible. This fact makes the pursuit of the better shave both a meticulous and commercially enterprising one.

Over the eons, the mysteries of excellent shaving have yielded their favors very grudgingly indeed. This implacable fact has, in turn, made the creation of outstanding shaving products one of the most difficult businesses in the world. The creation of truly worthy shaving products may, in fact, be the world's most relentlessly difficult business.

Sheer difficulty of manufacture has kept the shaving business supine and deeply resistant to improvement. As a result, most customers are unhappy with its products. Excellent goods for wet shaving are more difficult to produce than splitting an atom with one's teeth. Here are a few examples.

Example: The best minds of science remain stymied by the mysterious capillary action of badger. This is of course the material presently used in all quality shaving brush manufacture. Over the years men have tried to create a material equivalent of badger and have failed miserably. The closest alternative to badger of human invention has the texture of a pot scrubber.

Here is another example: Over half the world still cannot produce even one perfect double edge blade; therefore, most instead undertake the far simpler task of building rockets. Mother Russia is an example of this ludicrous circumstance. Yuri the cosmonaut can live in space for 10 years, yet his Russian masters can not provide him one excellent blade for shaving. Why, we ask, are double edge blades so difficult to produce? What is the perfect shape of a snowflake? What is the perfect curvature of a single steel blade?

A last example: Much of my own professional life has been spent commingling with lipids derived from various parts of the world. Like snowflakes and fingerprints, no two are the same; nor are they really different. They are lipids—infinite winding gyres of mystery piled upon mystery. Thus, one must understand lipids on their own terms. Few people, however, have ever heard of lipids, unless it involves some ever present hysteria regarding heart disease. Lipids and their amazing kin lie at the heart of wet shaving. Modern shaving creams comprised of chemicals try to absurdly mimic

the actions of lipids; of course they do so badly. God gives man lipids for shaving; man uses chemicals, instead. Man is a fool.

The 18<sup>th</sup> century form of shaving using a straight razor, mug and soap forms the distant basis of all modern wet shaving. It is perhaps more accurate to say that shaving itself was first conceived in "blade and bowl" form. For all of its simplicity, this form of shaving worked well enough for its time. (The use of shaving bowls was still in laborious vogue when I first came to shaving. It was only after my own invention of the solid priming cube that large, self-charging, shaving brushes made the traditional shaving bowl largely obsolete).

Straight razors, shaving bowls, shaving brushes and the other flotsam of former shaving glory are still with us. And gathered around this warm communion of shaving memories are other noisome pieces of the past as well. These include the styptic (alum) blocks, hot towels, pastes, emetics of various forms, and alcohol after shaves. It is not surprising that enlarged with such paraphernalia early barbers also performed bowel surgeries and autopsies.

The blade and bowl method of shaving had a long and not inglorious reign. From its origins in the mid-18<sup>th</sup> century it remained the common practice for nearly two centuries. Yet, even then shaving was not as common a thing as we moderns might suppose. The fact is that for nearly all its history, excellent shaving has always an uncommon pleasure. Two centuries ago, the prospect of a man shaving was more rare than Peruvian gold. Barbers were few. Soap in its current form was unknown. Steel used for shaving was better suited for hog butchery or slitting the throat of your wife's lover. The straight razor had just appeared on the scene and was therefore regarded with suspicion. Moreover, only gentlemen were permitted the right to carry a bladed side arm, hence, the average "villain" had little experience with refined steel. But with the rapid increase in prosperity in the early modern era, shaving became democratized. This fact paved the way for the neighborhood barber.

We have seen that the habits of shaving remained largely unchanged for centuries. As a result, beards remained the grooming standard around the world. The advent of public barbershops in 18<sup>th</sup> century Europe, however, signaled the first great change in this regard. A century later barbershops had become an urban commonplace. The first public barbershop in the world was

Truffitt&Hill in London. Founded in 1801, it continues in business to this day. Some like Geo. F. Trumplers also offered shaving "requisites" in the form of fine fragrance.

Over time, the local barbershop became a kind of informal social club; a genial habitue where clients spent time talking politics and sharing gossip. City barbershops provided a more settled alternative to the raucous coffee houses of the time, hence their great popularity as gathering places. Most Londoners could not gain admission to the gentleman's clubs; so they elected instead to gather at a favorite barbershop. In time the barber emerged as a kind of low brow, colorful urban celebrity. His blarney and vivacious joie de vivre set the tone for much of city life in London, New York to Paris. (The loss of the modern barbershop in American society is one more example of our descent into incivility and cannibalism. It is better to clip off the ears of a young man than to deprive him of the spiritual nourishment of a fine clip and shave. Better to save one's money and travel to Trumplers).

Despite his popularity, however, the historical life of the barber would be very short lived. As they are today, early barbers were inevitably creatures of the local habitue. This meant that they usually catered to a very select group of clients. Class distinctions governed barbershops as it did every other social form. Some men walked to the barber; others were conveyed there. Some clients waited for a chair; others were reserved one in advance. Shaves were both expensive and time consuming. The various barbershops around London reflected these distinctions: those in Whitechapel and Spitalfields were altogether different from Mayfair.

Since most barbers were sole proprietors, long waits for the next available chair were common. Only the largest cities had more than a handful of practicing barbers. This meant that for most men, a trip to the barber was an altogether conspicuous---and decidedly rare----opportunity for self-indulgence.

These constraints ensured that shaving would remain a kind of rare, public virtue. The general forms of society's complexities were often replayed in the venue of the barbershop. In the same way that the TV serial "Cheers" reflected America's longing for localism during the 1980s, the barbershop did in the 1880s. The barber and bartender present the common face of a common desire: to be an important part of a small whole and to abide often in easy relations with cherished friends. The world of the barbershop was such a world. The local barber was the pearl in the larger oyster of the neighborhood.

For generations, the sinuous bonds of localism were the barber's greatest assets. In general, shaving clients came and stayed a lifetime. Once established, barbers enjoyed favorable prospects. The force of local demand pushed the shaving trade through his door and its lucrative profits right into his pockets. In time, swelling prosperity induced many barbers to seek important distinctions of their own. Some found ways to leverage their local popularity to build a career in minor politics. Others resorted to practicing various forms of quackery and indecent medicine in the shadows of slums. Even today, many still believe that Jack the Ripper himself may have been a barber on London's eastside.

Yet, in the end the hero with the flashing razor, hot towel and cloud of talcum went the way of all provincial flesh. For no sooner had he reached a kind of glorious height, than the wings of the neighborhood barber were forever shorn by the singular genius of an American inventor named King Camp Gillette. And it is to his story that we now turn.

### King Gillette's Safety Razor: The First U.S. Shaving Breakthrough

The world shaving industry in its current form was born in 1904. In that year, King Gillette's immortal double edge razor received its first patent. (Note: the complexities of chronology must necessarily intrude here. As we have already seen, wet shaving in the form presently considered was practiced before the advent of Gillette's double edge. A century later, my own RMWS was created as the direct successor to Gillette's own achievement. With these matters before us, it is possible to present the following chronology: First era wet shaving with straight razor: pre 1904. Second era Gillette double edge: 1904 to 2000. Third era RMWS: present).

The appearance of the double edge razor marks one of the great milestones of innovation in the history of mankind; one only rivaled by the automobile, lightbulb and computer. However, unlike other inventions of more recent—and fastidious—vintage, the double edge was perfect when created. Indeed, it is still possible today to realize the same perfect shave with an original Gillette razor as in 1904. Gillette's more recent Faustian madness of laying blade upon blade in endless embellishments "Mach-ismo style" is merely an autistic perversion of the original double edge. The difference between the two is greater than that which exists between the Moon and moon pie. The King

understood shaving—lived it, talked it, obsessed upon it. His latter day followers are merely pygmies scrambling at the master's feet.

Despite its unrivalled excellence as a shaving tool, the double edge razor is astonishingly simple in design. The double edge blade is bolted---sandwiched if you will---between two pieces of metal. These latter are bolted together, thus securing the blade itself between. These elements thus conjoined are bound with a solid steel handle, usually by a screw thread. To use the razor, the shaver merely draws the perpendicular blade mount across the face in the desired direction to cut the beard. In this way the beard itself is removed in a smooth and uniform fashion.

Indeed, the Gillette double edge is so simple to use that instructions for its use are largely superfluous: a man instinctively masters its use with the first shave. As a result of its inviting simplicity,

millions of the razors have been sold since 1904. (Since the appearance of my essay in *Shaving Graces* "Don't Fear the Double Edge" interest in the double edge razor has erupted into a kind of fine frenzy in the US. Sales of double edge razors—blades---has reached stratospheric levels normally reserved for the memoirs of corrupt politicians. Having taught legions of men the proper use of this mighty shaving tool, I am not surprised that it is once again thrilling the world with its allurements. Is there a more perfect creation in all the world than the 1904DE razor? The lithe form of a beautiful woman?--- perhaps).

The greatness of King Gillette's invention was not apparent to everyone at first. Observers scoffed at "crazy Gillette's" strange invention; some dismissed him outright as mad. They admonished Gillette that the entire world shaved with an open blade razor and would always do so, amen. In his first year he sold a mere thirty razors. Since there were no double edge blades at the time, Gillette was forced to grind them himself. Financial help for the new venture there was none. So Gillette continued to work at his old sales job with Crown and Cork in Chicago. Even after two years in business the public still showed little interest in Gillette's invention. Eventually, the money ran out and the coils of looming bankruptcy began to tighten. Soon the creditors descended on our hero. Still Gillette persevered. He secured the services of another inventor genius by the name of William Nickerson. Slaving in the bowels of a rheumatic basement, Nickerson devised an efficient process for making double edge blades.

In 1904, Gillette quietly filed a design blueprint for his double edge razor with the US patent office. This did little to relieve Gillette of the unsold stocks of razors piled up in his warehouse. In a last ditch effort to avert bankruptcy, Gillette begged a loan from a Boston beer monger. The brewer, one of the richest men in Boston, condescended to snatch Gillette from the brink of ruin. From a vest pocket envelope he withdrew \$50,000. The deal was done; Gillette was saved. In exchange, however, the brewer demanded half ownership in Gillette's company.

History would vindicate King Gillette's daring venture. By the eve of World War I, the new Gillette razor had triumphed. Its simple construction and ease of use possessed an elegant simplicity that users understood. No longer was it necessary for a man to stand in the queue at the local barbershop. For the first time in history, the coveted pleasure of shaving was democratized. No more barbershop ques, no more styptics and the sweaty brow of Max the barberdasher. Now for the first time history shaving was rendered safe, simple and affordable.

Thanks to King Gillette, every man in America—and eventually the world---could experience the grand pleasure of a morning shave. At the same time, he could also attain the status of a clean-shaved gentleman. In this way King Gillette not only changed shaving; he also wrought a permanent transformation in the habits of civil society. The awesome power of the Gillette razor also shifted the focus of the shaving business itself. It did so by embedding the novel idea of the "safety razor" into the public mind. For the millions of men who had endured the uncertain hazards of the cut-throat razor, the arrival on the scene of a safe, easy to use shaving tool was greeted with delight. The double edge razor made shaving more efficient, less expensive and safer than ever before. Hence the reason for calling King Gillette's innovation the world's greatest safety razor. I call it bloomin' genius.

(The King was a consummate gentleman in myriad other ways as well: he loved fine cigars, Irish Ale, Panama Hats, beautiful women and exquisite shaving. The photograph of him in my possession shows him poised in a relaxed, Whitmanesque slouch. A fine cigar is gently knuckled in one hand while a vest watch mildly tugs at his modest girth. His wan, moustachioed smile suggests both indifference and resolution. A Panama hat tops his fine head, full of intelligence and refinement. To look upon him is to gaze upon the distillation of perfect manhood. We should not wonder that his face appeared on every pack of Gillette blades for over half a century).

## The Sensor/Mach 3 Era: The Second Shaving Breakthrough

The double edge proved so successful that it effectively dominated the American shaving industry for most of the twentieth century. Though other shaving tools were introduced later, none possessed the consummate appeal of the Gillette masterpiece. Indeed, the double edge proved so successful that only after the computer revolution of the 1980s was Gillette able to anoint its successor the Trac II. This was followed in 1990 by the Gillette Sensor. A few years later, a more muddled version of the "pivot blade" Sensor style razor appeared. This was the Mach 3 razor. (Those who follow the arcane business news of the world are probably aware that the Gillette company was recently sold to Proctor and Gamble for a sum of too many decimals. No sooner had the sale occurred than my phones in Austin, Texas rang furiously with inquiries as to why I had not purchased the grand old American icon myself. My reply: "I was out of town at the time the sale took place.")

There is no question regarding the greatness of these two companies. Proctor and Gamble is a corporate colossus of vast market powers withal. I am a great fan of their toilet paper. But of Gillette, only solemn thoughts can fill the mind. Gillette! Like an enslaved Greek philosopher, this great American company was bought for a few clinking drachmas at the Roman slave auction. Gillette! Aristotle's shade dispatched like a dog to clean Mr. Whipple's golden toilets! Gillette! The company forged by the blinding genius of its founder must now make its solitary way between the diaper and deodorant aisles of Wall Mart. Gillette! How will the next generation of Mr. Whipple razors be seen above the mountains of panty hose and pine tree room fresheners? Gillette! How the mighty are fallen!

To be sure sadder events have taken place in the annals of American business: Chrysler bought the venerable jeep of WWII fame, then turned it into a hog bucket for orotund soccer moms. The spare and intelligent Apple computer disappeared in the flatulent winds of Microsoft. (Though Steve Jobs is not the King; yet, he more than anyone today abides in the Great One's spirit). Only Harley Davidson still spurns the morticians of Wall Street.

But another Gillette there now is none and can never be, again.

With the advent of computer designed razors, Gillette attempted to tackle the most basic—and vexatious--- question in all of shaving. This concerns the inescapable trade off between “closeness” and “comfort.” As every shaver eventually learns, all things being equal, it is impossible to achieve a shaving result that is both close and comfortable in equal degree. For once the blade edge has penetrated the fragile PH mantle, intense irritation, often accompanied by superficial bleeding, usually follows. This condition is notoriously known as “razor burn” (though nearly all instances of so-called razor burn are actually “chemical” burn). Razor burn is perhaps the most common affliction among the generality of mankind of which we have record; indeed, it surpasses both malaria and the king’s evil as mankind’s most pernicious irritant.

Despite its universality—and ancient age—the various curatives of modern shaving have had contributed little to the relief of razor burn. Indeed, modern shaving practices have actually created a host of new shaving disorders our own shaving ancestors would have reproached with blows and curses.

Many of our present shaving iniquities come straight from the widget bellows of Gillette and Schick. Between them, we have in but a single century gone from shaving with one blade—to five. And so, between these two companies, the average shaver now faces daily misery by a thousand cuts. How many more, oh Lord?

With the advent of the pivoting, multi-blade razor, Gillette set itself to the task of bringing the closeness/comfort relation into a more satisfactory relation (in modern wet shaving this event is extensively developed in the principle of the V2/ratio, discussed later in this primer). But, alas, both closeness and comfort are still damnably absent from the daily shaving of 100 million men.

But when measured against today’s prevailing standards of technological sophistication, the Sensor/Mach 3 razor concept is unrivalled. Like a savage who first sees himself in a mirror, the first pivot blade razors astonished the world. It is almost unthinkable that a single company, unaided by anything but the raw power of invention, can produce a mass commodity of such outstanding uniformity as the Mach 3 razor. When viewed beneath a microscope its perfection rivals that of the most perfect single sheet of toilet paper. If mankind were bred with a computer, it could not produce a more perfect offspring. Those among us still camping out in the shadows of Stonehenge; we too are also impressed.

That millions of Gillette Mach 3 blades are consumed every day is hardly more amazing than the fact that no other company in the world has even attempted anything like it. The world is agreed: The space shuttle is simpler than the Mach 3 razor. And like the flight of the shuttle, Gillette's goods are to be found in nearly all places. Indeed, they are ubiquitously available for purchase nearly anywhere in the US and Europe a human being might set foot. I suspect that in some instances the ubiquity of the Mach 3 is more prevalent than air itself.

However, as we shift our view of the Mach 3 from its digitized pedigree to its real value as a shaving tool, a very different object comes into view. For the Mach 3 is not built upon the superb shaving aesthetics of the double edge. It is, in truth, an overwrought can opener. Nearly weightless and thus lacking all ergonomic value, the Mach 3 achieves its result by depriving the shaver of all relevant control over the beard reduction process itself. Its hyper-extended length makes it perfect for reaching the full length of a woman's leg; but renders it absurdly unfit for a man's face. Born from the bowels of a computer, the Mach 3 wreaks of poor function. It is, in short, a perfect tool for shredding cucumbers and flipping mashed potato pancakes. If he were alive today, the King would have none of it. And for the millions of us who adore his first razor---we would follow him unto the last.

Thus, it is largely within this withering purgatory between shaving hell and heaven that the Mach 3 razor now finds itself----delivering neither closeness nor comfort to even the most persistent shaver.

### A Word about Electric Razors.

The opposite of wet shaving is dry shaving. Historically this term has been used to describe electric shaving. A surprising number of people still attempt to shave using the face beater with steel blades. That they usually fail to shave well is less surprising. Year after year, millions buy electric razors nonetheless. They use them, curse them, and throw them out. Soon enough, however, they return to buy more. These in turn are used a few times, only to be cursed again. And so, the rubbish heaps of the world groan with the weight of disgraced electric razors. The fate of each is well known. Each was pitched from a bathroom window by an irate master of the house.

The most prolific powers of technology have been called upon to fix the electric razor. Even Santa Claus's expertise has been solicited; he thought the electric razor would be better used as a sleigh. And so for forty years he used it that way.

Electric razors are forever being improved. Yet, the better they are made, the more ungratefully they treat their masters. Technical improvements to render them more benign only produced more refined miseries for the shaver. At times, beautiful women have been paid large sums of money to speak well of electric razors. That, however, was before wet shaving appeared on the scene. Men who use electric razors no longer interest them; the wet shavers do. Beautiful women are usually very smart women.

King Gillette would have cursed the hand that offered him an electric razor; so should you. As with anything small and full of electricity, electric razors can turn nasty. Remember the electric fan and bathtub in the James Bond movie? For those who are mildly superstitious, the electric shaver is not unlike the evil eye: watching carefully for a chance to commit the next misdeed. Little dogs bite, and so do electric razors. The fangs of an adder are not more threatening than the rolling blades of the electrified guillotine.

So where, then, did the infernal electric shaver originate? In his fine history of the Gillette Company called, "Cutting Edge" Gordon McKibben offers a brief account of its origin.

"One theory for the popularity of dry shaving in Europe held that after the devastation of World War II, low-cost electricity was more common than bathrooms with hot running water, hence dry shaving was more convenient and certainly more comfortable than cold water shaving. Dry shaving caught on first and remained most popular in Scandinavia and Finland and through the low countries south to Germany, a climatic region where shavers were seldom bothered by humidity that made their faces sticky. Moreover, these northern shavers had less motivation for the refreshing aspect of wet shaving than their neighbors in hot weather nations..." (Cutting Edge, Harvard Business School Press, 1998).

## Part II

### The Roberts Method and the Birth of Modern Wet Shaving

The appearance of the Mach 3/ multi-track razor in the 1990s proved a windfall for mass market shaving following several years of uncertain growth. Gillette, having largely muddled through the 1980s, found new life in the Mach 3 pivot blade system. To those who like high stiletto heels and black skull caps, the Mach 3 comes as a gift carried on divine winds. The blades are mercilessly engineered to thresholds suitable for space flight. This makes them perfect for use by men, women and buffalo. Like the inimitable body bag, it is the kind of one-size fits all solution that Pol Pot would appreciate. This fact makes the Mach 3 the perfect shaving tool for the limitless pig sty called the modern global village.

The pivot head razor proved so successful that Gillette's comfortable rival Schick created one of its own—the Quattro. I have tried to shave with this denizen—and can not. But what do I know about shaving? Between the two, the Mach 3 offers better results. Schick, Gillette, Bic, why be fastidious in a world bulging with such shaving treasures! It's your face, by Zeus! Let loose upon its delicate tissues the hot dogs of computer aided shaving wizardry! Blood, you say! What blood? Infernal stinging everywhere, you complain? Impossible! No matter, they say. The next shaving breakthrough will fix everything—they promise. And the fix that fixes everything is even now upon us! In the spring of 06, The Gillette Company is poised to thrust its new FIVE BLADE kamikaze on the world. We've seen nothing like it since Bloody Kansas.

The virulent growth of mass market shaving in the last half century has occurred directly at the expense of the quality of the shaving experience itself. Indeed, it is easy to see one as largely the direct outgrowth of the other. The amazing capacity to generate—and consume---vast quantities of look-alike goods is the monodrama of modern American life. In most mundane instances, such as garbage bags and diapers, this approach to satisfying basic human needs is perhaps not without merit. However, the application of mass production to the incredibly exacting, nuance-rich domain of shaving yields only unmitigated disaster.

The failure of mass market or "commodity" shaving products to deliver a consistently superior result is due largely to the inflexibility of the mass production process itself. As a means for producing goods, mass production necessarily compresses all variation in product quality to the quantitative mean. This means that in order to ensure a consistent cost/price differential, a production run of "average" cost/quality must be maintained. In other words, products are made to conform to a predictable standard: not too good; not too bad. Ironically, deviations at either end of the production

spectrum are rejected forthwith. Thus, it is wholly possible for products to be rejected for sale because they are of superior quality to the "average" relative standard.

It is in this context that the principle of "standardized" quality is best understood. To be sure, this approach is largely responsible for the myriad goods and services that sustain the high consumption lifestyle of the United States. At the same time, such goods, though amenable to long production runs and continuous costing, usually perform poorly under highly variable conditions of use. For most of today's mass market companies, it is the accountant who decides what quality is and what it is not.

Yet, every man knows that shaving is one of the most intensely variable processes imaginable. And for this reason, a standardized---one size fits all approach---does not—and shall never---work. Yet, with few exceptions, the standard shaving product quality in the US falls well below that expected of garbage bags, toilet paper and plastic forks. Surprisingly, the manufacture of condoms exhibits product excellence far above even the best razor or blades. Of course, we suspect that functional failure in a condom is hardly an option; in shaving, too many people believe it is.

We readily acknowledge that every man must learn to shave his own beard correctly. This means, in effect, that every man must be taught to shave in the manner that is best appropriate to him. Proper shaving is not conducive to a one-size-fits-all world. Yet, it is also a fact that few men shave competently. Most men, in truth, shave incompetently. Over a very long career, I have never met an individual who possesses even the rudiments of shaving knowledge in any meaningful way---barbers included. Nearly all suffer some form of "barberia non compus mentus" this common aberration easily translates as "I am a barber because I act like one for 15 minutes a day."

Thus, it is with these considerations in mind that I created the Roberts Method of Wet Shaving (RMWS). The advent of this unique approach has required nearly 15 years of continuous development to reach its current uniform standard. Some have likened it to a virtual revolution in shaving itself. However, I prefer the use of "transformation" as a more appropriate description. Unlike the modern gigolo razor, the effectiveness of the RMWS does not depend on the next generation of computer designed gadgetry to satisfy. It is whole and real unto itself.

The RMWS encompasses the convergence of three basic approaches to wet shaving methodology. These include the following: 1). Established shaving tradition 2). Blade manufacturing

technology). 3). Individual shaving technique. These three elements are combined to achieve the greatest possible degree of shaving closeness, comfort and pleasure. At the same time, each of the three areas above represents an entire discipline of applied technique in its own right. This means that much future research will no doubt be necessary to bring the RMWS to its most refined standard.

Despite its highly distinctive approach to close-in, full blade shaving, in several important respects, the RMWS has much in common with the traditional shaving methods. Although the similarities between the two forms—traditional vs. RMWS (or wet method) remain discernable, they continue to fade with time. Thus, a brief discussion of the similarities between the two shaving approaches will, I believe, be helpful.

Until recently, there has never been a clear definition of “wet shaving” in any meaningful sense (please see my own definition presented above). Through most of the twentieth century, Gillette described its double edge blade as the centerpiece of their own “wet shaving” concept. However, Gillette largely invented this expression, but left it devoid of real content. Later in the fifties when Braun created the category of electric shavers, a new category—dry shaving—was born. I largely reject both of these usages as unhelpful and confusing. Where for example does anyone encounter “wet” in a product like Foamy? I consider them both as little more than a distinction without a difference.

In strictly historical terms, wet shaving was always narrowly distinguished over all other shaving forms by the use of a shaving brush. In other words, brush shaving was wet shaving, pure and simple. This meant that if a shaver used a shaving brush, he was thereby a wet shaver ipso facto.

This circular definition of wet shaving has created considerable confusion across the generations. The mere possession of a shaving brush does not make one a wet shaver any more than owning a firearm makes one a marksman. The existence of a shaving brush hardly defines the sum of wet shaving in any form. For as every beginning wet shaver soon finds, the shaving brush is only part of a constellation of factors essential to effective wet shaving (In *Shaving Graces* I described the “Iron Triangle of Wet Shaving” thus: double edge razor, shaving brush, wet mix. Since then, the importance of these three factors has only been confirmed).

This is not to suggest that the shaving brush can in any way be replaced by another, lesser function. Doing so would make the process altogether impossible. Rather, the shaving brush is an essential tool whose value in the wet shaving process is totally dependent on the use of other equally important tools. Thus, the mere possession of a shaving brush itself, regardless of its excellence of construction, size, or ballast capacity in no way defines the sum of wet shaving.

At some point in its early history, wet shaving's power for close shaving was realized. Almost immediately, barbers throughout the world seized on wet shaving as the centerpiece of their profession. For the two centuries they would remain the high priests of the practice. Successfully prying the privilege of wet shaving away from their clutches would require more than a century of strenuous effort.

Whilst presiding over wet shaving's extensive history, barbers eventually discovered the craft's most intoxicating attraction: through wet shaving it is always possible to shave closer. It is this fact that, today, compels every wet shaver to master even the most elusive subtlety of the wet shaving art. He too realizes that with just a little practice it is possible to extend the action of fine blade steel to nearly infinite degrees.

As he improved his skills with daily effort, the traditional shaver soon discovered wet shaving's most profound appeal: its power to deliver a superb, full blade finish. In time, the realization that wet shaving delivers the closest shaving experience possible (called "zero-grain" or "wet blade" shaving) became the immutable standard of shaving excellence around the world. Not only did wet shaving deliver a shaving result of unrivaled closeness. It did so faster and far more comfortably than any other method. This fact holds true today more than ever. Yet, it is also the case that the mistress of wet shaving will never yield her wondrous pleasures without a prolonged—and deeply studious--courtship.

### Some Observations on Shaving Brushes

The first shaving brushes were constructed of coarse, short "grey tip" badger hair. The use of this material made sense for two key reasons. First, badgers were prolific as a species. Thus, their hair was available in near prolific abundance. Second, and more critically, badger hair is intensely

hydrophilic: this means that it is water absorbent. Indeed, badger hair is the only hair in all of nature whose natural tendency is to attract and not repel water. This singularly important fact I will explore further below. However, this obscure—but important-- fact comprised the sum of wet shaving knowledge for nearly two centuries.

I surmise that the earliest shaving brushes were probably primitive implements of construction. Much like today's varieties, the original shaving brushes consisted of two distinct elements—a "knot" of pure badger hair inserted into a hardened handle. This overtly simplistic construction nevertheless provided both durability and ease of construction. Being simply made, it was thereby easy to produce many more from a single template. Small amounts of badger hair are relatively easy to gather, cut and load into the mount of a shaving brush. Nature has accommodated man in this matter by creating badgers as prodigiously hairy animals. One badger can furnish sufficient hair for many brushes. Badger hair is also remarkably voluminous. In this way, one person sitting at a bench can build large numbers of shaving brushes of impressively uniform quality. This improvement in shaving brush manufacture made shaving brushes available to a significant number of shavers at a reasonable price.

In the wilds of Europe and America, an abundance of pure badger bristle was readily available. Hot water for shaving, however, was not as easily procured. Until the widespread availability of tap water in the early 20<sup>th</sup> century, potable water suitable for shaving was largely regarded as a "vicious" luxury, in David Hume's words. Water suitable for shaving generally required a well, conveyance and durable storage. These rigid considerations made water for shaving an unrealistic indulgence for the average person.

Given its acute scarcity, it was, therefore, important to improve the efficient action of water during shaving. Curiously, the search for improved water efficiency quickly led back to the source of the shaving brush itself---the badger. It was discovered that these amazing animals possess a range of hair stock that is amazingly differentiated in both texture and water holding intensity. In addition to the very coarse "pure" variety, badgers also possessed a more refined range called "best." A third, and much rarer hair stock called "super" was also identified; but the considerable rarity—and great cost--- of this last greatly restricted its use.

These three grades of badger material—pure, best and super badger---continue to define the relative cost, quality and value of shaving brushes to this day. (I offer this last comment with strict

provision, however. Today, the use of super badger in nearly all high quality shaving brushes is generally expected by wet shavers. Thus, the distinction itself is largely superfluous. Super badger as a quality value is being supplanted by the "concept" or "purpose built" shaving brush. By comparison with a standard super brush, the knot design and mixing functions of these brushes are considerably more sophisticated. My own ShaveMaster V200 series brush is the first such concept brush).

How does the relative quality of the badger hair specifically improve its water efficiency in shaving? Presenting a detailed explanation of this very complex subject is impossible given the limited scope of this primer. However, it is possible to provide a brief explanation that is also meaningful.

A shaving brush, if it is to be effectively used, must perform two especially essential functions throughout the wet shaving process. I call these two functions E1 and E2. Both involve the resourceful use of water. The first, E1, is the general water loading "efficiency" of the brush. The second, E2, regards its "effectiveness."

The first function—E1-- measures the rate at which the shaving brush RETAINS the largest possible volume of water introduced into the brush. A few years ago, I created the expression "velocity" to describe this function. Thus, a high velocity brush is one that moves water quickly into the bucket and retains it for as longest possible duration. Shaving brushes are increasingly described as "wet" or "dry" according to their relative velocity as measured by E1 criteria.

The second function-- E2-- measures the ability of the brush to TRANSFER water into the hydroplastic (wet) media used during shaving. I describe this process as the two-step "suffusion/infusion" action of the brush. The brush first suffuses with water (the E1 function); the brush then infuses the HP media to its fullest extent possible (the E2 function). Finally, I use the term "ballast" to accurately describe the capacity of a shaving brush to store hydroplastic media in a wet form as long as possible. Brush "volume" is another term I use to describe the actual amount of wet mix produced during brush action. I will have more to say about the role of hydroplastic media later in this primer.

It is at this point that we need to return to our previous discussion of shaving brush material: specifically, the various grades of pure, best and super badger.

The velocity (sustainable hydricity) of a shaving brush is directly affected by the specific quality of badger hair used. It is also directly governed by the specific construction of the brush

during manufacture. The mere use of a superior grade super badger does not in itself produce a high velocity mixing chamber. Specific design elements to enhance brush performance are also necessary. In general, however, it is readily admissible to state that a shaving brush's relative velocity rate will increase given: 1) The quality of badger hair, 2). Volume of hair used. 3). Specific construction of the brush bucket relative to desired velocity. (Quality+Volume+Construction). Presently nearly all shaving brushes are still sold using the three grade hair quality system: pure badger is the lowest (driest) brush grade; "best" the intermediate hair grade and super badger the highest.

(Note: The reader at this point may well detect an ominous tone of obsolescence in my treatment of shaving brushes. If so, he is detecting correctly. I say that the conventional shaving brush is dead—more dead than Washington's dentures. Indeed, it has joined Poor Richard and the dunking stool in the attic of oblivion. That shaving brushes have a glorious future ahead, however, there is no dispute. Without the shaving brush there is no wet mix; this fact alone ensures their perpetuity as an indispensable shaving tool. But for the badger brothers three—pure, best and super—there can be only a slow and inevitable fading away. Pure badger brushes are the junk bonds of wet shaving—worthless. Best badger brushes are satisfactory only to those who know nothing else. Super is everything; but it too is not without sin. And so we go off in search of new worlds. What new age in wet shaving should we expect? The era of fast mix/high velocity shaving brushes).

The quality of badger, hair mass and construction however are not the only factors that determine shaving brush velocity. Knot thickness, diameter of brush canopy, uniformity of cut and density of badger material also affect brush performance. (Note: Mix velocity, of course, exerts a prolific impact on brush velocity as well. For instance it is possible to have a high velocity brush greatly reduced in both E1 and E2 due to the effects of a low velocity mix. The opposite is also possible: a very wet mix increasing the relative velocity of a dry brush).

The importance of velocity—both E1 and E2---in wet shaving is simply stated thus: a high velocity mix increases the transport efficiency of the razor blade itself. In other words a higher velocity mix allows the shaver to use sharper (increased frequency) steel. Sharper steel, in turn, means a closer more comfortable shave realized in less time. It is also of interest to note in this regard that wet shaving is also effective at securing an outstanding shaving result with lower frequency (sharpness) steel as well. This fact, though of less interest in the present context, is highly desirable nonetheless.

Please note: velocity has nothing to do with the action of shaving medium that uses various chemical actions to create a "slick" blade effect. The use of a single blade on terrain previously slicked with pre-shave oils or beard lube will certainly produce horrific injuries. Indeed, the use of pure oils in any form will spontaneously destroy the primary effects of velocity. Yet, these various "pre-shave beard/lube oils abound in the "faux" shaving market. I am in steady receipt of calls from clients who have been duped by this pervasive "lube pit" swindle. Not only will shaving oils ruin your shaving brush, they will also ruin your shave and, eventually, your skin. Please see below my various remarks on "asymmetric buffers" for further insight on this subject.

The RMWS is convenient shorthand for "high velocity" wet shaving. Traditional shaving methodology is conversely defined as "low velocity" shaving.

The main difference between low and high velocity shaving is seen in the degree of in-blade closeness possible. Low velocity shaving (the standard for nearly all British creams and shaving soaps) uses a very thick, high volume/low velocity media. This means that it is highly stable at low hydricity levels. By using chemical agents, traditional dry paste cream can be activated (volumized) using far lower levels of water than hydrogenic wet media (the kind, for instance, used in HydroLast). Low velocity media volumizes quickly and can cut well in a high beard mass environment. Thus, dry paste mix works best during the early phase of beard reduction.

Low velocity mix, however, can not be modified as the shave progresses. In other words, the shaver has absolutely no way to change  $V_1$  (wet mix velocity) at will. Because of its high chemical concentration, the relative velocity of dry paste creams becomes increasingly more erratic toward the last phases of the shave (for those using my RMWS, this is between the second and the third forms). This means that mix velocity continues to degrade at variable rates through the entire shave sequence. At the same time, however, under the constraints of my  $V_2$  law, razor volatility (loss of cutting control) is also increasing at roughly the same rate as mix velocity. This conjoint increase in both  $V_1$  and  $V_2$  causes the blade to over track. Injury to the shaver nearly always follows.

In sum, the inability of the shaver to directly control the relative velocity of dry paste makes it difficult to achieve a zero-grain (wet blade) finish. Conversely, by using a wet paste mix offering controlled velocity, it is possible to continue cutting down the beard mass until a zero grain result is achieved.

In using wet paste (or high velocity) mix the shaver exerts continuous and direct control over the relative velocity at every point in the shave. This result can be achieved thus: 1). Alternating the velocity of the hydroplastic buffer by alternating the wet mix itself. 2). Using razors of variable volatility. 3). Using a combination of both.

Technique: The effectiveness of wet shaving is ultimately determined by the individual shaver's technique. The most relevant of these techniques are the following: 1). Creating a wet mix media through the shaving brush that contains BOTH high levels of hydricity and stability. 2). Maintaining (during shaving) a continuous hydroplastic buffer between the blade edge and the shaver's epidermal sheath. 3).The effective control of the cutting edge itself in a smooth and continuously fluid motion.

As noted already, this dynamic interaction between water and steel I call the "V2" ratio (velocity/volatility). This subject is discussed at greater length in the glossary that follows the main text.

### The Hydroplastic Buffer

The RMWS is based on the principle of the "continuous hydroplastic buffer." This medium is primarily created through the concentrating action of the shaving brush. Once in place, it is then released from the brush and "interposed" between the blade and the skinline during shaving. The technical term I created to describe this buffer is the "hydroplastic manifold." I also like to use the expression "blended buffer" to best describe its unique make-up. The term "blended" describes the process of fusing water and complex humectants through the mixing action of the shaving brush.

The hydroplastic buffer is comprised of enriched vegetal oils (not the cooking variety) and pure hot water. These elements are condensed in the shaving brush to yield a soluble, yet stable, medium called wet mix. It is this wet mix that is subsequently concentrated, then cut with single edge steel. (I call this process of brush activating the mix "peaking the mix". When properly blended these elements produce a thin, wet sheath capable of supporting very sharp steel on a continuous

plane. Once sufficiently thickened through brush action the wet mix is converted to a more manageable form called "pearlized mix").

One astonishing feature of wet blending can be seen in the sheer capacity of its various products to carry steel. In wet shaving, velocity will always beat volume when it comes to the performance of mix. Thick dry paste "lather" can never stand comparison with the peerless steel bearing powers of a thin, high velocity wet mix.

It is important however to understand that the elements of wet mix---water and complex vegetal emollients---are not merely blended once. They are blended repeatedly to develop their full suppository power. The combination of these two stages is called "binary" mixing. (The binary mixers in HydroLast are the 400gram cube and the wet paste).

Binary blending at the manufacturing level: The first stage of the binary blending process occurs when the individual ingredients are blended out of their primary state. At this stage these elements are slowly combined in staggered sequences to ensure their proper mixture ratios. This process is called "small batch wet blending; or wet blending for short." This process must be done in the smallest possible batches to ensure both organic consistency and wetness (primary velocity). Once this process is completed, the product is packed and sold in the shortest possible time. The period of time between blending, packing, shipping and consumption must be kept to the absolute practicable minimum. This tight coupling between blended product and consumed product--- small batch produced, chemical free, and fresh---ensures that the client receives the product in the wettest composition possible. (The alternative to wet blending is, of course, the generous use of preservatives to stabilize the product for a shelf life of ten years).

Binary blending at the user level: The next binary step occurs when the various products themselves are brought together to form the core wet medium that will support the steel blade. This combined medium I call "wet mix." And it is this medium that takes the place of conventional "shave cream." Combining a conventional dry paste cream, however, with wet mix will cause the former to dry down spontaneously.

When thinking about wet shaving, it is important to remember that wet shaving is a process, not a product. This means that the results expected from wet shaving are achieved through progressive mastery of the process itself. The process is simple enough: it requires the progressive

increase of barrier fluids on the skin line sufficient to effectively buffer the action of the steel blade during transit.

In sum, wet shaving should be ideally defined as shaving with the highest possible ratio of water to steel at every stage of the shaving process. Chemical shave creams—regardless of cost or origin-- do not perform this task effectively. Chemical based shaving creams are too dry for wet shaving in any meaningful form. Their action on the skin degrades the required balance of water to support the buffer during subduction by the steel blade.

Summary: Wet mix is produced in the shaving brush. Once created, it is then projected onto the face and neck. Once released from the brush, it is thickened by the continuous scrubbing action of the brush. This brush action transforms wet mix into "concentrate." It is this concentrate that in turn becomes the "hydroplastic buffer." In this capacity concentrate acts as a kind of replacement PH—though far more durable than its natural counterpart---during shaving.

Every wet shaver quickly discovers that the process of building wet mix does not merely entail a single effort. Like nearly everything in wet shaving, it too is a process.

Mix is converted to concentrate by the actions of the shaving brush in two distinct ways

1). Trapping very high volumes of pure water within the brush bucket during the "infusion" of the brush. During this step large amounts of water are directly introduced into the brush itself.

2). Rapidly expanding the maximum, uniform penetration of water into the mix. In this second movement, the actual wet mix medium itself is created through the churning action of the brush. This physical manipulation of the shaving brush to produce wet mix is called "coiling." In this process water is "suffused" into the thicker wet mix media.

In other words, two steps must happen back to back for excellent, high velocity mix to be produced: first, the brush must be constructed in such a way that it will absorb and hold large volumes of water for as long as possible (the infusion stage). Next, the brush must be capable of passing this water into the mix stock itself during the brush agitation (suffusion) phase. This second phase must allow for the rapid, but not too rapid, passing of water from brush into mix without washing out the latter from an excess of water. When performed under suitable conditions, the result will be a smooth, extremely rich, yet not too thick, media capable of rolling the sharpest steel blade modern technology can produce. The result on the skin is nothing short of breathtaking. The beard

falls away quickly, the cutting effort is minimal and the skin is left soft, supple and flawless. (I will offer a more detailed analysis of the specific functions, design, and proper use of the shaving brush in a later edition of this primer)

### Traditional and Modern Wet Shaving Distinguished

Much effort has been made in this primer to distinguish between “traditional shaving” and “modern wet shaving” forms as they are currently practiced in the US and Europe. In presenting both forms for the reader’s consideration, I have made every effort to present them accurately and completely. Though both forms are derived from a common ancestry, yet their specific relative merits are generally incomparable. This fact, however, is not meant to suggest one form necessarily possesses a conclusive advantage over the other. Both forms are well tested over many years. Indeed, under changing circumstances, I can easily imagine using both approaches with equal benefit. For instance, I believe that a beginning shaver does well with a basic badger brush, double edge razor and a pot of paste cream. These tools are generally available and reliable in performance. Used with consciousness effort, both will produce a shaving result of outstanding quality.

In general, I recommend the adoption of my own “wet method” system as an advance beyond the limitations of the traditional dry paste approach. The reasons, as we have already seen, for this view are extensive and important. But as I have already discussed them in this primer, I will not consider them again now. It is merely enough to use both systems to immediately grasp the great—and ultimately unbridgeable—differences between them.

I believe that the greatest difference between the two approaches to wet shaving exists at their conceptual boundary. This boundary in turn is defined not by form and function or water versus chemical composition, rather it is defined solely by the superior procedural unity of one form over the other. This fact is most apparent in the contrast between the systematic and schematic character of the two approaches being considered.

In the final analysis, traditional shaving is not SYSTEMATIC in either process or result. It is merely SCHEMATIC. In short, it is improvisational and deficient in predictability of either method or result. This latter is the core defect in all traditional chemical derived shaving products, including the

best British and European paste shaving creams. The schematic nature of traditional shaving is necessarily the result of its derivation from chemically based processes used in their manufacture. For it is the chemicals alone that allow for one product to do the work that must necessarily be done by several in a truly differentiated—and effective--- shaving methodology. It is, therefore, this differentiation problem that makes the careful selection of these products largely superfluous. Since most possess the same chemical ingredients—and therefore perform identically under steel---the process of selecting one brand over another is largely a matter of idiosyncratic preference.

Wet mix, on the other hand, is necessarily the product of a systematic concentration of wet media from several different sources. And it is this profound fact on which the entire miracle of wet shaving is founded: THE DIFFERENTIATED USE OF SINGLE BLADE STEEL WITHIN A HYDROPLASTIC MANIFOLD.

### The RMWS Systematics and Methodology: A Final Word

I am frequently asked how I discovered my unique method of shaving. Did it all come to me at once much like a Eureka! event. Or did it unfold slowly out of the mists of my imagination? Did someone teach it to me? Or did it involve a slow process of incremental learning until a grand conception finally showed forth? To all of these questions both a yes and no can be offered. Yet, in my view, all proper analysis of the subject must begin with the client and the unique quality of his daily shaving experience.

In my Austin, Texas center, I teach wet shaving to individuals every day. The myriad complexities of wet shaving comprise the sole daily matter of my profession. In this endeavor I have also benefited greatly from both the encouragement and outstanding contributions of many other individuals. At the same time, I should note that my shaving clients are not part of any pre-selected segment of the shaving population. Nor are their shaving habits uniquely compatible with the methods I teach. Instead, their numbers are drawn from the widest possible sample of participants. This fact reflects the truly heterogeneous character of shaving as it exists in the real world.

The elements of the RMWS in their current form have been under continuous development for nearly 15 years. During that period, hundreds of men have used the principles of the RMWS to

greatly improve their daily shaving experience. With very few exceptions, the results have been uniformly outstanding. This has been particularly evident among shavers who have used the RMWS for prolonged periods of time. Indeed, in several instances, I have personally monitored the progress of shavers using my system for nearly an entire decade. The cumulative shaving experiences of these individuals extending over many years has provided an outstanding resource for developing new wet shaving products and practices. My highly personal experience in working with this wide and varied group of shavers has directly shaped my approach to the subject of wet shaving. It also serves as the background for much of the discussion that follows.

The RMWS is divided in two distinct dimensions. The first comprises the Roberts Methodology itself. This part (most of which is covered below) consists of a cleansing, cutting, and conditioning sequence. This element is generally known as the 'practical' part of the RMWS. It is the part in which shavers progressively master the tightly linked actions of the shaving brush, wet media and double edge razor.

The second dimension of the RMWS consists of the theoretical portion. This part is specifically known as the "Systematics." This aspect of the RMWS is primarily intended for more advanced shavers.

The Systematics is divided into the following categories: 1). Aromatica (use of essential oils), 2). Hydristics (the effective use of "heavy" water), 3). Metallurgy (steel blade and razor design). 4). Hydrogenic formulary (specialized manufacture of wet shaving products. 5). Shaving brush manufacture. 6). Proper use of wet shaving products and technique. Several of the above elements comprise the "square of wet shaving" a summary analysis of which is found below.

## Part III

### A Short Glossary of RMWS Related Terms

**Aromatica:** The use of aromatic oils in hydrogenic formulary. A sub-specialty of the RMWS wet blending process.

**Blade Frequency:** In wet shaving I use the expression "frequency" to describe the relative sharpness of a standard double edge blade. The more general expression "sharpness" is too vague a term when discussing the specific qualities of a steel blade. Presently, the highest frequency blade available in the US is the Feather platinum from Japan.

The second blade in terms of frequency is the Merkur stainless double edge from Germany. Compared with Feather, it offers an outstanding performance value. Merkur blades are therefore equally suitable for use with the RMWS.

The lowest frequency blade for possible use in wet shaving is the traditional straight or "cut throat" razor. This tool is commonly used by barbers and a few connoisseurs of barberiana. And though it can be used in the RMWS, its extremely low frequency/high volatility makes its daily use highly problematic.

I am frequently asked to describe a recommended razor sequence to clients as they advance as wet shavers.

**Beginning Wet Shavers:** Merkur Progress Adjustable with Derby Turkish double edge blade. This is a nearly perfect combination for the beginning shaver: a low volatility razor combined with a lower frequency blade. However, to ensure a consistent V2 ratio between these elements, please keep the scaled (numbered) settings on the Progress razor at the LOWEST level at which effective cutting can take place.

**Intermediate Wet Shavers:** Two options here: First, replace the Derby blade in the Progress with a Feather platinum. Second, use a Merkur blade in an HD model Merkur double edge. If you choose the first, please assiduously observe all V2 constraints. Cut at the lowest possible scaled setting (low volatility) at all times.

**Advanced Wet Shavers:** HD razor slotted with a Feather platinum blade. I personally prefer the Derby blades in this role.

**Brush Ballast:** The ballast of a shaving brush comprises the lower, or "first chamber" of the brush itself. Thus, the larger the brush, the larger the ballast (an enlarged knot on a shaving brush is not the equivalent of large ballast. It is merely a large knot. A ballast is built into a shaving brush specifically as a design element. Any shaving brush with a wet plug has no ballast strength). The ballast serves the primary function of storing large volumes of peaked wet mix prior to migration up through the brush bucket and into the first chamber. Once there it is then released as concentrate to be cut.

**Beard morphology:** Consistent with every part of the human anatomy, the human beard also possesses its own distinct morphology. For this reason, I have divided the human beard into three distinct forms. These are "growth" and "grain" and "fiber." These three forms are, in turn, further distinguished by their length, texture, and extent. "Growth" encompasses the beard before it is cut. In growth, the beard is at its greatest length, softest texture and greatest extent. Beard growth covers the greatest portion of the face and neck. I commonly refer to beard growth as "24 hour." Reducing growth is always the easiest part of the shaving process. Reducing beard in its "growth" phase invariably involves the least time, effort, blade wear and possible injury.

The next beard element, "grain," is considerably more difficult to reduce than growth. Depending on the effectiveness of initial reduction of the beard in the growth phase, the grain usually exhibits shorter length, considerably tougher texture and much more limited extent than the beard growth. For this reason, most shavers encounter serious difficulties in achieving satisfactory grain reduction. As a result, the average shaver completes his shave after achieving a mere 50% reduction in grain. It

is while attempting to reduce "grain" that most untrained shavers experience irritation. Grain reduction also creates frequent V2 distortions for which the shave must effectively correct.

Grain typically appears in the form of I call "follicular ridging." Such ridging is usually found along the center third quadrant, edges of the first quadrant (mouth edges), along the jaw line (called the intra-facial seam) and the second quadrant, center.

Beard "fiber" is the last category of morphology we must consider. This element of beard mass is commonly found widely scattered across the entire shaving terrain following completion of the wet shave itself. These elements typically appear as highly prickly shafts of beard hair. Though widely dispersed, beard fiber is however, extremely difficult to clear. Beard fibers exhibit the most fibrous texture, shortest length and most limited extent of all beard forms. Beard fiber is intensely annoying; women and little children rightly find it offensive.

Shaving injuries are most common during attempts to clear fiber. However, for rapid and efficient fiber clearance, I recommend the combined use of HydroLast Cutting Balm and a Feather platinum blade in an HD Merkur double edge (HD) standard razor. For extra fine reductions of fiber, pure slag from my HydroLast shave cube produces an outstanding medium for clearing fiber.

**Binary Mixing:** This is the two-step sequence for building "wet mix" in the RMWS. The first stage in this process is called "peaking" the mix. In this phase water is directly infused into the core mix through using direct, mildly vigorous brush action. The second stage is called "pearlizing" the mix. In this phase the mix is volumized—thickened-- through more sustained brush action (pearlized mix specifically wet mix from which all excess air has been removed). A third phase called "concentration" involves the direct manipulation of the mix after its deposit on the shaving terrain (I also call this process "stretching the mix."). Concentrating wet mix in this way dramatically increases the accuracy and speed by which single blade steel can be used. Moreover, the use of concentrated mix allows the shaver to achieve zero-grain results. However, using concentrated mix in this way is only possible with some combination of HydroLast wet mix media. The unstable velocity of traditional dry paste creams make them unsuitable for this last procedure.

**Buffering:** Pure water that is progressively "texturized" (converted) into wet mix is buffered. Mix that is well buffered possesses superior plasticity. Together, these elements comprise the cutting

“manifold” (channel) on which a single steel blade is carried. No more fascinating subject exists in the world of shaving.

**Concentrate:** Wet media enriched with large infusions of water is called concentrate. It is concentrate that is actually released from the brush onto the terrain and cut. Wet shaving clearly distinguishes between “wet mix” which is “peaked” up in the brush itself and concentrate that is “pearlized” through successive mixing action of the shaving brush. Peaked mix is wet media that has been worked up repeatedly through the brush into a wet, distinctly viscous medium. Once released from the brush, however, the mix rapidly texturizes, thus assuming the more stable medium called concentrate. It is concentrate that carries the steel blade during cutting.

**Controlled Velocity:** This expression describes the control of mix velocity throughout the entirety of the shave. Controlled velocity is a primary factor in successful zero-grain shaving.

**RMWS Cutting Forms:** The proper methodology for beard reduction using shaving brush and double edge razor. Copies of my cutting forms are available directly from me or from [www.methodshaving.com](http://www.methodshaving.com) (There has been a substantial rise in the level of Internet commentary on the shaving forms themselves. Much of this work, however, tends to be redundant and of mixed quality. At the same time, I do want to encourage continued commentary on the subject.

**Dry/Wet Breech:** I first described this phenomenon several years ago in my first Internet book Shaving Graces. Since then it has become one of the most commonly treated subjects in all of wet shaving. Over the years however a few misconceptions have obscured its origins and central role in the wet shaving process.

In order to grasp the importance of dry breech, it is first necessary to understand how mix is created in a shaving brush.

Despite its simplistic appearance a shaving brush is actually a highly sophisticated device. It is so complex, that in two hundred years of continuous use, its proper function has never been fully understood. The first modern attempt at a thorough examination of the shaving brush first appeared in Shaving Graces. This present discussion should therefore be regarded as an extension of that

earlier treatment. A couple of points however should be made regarding the function of the brush and its proper relation to the wet shaving process.

First, the modern shaving brush really has nothing to do with either shaving or brushing. It does not possess a cutting edge; nor is it used to comb or brush hair in any manner. It is, in fact, nothing less than a very sophisticated high pressure "mixing system;" the finest perhaps ever conceived. But unlike nearly any other mixer, shaving brushes use external compression to weld together two very disparate elements: water and plant derived oils.

Second, a shaving brush must be both water porous and water retentive. In other words, it must not only attract water in very high volumes; it must also retain water to the highest degree possible. It is this amazing feature of the shaving brush to both attract and repel water that creates unique challenges for the beginning shaver in attaining to its mastery. Yet, the dual attraction/repulsion character of the shaving brush is absolutely necessary for its proper function. It is for this reason that badger hair is universally used in the construction of shaving brushes around the world. Badger is the only natural medium that attracts water and bonds it at a molecular level.

Third, the mixing action of a shaving brush is activated by pushing the loaded brush forward against a hard surface, such as a man's face or neck. When this is done, the forward pressure at the top of brush forces the brush spread out like an open umbrella. When this occurs, the breech of the brush is activated, or opened. To close the breech, it is only necessary to wrap the hand around the flat breech and gently bring it back to the upright or closed position by gently closing the hand. In properly knotted brushes, breech closure should be nearly automatic.

By opening the brush breech, water is directly released into the dry mix. This mix is commonly, but mistakenly, called "shaving cream." When the breech is closed, water is trapped inside the brush. Until I first brought the two-stage—"push-pull"---breech concept to world's attention on the internet years ago, not one reference to its existence could be found. Yet, its importance to the wet shaving process can not be overstressed. Unless the breech of the shaving brush functions properly, the mix will not receive sufficient water to hydrate. The result will be dry mix and blade burn. The most frequent cause of dry mix is the very common phenomenon I call "dry breech."

Dry breech occurs when the core or breech of the brush itself runs dry. Since every shaving brush at least partially suffers from dry breech it is important to clearly identify those factors under which it is most likely to occur.

Dry breech is most common in very small brushes, particularly those comprised of pure or best badger quality material. Since these grades are considerably less responsive to water they invariably dry faster than super badger grade material. In addition, traditional shaving creams, though vastly superior to mass market varieties, can also induce dry breech in even the best shaving brush. Finally, hard water is a notorious agent for producing dry breech. Water heavily infused with lime or minerals can also induce dry breech.

Fortunately, correcting dry breech is relatively easy. By using my HydroLast 400 gram shave cube, the shaving brush can be "wet primed" to dramatically reduce the effects of dry breech. This simple process allows the shaver to uniformly saturate the brush bucket with a high velocity medium, thus stabilizing the brush prior to the introduction of a thick cream or wet shaving paste. I originally created the 400 gram shave cube as an effective medium for eliminating dry breech from almost any shaving brush. It is still the only such product of its kind in existence. The priming cube can also be used for outstanding results with traditional dry paste creams.

**Double Edge Razor:** This razor is the proper reduction tool for all authentic wet shaving; every other razor represents an aberration of the effective unity of steel and water best realized through the double edge system.

**Dry Shaving Paste:** Chemically based, brush shaving cream, usually packed in a plastic tub. Also called traditional shaving creams.

**Elasticity:** This term describes the extent to which mix concentrate retains hydricity and resists binding. In wet shaving we call this "stretching the mix." Elasticity becomes particularly important during the finishing phase of the shave. The higher the elasticity factor of mix, the closer and more comfortable the finish process.

**Excision:** using single blade steel to cut beard hair. Shaving is not excision. This latter refers to the process of clearing the epidermis of all beard matter. In wet shaving, we first cut beard; we then shave skin; finally, we condition skin to return the latter to an optimal PH. The failure of all shaving

goods manufacturers to account for these variable stages in the facial hair grooming process readily explains the miserably poor quality of their goods.

**High Velocity Shaving Brushes:** In December 2005 the world's first "high velocity" shaving brushes went on sale in the United States. Designated the Shavemaster "V200," this new concept in shaving brushes is intended to supplant the conventional shallow bucket, "low velocity" version. The V200 is constructed to saturate faster and stay wet far longer than traditional brushes.

**Hydricity:** This term is used when discussing the role of pure water in wet shaving. As we have already established, pure water—and differentiated steel--- is the primary building block of wet shaving in nearly all forms. At the same time, we also established earlier that all instances in which water is used in shaving are not necessarily instances of wet shaving. Water is merely one component—albeit an important one—in the list of required elements for wet shaving. Yet, as the various unique qualities of wet shaving continue to be revealed, the important role of water will receive more thorough consideration. For the purposes of our present discussion, the complex role of water in wet shaving is too extensive for in-depth treatment.

**Hydrogenic shaving:** The technical term for the Roberts Method form of "wet shaving." I invented this term to clearly distinguish pure water based shaving from that of dry paste or chemical shaving.

**Hydroplasty:** This subject can easily justify a book length treatment, I will confine the present discussion to those aspects most relevant to the beginning wet shaver.

Hydroplasticity is a compound expression involving the sustained interaction of two distinct elements: water and the manipulation of water by varying its relative density. A short, but careful, analysis of this concept is called for.

As we have already seen, the building blocks of wet shaving consist of the efficient union of pure hot water with a complex vegetal emollient. The use of chemicals in any form will prevent this process from taking place. Chemicals act to disrupt the efficient union of hydro- emollient complex by inhibiting the diffusion of water molecules into the vegetal complex itself. This disruption of the natural fusion of water and complex emollient produces spontaneous dryness on the skin's surface.

This prevents the efficient use of superior steel in wet shaving by inducing more frequent injuries and over cuts.

Pure water, however, presents us with several intractable difficulties. Chief among these is water's natural instability. Pure water is difficult to control or fungify (thicken through movement). For water to be useful in wet shaving it must be first converted from its pure state to one more approximating a saturation. In other words, we must progressively "thicken" (fungify) water in such a way that we are able to retain its wetness (velocity). At the same time we must also increase its relative concentration. This is done through the brush mixing process. However, in the process of mixing we must ensure that the mix medium remains sufficiently wet. Thus, in much the same way that pure cream is converted into whipped cream through the physical action of a beater and bowl, the medium we call "wet mix" is converted to "concentrate" in much the same way. This process of thickening wet shaving mix is also called "peaking mix." Simply put, the expression "hydroplasticity" describes the power of any wet shaving medium that is both wet and thick. This process of "thickening" water occurs much the same way as the example of whipped cream offered above: we are converting a pure liquid into a thicker, more manageable form. We are in effect increasing our direct control over pure water with the intent of using it to support the movement of surgical steel across it.

At this point in our discussion some mention is warranted on the subject of "lather" as both a relevant or desirable component of the wet shaving mix.

For generations, the image of a full face of thick lather has long been equated with the joys of shaving. The central importance of voluminous lather and its relation to shaving excellence has never been clearly demonstrated. From a purely historical perspective, however, the role of lather in shaving can be stated clearly enough: the richest shaving lather is produced from the active saponification of water and processed animal fat. Still today in many European countries, soaps using animal by products continue in use for their high saponification value. In general, though, very few animal based shaving products remain in use today. This fact has had little effect on diminishing the important cosmetic importance of products that exhibit imitation "lather" when used. By using various forms of chemicals and propylene agents in their products, manufacturers of mass shaving products in the US, have been remarkably successful at creating the look and feel of lather in products otherwise devoid of shaving relevance.

If the presence of copious amounts of lather in shaving is so desirable, why, then, do we find it objectionable in the context of wet shaving? The saponification process can only occur through the extensive drying out of the soap medium through sustained agitation. In wet shaving this agitation is achieved through the use of the shaving brush. To the extent that a wet shaving media requires extensive saponification through sustained agitation the drier it will necessarily be when brought into contact with steel. This means that in the process of building an extensive lather through extensive shaving brush action, the shaver actually dries down the wet media. This result is, of course, the very opposite of what wet shaving requires; that is, a thin, very wet continuous substrate. A thick lather media can only be effectively cut with a very low frequency, high inertia, blade. In the technical language of wet shaving we would describe this as a low velocity to volatility ratio (-V2).

The amazing effectiveness of wet shaving is based on the action of what I call the "symmetric hydroplastic buffer (SHB). As we have already seen above, the hydroplastic buffer is an indispensable element in the wet shaving process. It acts, in effect, to insulate the potential irritating effect of the steel blade during shaving. It also protects the skin after shaving. It does so by creating a replacement PH mantle for the skin following, once the skin's primary barrier is removed through shaving. In order for a hydroplastic buffer to be uniformly effective, it must fulfill both of the above conditions. This means that it must both act as effective steel blade barrier during shaving provide a PH compatible replacement barrier after shaving. Within this range of conditions however another of equal importance must also be considered: the hydroplastic buffer must also possess sufficient elasticity to promote superior blade traction at every point in the wet shaving process.

All three of the above critical elements--- plasticity to support the smooth flow of steel across the shaving terrain; elasticity to promote effective blade tracking and close cutting; and strict PH compatibility to ensure the most comfortable possible finish to the shave---together comprise the sum of the hydroplastic buffer.

Despite the easy logic of the above, we should not readily conclude that the creation of a sound hydroplastic buffer is an easy thing to do. By the very nature of its fragile composition, the HB is inherently unstable even under the best of conditions. This instability can result from several different factors. If the environment is overly dry, the HB can dry out quickly. If an excess of water is used to build the cutting mix, the resulting HB will be depleted. This will produce an HB factor that is too thin to carry steel. The perfect HB is neither too wet nor too dry. Nor is it too thick or too thin. A

perfect HB is called "symmetric." This means that it comprises a continuous, wet consistency across the shaving terrain. This means that all wet/dry—thick/thin values have been sufficiently homogenized to permit the smooth flow of steel.

A hydroplastic buffer that is poorly developed quickly separates when released from the brush and deployed to the skin. We refer to this separation as an "asymmetric" HB. In most instances an asymmetric buffer will run in patches of wet, combined with extensive dry patches as well. In most instances an asymmetric buffer occurs because the shaver has failed to sufficiently mix the wet media sufficiently to ensure that water and core emollient are thoroughly combined to the appropriate degree. In nearly all instances, however, an asymmetric mix is usually too wet due to insufficient mixing through the shaving brush. Asymmetric mix is called "pale" mix when it runs too thin due to an excess of water over emollient. Perfectly blended mix is called "peaked" mix.

At this point in our discussion a few brief remarks regarding the difference between "shaving cream" and "wet mix" will be of considerable value.

The phenomenon commonly described as "shaving cream" has no relevance to the process of wet shaving. In using this expression, I am of course confining my comments to the category of creams typically used in most forms of traditional shaving. This category includes the tub creams commonly found in Europe and on the shelves of specialized purveyors of fine shaving goods and toiletries in the United States. This category, however, can not be extended to those products commonly mass marketed in cans and spuriously referred to as shaving cream. In most instances traditional tub creams can be used with shaving brushes, though not necessarily in all instances.

The concept of shaving cream itself has merely nominal value in any serious discussion of the present subject. As a real phenomenon, shaving cream possesses a dry and inert substance. Due to its inevitable tendency to spontaneously dry, even the "richest" form of shaving cream is wholly devoid of sufficient velocity for wet shaving. It also suffers from the worst kind of asymmetric defects. Three such deficiencies in this regard should be noted:

- 1). Traditional dry paste creams sit on the beard; they do not infuse and relax it. Even the best traditional creams are inert in this regard. And though they are vastly superior in composition to the chemical varieties found in the mass market, their value to wet shaving must be nevertheless discounted. The main reason for this is noted above. Traditional creams are too dense to infuse the

beard with sufficient water. As a result, they merely layer the face like a dense blanket. This means they have little power to soften the beard or produce a sustainable hydroplastic buffer.

2). Traditional dry paste creams dry down too quickly. In nearly all instances, traditional tub creams dry down prematurely, both during suffusion in the brush bucket and when concentrated. Due to their tendency to dry out "in use," traditional shave cream products must be used with low frequency blades. High frequency blades such as the Feather platinum range should be avoided when using traditional dry cream products.

3). Traditional creams dry down the skin. This increases the likelihood of blade injury. In addition, because of their elevated levels of hydroxy acids they also produce a higher incidence of significant irritation to the epidermis.

**Agitation:** The process of infusing either wet or dry paste with water. This process is achieved through the use of a shaving brush.

**Asymmetric and Continuous Hydro-Buffers:** The most important task of wet shaving is to ensure that a sufficiently robust HP buffer is effectively maintained at all times. This process of continuous "interposition" is central to wet shaving efficiency.

Ideally, the shaver should strive to create both the thinnest and wettest HP buffer possible. More importantly, the shaver should also ensure that the buffer is continuous in scope. In other words, the shaving blade should always be supported by a thin, wet buffer. Failure to achieve this effect will result in increased blade volatility and skin irritation. A suitable analogy for this process is that of a wiper blade sweeping a windshield during a rainstorm. Given an optimal volume of water in the form of rain, the wiper will move smoothly from one side of the windshield to the other. An excess of rain will cause the wipers the drag. Insufficient rain will do the same. This highly variable relationship between wipers and rainfall is commonly resolved by an adjustment in the wiper speed itself. In wet shaving the same result is achieved either through the maintenance of a continuously wet HP buffer or a modification of razor volatility.

A continuous buffer is, therefore, one that is effectively maintained without separation or rupture. However, a buffer that is either too dry or chemically activated will quickly reduce to patches of alternating wet and dry consistencies. This phenomenon is called an "asymmetric" buffer. When the HP buffer becomes asymmetric, the relative velocity of the mix declines. At the same time, the relative volatility of the razor increases in direct relation. This inversion of the V2 ratio normally results in discomfort to the shaver.

The creation of a stable hydroplastic buffer is essential to all forms of wet shaving. Indeed, without such a buffer wet shaving in any meaningful form is impossible. The creation of a continuous, "symmetric" HP buffer necessarily requires a stable V2 ratio for its success. This means that the velocity of the wet mix) must be kept consistent at all times. A double edge blade will degrade the hydroplastic buffer the least. A multi-blade system will degrade the buffer the most. (I have sometimes been asked if the use of a multi-blade (Gillette style) system requires a parallel increase in the V1 factor of the mix; i.e., an increase in the mix hydricity. This is an outstanding question. Increasing the relative velocity of the mix while using a multi-blade system will result in spontaneous irritation. The aggressive action of a multi-blade system produces rapid HP degradation. It does so by stripping the HP buffer. As a result, the blade overtracks and injures the skin. Acute discomfort is usually the result).

**Coiling Action:** This describes the agitating action of the shaving brush used in the production of wet mix. Coiling consists of two basic movements: forward and lateral. The forward motion infuses water into the mix; the lateral action combines the water with the mix.

**Concentrate:** Also known as cutting mix. Wet mix media is converted to concentrate through infusion by water. By allowing the wet mix to "concentrate" the shaver directly increases both the stability of the mix (through thickening) and its elasticity (the power of the mix to literally "stretch wet"). In sum, wet shavers quickly learn that it is not always desirable to cut mix when it is fully peaked. Nearly all of best blade work in wet shaving occurs when mix is "concentrated" into varying elasticities.

**Essentialism:** This expression is actually an ancient philosophical concept that I have adapted to wet shaving. The principle of essentialism in wet shaving holds that all products used in wet shaving are kept as simple and pure as possible. In other words, every ingredient added to a wet shaving product must be narrowly—“essentially---compatible with wet shaving’s core ingredient of water. Any element that disrupts or interferes with the spontaneous hydricity of water is rejected. Adulterants or additives derived from chemicals, non-lipid oils, or fruit based acids (hydroxides) violate the principle of essentialism and, therefore, are unsuitable.

**High Velocity Shaving:** Also known as “Wet Blade Technique.” This is an expert form of wet shaving that strives to reach zero-grain beard reduction in the fewest possible blade strokes. This result is achieved by deftly manipulating the V2 and using a high frequently single track blade. I personally teach this wet shaving technique in my Austin, Texas Shavemaster clinics.

**Hydroplastic Media:** I originally coined this expression to describe my own HydroLast wet shaving system. Since the formulary basis of HydroLast is pure water, the use of this neologism is intended to clearly differentiate the specific action of water in wet shaving from that of mass produced chemical based shaving creams. HydroLast is intended to support the principle actions of hydroplasticity in wet shaving. I differentiate hydroplastic media along two continua: high and low velocity. For a more detailed treatment please see discussion of velocity below. (A quick distinction between high and low velocity media can also be applied to dry and wet shaving pastes. All traditional shaving creams are dry paste creams. HydroLast is the only wet paste).

**Hydroplastic Mixer:** A shaving brush

**Inertia:** The decrease in cutting efficiency resulting from blade degradation. High inertia in a razor can result from the following sources: 1). Improper grip. 2). Poor razor design resulting in poor distribution of weight (imbalance) in the razor. 3). The use of mix that is either too high or too low in velocity. 4). Distortion of V2 through use of excess frequency of blade in relation to the inertial stability of the razor itself. 5). Mixing incompatible elements such as chemical with organic or low velocity with high, etc. 6). Improper technique due to improper training in wet shaving method.

In general the role of inertia in wet shaving is the most limited of any shaving system presently extant. I prefer to define inertia as "excess control by the shaver over the cutting process." In other words, the overcompensation by the shaver to conditions he himself has created that produce disruptions in the conditions that govern V2.

**Lubricity:** The opposite of hydricity. A mix that contains an excess of acids or oils is "slick," not wet. Excess lubricity in cutting mix will cause a spike in blade volatility. This is only made worse coupled by low buffer velocity. In this way, a slick mix creates an asymmetric buffer, thus preventing the efficient action of V2. When shaving in this way, make sure that you keep 911 on the phone. In wet shaving, we describe this as "shaving stupid."

**Mozzarella Effect:** The tendency for traditional dry paste creams to congeal into sticky strings during use. The appearance of these strings during shaving indicates excess drying of the mix itself. If not corrected promptly through the addition of water to the mix, the buffer will become too dry to cut without injury or irritation. Mozzarella is common when using dry paste creams in low humidity conditions.

**Mixology (hydroplastic):** Matters relating to the specific performance of various wet mixes under variable conditions of hydricity through the shaving brush.

**Peaked Mix:** This is wet shave media—either dry or wet shaving paste-- that has been perfectly "worked up" through the shave brush bucket into a perfect consistency—not too wet, or dry. Increasingly, however, the term is used to describe the actual mixing process that takes place within the brush itself. Thus, the term "peaking the mix" is used in this sense. The opposite of peaked mix is pearlized mix or "concentrate."

**Pearlized Mix/Concentrate:** When wet mix is thickened either through brush action it is "pearlized." Perfectly pearlized mix is therefore both wet and dense. In the technical terms of wet shaving we describe this medium as possessing both high velocity and volume.

**Primer (for shaving brushes)** The standard shaving brush primer in the United States is my own HydroLast 400gram "shave cube." This item is combined with my HydroLast wet paste and forms the basis of my "wet-system" shaving concept. The shave cube can be used to great benefit with either dry or wet paste creams.

**Reduction:** Using differential steel blades to cut beard. The principle of reduction emerged directly from the rapid adoption of my original three form (3X) wet shaving model first introduced in 2002. This model is the vertical, transverse, oblique sequence. This approach unseated once and for all the old wives' nonsense of "shaving with the grain." Copies of my RMWS forms can be obtained from my website or [www.methodshaving.com](http://www.methodshaving.com).

Reduction involves the systematic elimination of beard mass through repeated strokes of the blade. Unlike conventional "shaving" which attempts to reduce beard mass in one step, reduction does so in a progressive manner. The use of the term "progressive reduction" in this context means that the beard mass is reduced, not shaved off, by shallow increments. Thus, progressive reduction occurs when the beard mass is cut down through repeated incremental reductions. This idea can also be understood as a progressive "laying bare" of the beard mass by controlling both the mix velocity and gross volatility of the razor.

**Reduction Efficiency:** The combined volume of time and effort required to reach a zero-grain standard. The most highly skilled wet shavers can accomplish zero-grain results in less than 1/2 the time and effort required of other less efficient methods.

**Square of Wet Shaving:** The functional core of the RMWS is found in the dynamic interaction of four categories: these are 1). Hot water 2).Single track steel blade 3).Wet-mix media 4).Shaving brush. I call the effective union of these four elements the "square of wet shaving."

**Stretching the Mix:** The method of manipulating wet mix for maximum blade efficiency.

**Subduction:** I use this term to describe the degree to which the blade edge is brought into direct, continuous contact with the skin line, or epidermis. As I note elsewhere in my discussion of the V2

ratio, subduction plays a crucial role in the elimination of blade irritation in wet shaving. At the same time, subduction is necessary in some degree if the desired results of wet shaving are to be realized.

Subduction is controlled in two different ways: mechanically and ergonomically. The first occurs when the blade itself is raised or lowered through an internal mechanism within the razor's blade chamber. The Merkur Progress razor for example controls subduction through raising and lowering the blade. The shaver controls this process directly by turning a small rotator at the blunt end of the razor.

Subduction through ergonomic control, conversely, takes place when the shaver exerts direct pressure on the razor's cutting edge. In most instances it is the second form that is used in wet shaving.

**Technology:** Excepting a few isolated advances in the manufacture of razors and steel blades, the role of modern technology in wet shaving will remain heavily discounted for the foreseeable future. Several reasons account for this.

First, unlike mass-market shaving, wet shaving is differentiated at the user level. Beard texture, skin quality, and the ever changing preferences of the shaver himself lie at the center of wet shaving. Technology can not accommodate the infinite nuances suggested by the above list. In this regard, mass shaving products fail due to their lack of differentiation in satisfying the uniqueness of individual shaving needs.

Second, the V2 ratios of mass-market products are always inadequate to the needs of differentiated shaving. This means that either the V1 steel factor is too sharp or the V2 mix velocity is insufficiently stable for blade support. In short, mass market/technologically derived shaving products suffer from a lack of V2 symmetry.

Third, the suppository action of high concentrations of water can never be replicated by chemical substitutes. When brought into sustained abrasive contact with steel, chemical burns to the skin are generally the result. In such instances we have a breakdown of wet mix hydroplasticity.

When discussing the subject of wet shaving, it is important to remember that two distinct schools—approaches to the subject, if you will---presently exist. The first originated in Europe nearly three centuries ago. The second school is my own RMWS. The first is commonly referred to as

“traditional” shaving; the latter is called “modern wet shaving.” Though both share certain historical similarities, they are, however, altogether different in terms of their methods and results.

As presently understood and practiced, traditional shaving is generally defined by the use of a low ballast (limited water holding capacity) badger brush, modern Gillette Mach 3 or similarly pivot blade razor and chemically based “shaving cream” or soap. The generic nature of these products makes it possible to combine products from different producers with little difference in outcome. All have adopted in some form the Mach 3 pivoting blade system as their primary cutting tool.

Modern wet shaving (RMWS), conversely, uses a non-chemical “wet mix” media, and “high velocity” shaving brush. The chief cutting tool of this system is the single track double edge blade.

Traditional dry paste cream shaving is primarily focused on securing a “comfortable” shaving result. This is achieved through the use of a low volatility blade platform described above. However, restricted mix elasticity prevents close, continuous in-blade contact when using the traditional method.

Modern wet shaving (RMWS), conversely, is focused on achieving the closest possible close/comfort nexus. This is achieved through the use of high elasticity cutting mix, accurate and effective use of single track steel and the effective maintenance of a continuous buffer between blade and epidermis.

**Tracking:** the stability of the single track blade as it passes across the skin line and through the beard mass. Tracking in the strictest sense entails both the efficient movement across the shaving terrain and effective cutting of the beard mass at every point. The equivalent term for tracking is “cutting power.” The tracking power of a steel blade is governed by 1). The quality of the hydroplastic buffer 2). The quality of the double edge blade.

Excellent tracking in steel blade cutlery is measured by the smallest number of cutting strokes needed to achieve zero grain. For further elaboration please see my discussion of the “V2 ratio” below.

**Velocity:** This expression is without doubt the best known in all of wet shaving; it is also the least understood. Simplifications of the term abound. And this fact not surprisingly adds vastly to its confusion in more specific usages. To be sure, the expression itself is a highly attractive one since it

suggests powerful associations of speed, facility and economy of effort. However, both the term and the concept itself have distinct meanings which I will attempt to clarify at this time.

The role of velocity in wet shaving comprises several independent elements. These work in tandem to create the condition we broadly define as velocity. These three elements are 1). Hydricity. 2). Plasticity 3). Elasticity. All three of these elements combine to form the final substance produced in the shaving brush. This substance is called "wet mix media" Or "wet mix" for short. This term should never be confused with the more common expression "shaving cream." Where the latter uses chemical agents to increase media volume, wet mix uses water.

The first term, hydricity, defines the total volume of water within the mix. Plasticity defines the volume of mix produced through the brush bucket. Elasticity defines the extent to which the mix remains wet during shaving. Elasticity also refers to the extent to which mix can be effectively manipulated or "texturized" during shaving without drying out or binding.

I have identified two basic forms of velocity: I call these simply primary and secondary forms. Primary velocity is the specific velocity of mix produced in the brush bucket. This form we can simply call "wet mix velocity." Secondary velocity involves the velocity of the mix after it has been released from the brush. This latter is of course also known as "concentrate." Concentrate is released from the shaving brush across the face and neck terrain. This concentrate then forms the hydroplastic buffer (HPB). To repeat: Primary velocity is best measured by the hydricity of the mix as it is churned in the brush. Secondary velocity in the form of concentrate is measured by both plasticity (mix volume) and elasticity (capacity of mix to remain wet even when depleted through blade action). Plasticity, in itself, is far less important than achieving a high ratio of balance between hydricity and elasticity. In other words, a thick mix is far less important than a wet—or high velocity--one. However, because all chemically based shaving products are hydricity deficient, they invariably substitute thickness for wetness in the resulting mix. Shaver injury—or serious PH degradation---is the common result. Formula for velocity: Hydricity + Plasticity + Elasticity+ = (MixVelocity)

**V2 Ratio (V2r):** Since I formulated this basic principle of wet shaving several years ago, the V2r has become the standard theoretical model on the subject of wet shaving.

The V2r can be best understood when viewed as the operation of a basic teeter-totter. One side is weighted by water; the other by steel. The water is weighted by "velocity." The steel is

weighted by "volatility." Since I cover both of these operative principles elsewhere in this primer, I will here only elaborate their basic relationship. In this way I hope to eliminate any unnecessary confusion for the reader.

In wet shaving, it is necessary to effectively control the "ratio" or "relative balance" between both velocity and volatility. As velocity increases it is necessary to decrease the relative level of volatility of the cutting system in use. Conversely, as volatility increases, it is equally necessary to decrease the relative velocity level. In short, the wet shaving mix must not exceed the by too great a degree the "tracking" capacity of the razor to cut it (in wet shaving we cut wet mix, not beard). Similarly, the tracking capacity of the cutting system in use must not exceed the capacity of the mix to support (buffer) its actions. Violations of either side of this effective principle are the leading cause of injury and discomfort in shaving.

As I describe elsewhere in this primer, velocity is comprised of three elements: hydricity (wetness), elasticity and plasticity. Volatility is comprised of frequency (blade sharpness), alignment (tracking), ergonomic control (the hand guided action of the razor).

**Volatility:** This term defines the degree to which the actual cutting unit (the blade) can be effectively controlled by the shaver. Volatility defines the extent to which control the shaver can freely use a single track blade without irritation or injury. If such control is consistent we say that the razor is low/low (L/L) volatility. This means that the volatility of the razor is the same at the end of the shave as the beginning. Conversely, if the razor can only manage a low gradient beard than it will probably be very volatile in the beginning and generally smooth out at the end. The Gillette razors are notorious for this defect. Both the Mach and Sensor series razors suffer from high/low volatility. This fact accounts for the importance of always keeping a fresh blade in a Gillette product. The opposite of L/L volatility is H/H (high/high) volatility. This latter means that blade control is rendered unstable at every point in the shave.

Thus, if the shaver can effectively control the cutting unit at every increment of increased galvanic closure (closeness) the cutting system is said to be of low overall volatility. Volatility, therefore, is always the sum of the TOTAL control over the entire cutting system at every marginal increase in closeness. The basic formula for volatility is Volatility = frequency (blade sharpness) + alignment (extent of blade-to-skin contact) + subduction (ergonomic control of total cutting unit by

shaver). At all times, it is imperative that at least two of the three criteria in the above formula are of positive volatility. Thus, a straight razor is volatility positive in both frequency (sharpness) and ergonomic control. It is negative in alignment. This explains why people who try to shave themselves with a straight razor suffer frequent injury.

Volatility, therefore, directly results from shaver control over the total cutting system in use. Thus, simply avoiding the use of hyper blade steel (such as the Feather platinum blades from Japan) is not necessarily sufficient to control the volatility of a double edge razor.

Let us return once more to the straight razor example presented above. Since the straight razor is a high volatility cutting unit, it is necessary to create a compensatory low velocity hydroplastic buffer. In this way a compatible environment will be created in which the cutting unit and hydroplastic buffer can interact dynamically with a minimum of constraint or blade frequency loss. The compensatory benefit of the hp buffer is achieved by using the lowest possible velocity medium as the hydroplastic buffer. This explains why barbers invariably use a distinctly thickened, nearly viscous fattened soap medium in which to use a volatile cutting unit like a straight razor. By reducing the velocity of the hp buffer to one approaching pure inertia, it is possible to wield a straight razor with relative ease. This is only true, however, so long as the barber does not attempt to use the straight razor beyond the appropriate zone of hp compatibility provided by the thick, soapy hp buffer.

The above factors are not the only elements that influence volatility. Others include the unique character of the shaver's beard mass, quality of steel blades and, most important, the composition of the hydroplastic buffer (mix concentrate) itself.

**Wet Blade Technique:** This is the sophisticated "rolling steel" shaving method that I teach in my Shavemaster clinics in Austin, Texas. These clinics are free to my clients. Please call in advance for reservations and equipment requirements. (Note: Wet blade technique is not the same as the RMWS method; it is a much more advanced form of wet shaving. Unlike the RMWS, which can be mastered at a fairly rudimentary level, wet blade technique requires high frequency steel and high velocity cutting mix to execute. I always insist on teaching wet blade shaving to the client myself).

**Wet Blending:** The process of “blending up” to the highest possible levels of purity, hydricity (wetness) and freshness. Wet blending is a proprietary process. It is the basis for my HydroLast brand family of wet shaving products.

**Wet Mix:** This medium should be understood as existing in three distinct forms: 1). Binary mix. 2). Brush mix 3). Cutting Mix. In the RMWS binary mix is formed by fusing the draw from the shave cube (the slag) with the wet paste. The first—the cube---acts as a “primer” to raise the velocity of the paste to a satisfactory level. The brush mix takes the process one step farther by “concentrating” the water/emollient ratios and thus rendering them suitable to receive steel. The last, cutting mix, is shifted through changes in relative velocity and thus rendered suitable for blade excision.

**Wet Shaving Paste:** Non-chemical, water based wet shaving media. HydroLast originated the wet shaving paste category. Wet paste must be clearly differentiated in both ingredients and performance from the traditional “dry” paste variety commonly found in tubs and tubes.

**Wet Shaving Systematics and RMWS Methodology.** The RMWS consists of two core elements: the Systematics and the Methodology. The first covers the theoretical principles of “hydrogenic” or pure water based shaving. These principles include the core elements of hydroplasty, volatility and velocity. The Methodology, on the other hand, entails the effective practical use of single edge blade, wet mix media and high velocity shaving brush.

**Zero-Grain Shaving:** The effective reduction of all beard mass to the lowest possible level (also known as “cutting the lightbulb”).

