

C' P' R' & Q'

November 10, 2003

Bruce I. Petrie

It was, indeed, a memorable day when the famous mother of all geological faults, the San Andreas, and her family of little faults, collaborated in a vast transformation of California, moving its western boundary scores of miles to the east and eliminating a major portion of one of the most dramatic coastlines in the world. Those of you whose memory goes back as far as your attendance in this room on March 9, 1992 may remember that the paper read that evening recounted the unusual demise of the firm of C P R & Q. You will recall that all four members of the firm were happily driving in formation across the Golden Gate Bridge at the fatal moment and, hence, followed that magnificent structure into the depths of San Francisco Bay.

This extraordinary geological event was certainly among the greatest catastrophes in all natural history, with personal and economic ramifications that were global in extent. The material damage was not merely earth crevices, broken bridges, collapsed buildings and highways. It was total- a disappearance into the sea of one of the earth's choicest areas - an occurrence that defied all geological science, giving a new face to the western United States and confounding the world's geologists.

I am not so unfeeling that the terrible losses in human life, the disappearance of homes and the billions of dollars in economic damage are not in the forefront of my mind. But my feelings for Candice Candide, Paul Perfect, Ralph Raider and Quincy Quixotic, and what they stood for, was so deep that, perhaps, I will be excused for admitting that their loss outweighed, in my heart and mind, much of my tenable grief for others. I cannot escape, of course, the simple fact that many, if not most, Californians - although they could not have anticipated the magnitude - chose to take the well-announced risk that the time was ripe for the "Big One." Many of these cavalier folks had for many years participated in private and public efforts to strengthen homes, commercial buildings and infrastructure; many, in their everyday routines, regularly passed signs warning of quakes and tsunami waves. Yet, the typical attitude seemed to be jocular or expressed such fondness for the natural beauty of the state that living in glorious surroundings justified the risk. Candice, Paul, Ralph and Quincy, Californians all, of course, must be counted among those cavaliers.

You will remember that, with great panache, the stunning Candice, the exemplary Paul, the intrepid Ralph and the cutting-edge Quincy had organized the firm of C P R & Q. I hesitate to demean its unique purpose by referring to it as merely a consulting firm. It was, instead, a firm that generated and sold its own impractical ideas. The word "impractical" it must be admitted, was in part a marketing adjective. C P R & Q had a distinct antipathy to the hyperbole used ad nauseam by virtually every other American advertiser, hyperbole so patently false as to draw only jaded yawns from most consumers. In the view of C P R & Q, this national tendency to overstatement in the commercial

world had cheapened the rest of the language as well, by encouraging the use of more and more exaggerated terms, leading to frequent misunderstandings in communications between people, often with destructive consequences.

But what most distinguished C P R & Q was its insistence that seemingly practical objectives be ignored in favor of the ideal. It was that distinguishing feature which I tried to express in March, 1992, when I wrote about the firm's major assignment from the Democratic Party. As they each swung onto the bridge on that fateful morning, the glee of the four partners was unbounded. The Democratic presidential candidate, Adlai Wilson, had won the election largely on the strength of the party's revolutionary platform, conceived and written by CPR & Q. The drive over the Golden Gate could not have been more appropriately symbolic, not only of the firm's success but of a new awakening in America, a national recognition that America's true human potential was yet to be achieved. Surely, however, it was within reach.

But it was not to be. The unparalleled calamity of that day also obliterated Adlai Wilson and restored the management of the country to the "suits", the proudly practical men who in a mere 215 years had single-mindedly built an unmatched commercial machine dedicated to unceasing and oft proclaimed economic growth. It is true that no one had bothered to ask what the country was growing toward, when it would get there and what it would do then. Indeed, if anyone had asked such questions, he or she would probably have been written off for impertinence and dubious patriotism.

The relatively few who had the audacity to question the increasingly sleazy popular culture, which seemed inexorably to accompany the march of technology and commercial success, found themselves drowned out by the hurried and harried dash into a new hedonism, one fueled by technology, driven by cut-throat and cut- corners competition and aimed at acquisition with a capital A; hedonism in which the scandals moved from the tabloids to the Wall Street Journal.

The transformation in American life that C P R & Q was seeking simply sank, with the four principals, into San Francisco Bay. Thus, the suits were again in the saddle and riding mankind - at least the American version of mankind.

Not all of California disappeared. Only that portion of the state from Petaluma in the north to San Luis Obispo in the south actually caved into the ocean, leaving the most conspicuous exemplar of the California mind-set, Los Angeles, still intact.

The soft, weathered and picturesque coast line along the Big Sur and other breathtaking stretches had suddenly been replaced by a new line - a commanding, raw, jagged break line as new as if it had been pushed up in an instantaneous orogeny smack in the faces of the first humans to see it. But despite this overwhelming geological cataclysm, despite the loss of millions of people, life went on. In the north, this johnny-come-lately line fortuitously preserved most of the vineyards of the Napa and Sonoma valleys, surely an example of divine intervention. The wine industry, with typical American alacrity, moved to assure the world that although much of California's wine had been turned into water, its most famous vineyards were still busy at their task of converting water into wine. The real estate industry, stunned at first, soon woke up to the fact that hundreds of miles of scrubby desert were now brand new and glorious ocean - front lots.

The jagged line turned south just east of what had once been Sacramento, and, *mirabile dictu*, because of good fortune or more divine intervention (no one seemed to care which) Yosemite National Park remained, almost without a scratch and as muscular as ever. The jagged line continued south and then west, precariously missed Bakersfield and finally joined the Pacific Ocean just south of San Luis Obispo, composing a coda to that town with the melodic name.

For those who enjoyed dreaming up metaphors of the natural world, the long indentation between Petaluma and San Luis Obispo left the United States shrieking with an open mouth to the Southwest, grieving for its lost jewels: San Francisco, Monterey, the Big Sur coastline and, yes, even San Simeon, the rococo castle of William Randolph Hearst and the 90,000 acres on which it sat.

The calamity, as devastating as it was, thus did not completely deprive the United States of its most funky member. Years later, as if to reassert its *avant garde* role, California, or what was left of it, hosted another bizarre event, one of great significance and again related to the great land disaster and, incredibly, to C P R & Q.

As has been said, Yosemite National Park had been spared. Indeed, if that natural Xanadu could ever be said to have been improved, the Big One deserved the credit. The western face of Yosemite now had an ocean view. Better still, down at water level, it had a wide and scenic beach, albeit replete with a jumble of rotting trees. The southern end of the beach was marked by a near-vertical stone face reaching up 600 feet to the top of a promontory.

From what I hope you have remembered about the star-crossed lives of Candice, Paul, Ralph and Quincy, you might guess that their respective progeny, if any, would not lean toward conformity. A case in point was Peter Perfect, the nephew of the ascetic Uncle Paul. Out of a sense of avuncular duty in the absence of Peter's deceased parents, Paul had become Peter's advisor. As Peter grew older, he realized how much he had depended on Paul and how much he admired his uncle's world view. He also was entranced with Paul's solitary life style and his attention to nature. Thus, on the occasion of which I speak, Peter had been drawn to yet another weekend trek into the western edge of Yosemite, a place which had been of special significance for Paul and, hence, was a place of special significance for Peter.

The hike in through deep forest was no piece of cake and, when he had reached his destination, Peter had chosen to rest and enjoy a long meditation, inspired by the sun setting into the Pacific. Finally, he slipped the flimsy tent out of his backpack and set to work making camp, scraping out a fire pit, collecting water from a nearby pond, and hanging his food bag out of the reach of bears. These solitary chores always produced in Peter a deep sense of satisfaction and peace. You can thus imagine his astonishment, as he was pounding his last tent stake into a convenient crevice, to hear a voice, a distinctly female voice, cry out from the direction of the precipice, "Thank God - give me a hand!" His astonishment intensified as he reached the precipice and saw that the plea came from a young face which somehow, even in that first instant, looked familiar.

"Why hello, Peter, fancy meeting you here."

As his mouth dropped open, Peter somehow managed to choke out, "What! How do you . . . I mean . . . have we met?"

"Well, you look a lot like Peter Perfect to me."

"Well, maybe that's because I *am* Peter Perfect, but, but how in the world...?"

"Not so mysterious. We met in 1991. Your uncle introduced us. You've changed somewhat, but then everyone does."

"You must mean my Uncle Paul, but where and why and . . ."

"Don't you remember that wonderful picnic C P R & Q had in the Muir Woods?"

Peter paused a minute, and looked more closely at the red hair blown by the chill wind out from under her climbing helmet, "You don't mean that red hair of yours came from the gorgeous Candice Candide? Why, you were just a little shrimp and sort of funny looking at that."

"Well, I've changed too. Now, will you please help me get up there - or are you an immigration officer or something?"

Peter helped, trying hard not to be too obvious about grabbing her long, tanned legs, which were remarkably like her mother's, and managed to say, "Yes, you have changed - you have indeed." How in the world did you get here?"

She turned to look directly and quizzically at him, "Isn't that obvious?"

"Well, yes, it's obvious, but that's a helluva series of pitches ... and the sun is going down, you could have fallen . . . you must be nuts."

"I knew it was getting late but I stopped to enjoy the view and hack out some rock samples. Stuck them in my pack. Very pretty stuff: but they weigh a ton."

"And where were you planning to go from here - just stroll through that woods back there and hail a taxi?"

"No big deal. I'll walk out the same way you walked in. By the way, she smiled, I don't think your Uncle Paul would have liked you using the word, 'helluva'."

"You're right, but I only use rank obscenities like that when I'm flummoxed."

"There's nothing to be flummoxed about. By the way, would you mind if I sleep with you tonight? I've got a bag in my pack, but it would be nicer if I could get out of the wind."

"Now I am really flummoxed. What do you think Uncle Paul would have said about that sort of thing?"

"I know he wouldn't approve, but he's gone" and then she paused, "and anyway 'that sort of thing' is not going to happen - but you're not married are you?"

"Of course I'm married - but only to my work. I don't suppose my work gets jealous, but you never know."

After a sparse meal of trail food, the two of them clambered into Peter's small tent and began a conversation that lasted into the wee hours. Her name was Cathleen, with a "C", Cathleen Candide, the only child of Candice Candide and a father who had died shortly after Cathleen's birth. She had known slightly the other members of C P R & Q, and had some idea about its work. After the earthquake, she had learned more about the intense idealism of its members and their goals for the firm. Cathleen explained that she made her living teaching rock climbing and other outdoor skills to clients in the Yosemite area, but periodically was drawn into solo excursions like this one that had led, fortuitously, to Peter's tent.

For his part, Peter explained to Cathleen that, with Uncle Paul's help and advice, he had gotten safely through his wild undergraduate years at Corinth College; that he had recently obtained a degree in biochemistry from MIT, made possible by a bequest from his Uncle Paul, who had been a father to him since the death of his parents at an early age; that he was a research assistant in a small firm in Santa Rosa; that he loved hiking and frequently made weekend trips into the Yosemite area, usually alone, especially to explore the escarpment created by the earthquake. Paul had often discussed C P R & Q's goals and purposes with Peter.

As the two of them began to nod off, Peter said, half to himself, "If you think about what most people do for a living, what their career goals are, it makes the work of C P R & Q seem almost noble, even sublime. They recognized that America's greatness has to be seen in light of its enormous advantages, its size, its natural resources, the protecting oceans, its beauty. Add to that its good fortune in the young geniuses who invented a form of government which permits anyone to speak, write and worship freely, gives all adults a secret vote, protects them against intrusive government and has an elaborate and well established system of justice. If that extreme degree of wealth and freedom can't produce a sublime society, what can? C P R & Q must have realized that much of what might be expected from all these blessings has not been achieved.

"They probably blamed the fact that most citizens seem to think that flag waving is their only responsibility and that they are entitled to have no interference with their pleasures, regardless of the national interest. The immense popularity of SUV'S is a case in point. Television seems to be the final step in creating a juvenile society and it does so unabashedly."

Cathleen, who was barely awake, didn't catch all of this, but she heard enough to understand Peter's thinking. Suppressing a yawn, she mumbled, "You're right, Peter. We need to talk further about all the members of C P R & Q tomorrow." She leaned over and gave Peter a peck on the cheek, "Uncle Paul wouldn't mind that, I'm sure." Peter, as he fell asleep, mumbled, "I'm sure too."

About half way through their surprisingly tasty breakfast, Cathleen ventured back into the subject, "It would be nice if we could find the kids of the other two members; in fact, somehow, I think it's important that we do.

"You mean, if R and Q had kids? And if they survived the quake."

It wasn't until they were back on the trail that Cathleen responded to the doubts about other children. Her mother had mentioned that although Ralph Raider had never

married, he had managed to adopt a child and, consistent with Ralph's view of life, the child was a black girl from Tanzania. Her mother had thought that the girl's name was Rachel. She had heard that the girl was unusually gifted. Cathleen had no idea where Rachel lived.

"That leaves Quincy Quixotic", remarked Peter, "and he must of been a bigamist, married to at least two computers." Cathleen had no clues as to any children of Quincy Quixotic.

As they separated, they exchanged E-mail addresses and pecks on the cheek and agreed to keep in touch, with Cathleen promising to keep an eye out for a Rachel Raider if Peter would do the same for any progeny of Quincy Quixotic. They agreed that with a name like Quixotic no one could disappear completely.

"Unless the Big One . . . ," said Peter.

"Unless", said Cathleen.

Three months passed. Peter thought often of Cathleen and she of him, but both were busy and the E-mails few. Then; suddenly, it happened. "Dear Peter, I've found Rachel Raider - at a party last night; she even lives close to me. She seems very nice and very bright and is some kind of social worker. She was north of Sacramento and escaped from the quake. Her address is Rraider@aol.com. She knows from her Dad that Quincy left frozen sperm and says that he must have made some arrangements for its use. She'd like to get together, especially if you can find a Quixotic conceived with frozen sperm."

Peter quickly replied, "Oh great, Cath, I'll just ask around of people who've got that frozen sperm look on their face. He or she is bound to turn up."

And, surprisingly, he did, without Peter having to apply his "frozen-sperm face test". A couple of months after Cathleen's heads up, as he was cooking dinner and occasionally glancing at the Jim Lehrer News Hour, Peter to his surprise heard the name mentioned: "Quentin Quixotic." As he quickly gave the TV his full attention, Mr. Quixotic, who looked to be about Peter's age, was being introduced by Lehrer as a professor of geology at the University of Oregon in Eugene. The segment of the News Hour was apparently devoted to new techniques in earthquake forecasting. Suddenly it struck Peter, this, of all things, is the anniversary of the quake - that's why they're talking about forecasting - and I've discovered the frozen-sperm Quixotic.

It took about a week to reach Quentin Quixotic and to organize a telephone conference call between Cathleen, Peter, Rachel and Quentin. After the initial excitement, Peter asked for brief biographies, including how much each one knew about the work of C P R & Q. There was a common thread in the four comments to the effect that each of their parents held a strong conviction that only the ideal was worth striving for.

Cathleen quoted her Mother's frequent references to Robert Browning's, "Man's reach should exceed his grasp or what's a heaven for". Peter referred to the aphorism that since impractical men seek to conform the world to themselves, rather than themselves to the world, impractical men make the only true progress. Rachel remarked, "When one sees the ultimate value in striving for the ideal and realizes that one's parent had been doing just that, doing anything less than that yourself seems like a betrayal."

After Quentin, the last to speak, had finished with particularly eloquent comments, there was a long silence. Then Quentin spoke again, softly, "All of this about our parents makes me think of the Spanish philosopher, Miguel de Unamuno, who once said, 'Do not adjust the hugeness of your desire to the smallness of reality.'"

There was more silence. Then, with that note of inspiration, they all agreed that the telephone call had been an ice-breaker and now a personal meeting would be a good thing, if for no other reason than to honor their remarkable parents.

"How about this for a bright idea, said Peter, we take a hike out to the spot where Cathleen and I met - you'll never find a more beautiful spot nor one that's more fitting for the occasion." But Cathleen intervened, "Let's first meet at my condo, it's right on the way. I want to show Quentin my rock collection, which includes a particularly nutty one." With that, Quentin asked, "If it's really nutty send me a chip in advance and I'll be sure to classify it for you."

Three weeks later all four met at Cathleen's very modest condo, introduced themselves face to face, and soon headed for Yosemite. After the long trek that Peter had warned about, they finally pitched their tents on Peter's favorite site. Watching the sun set over the Pacific they marveled at how the devastating quake had managed to make Yosemite even more beautiful than before.

During breakfast the next morning they picked up on the thoughts and ideas expressed during their telephone conference call, coming to a consensus that they wanted to do something together and with the same ideal objectives as their parents, to forego the usual commercial techniques and rely on means that were often given lip service but seldom followed in practice; then see how far they could go with it. But, as to just exactly what they might undertake, they were having trouble focusing on anything specific.

Quentin, who had spoken very little, finally raised his hand, "I have a thought regarding a specific project. Cathleen may have come up with something that will put us all to the test - especially Cathleen. On the trail out here she gave me permission to identify the subject to you and discuss some thoughts I have about it. You may have overheard her remark on the phone conference call that she wanted me to see her rock collection. She agreed to send me a chip of a particular nutty rock she has. The short story of all this is that Cathleen sent the chip, I applied the standard mineral content analyses and some not so standard. None of these tests revealed what I expected to see, not even close. The chip had qualities I have never encountered before, nor have I ever read about them. Then, being very careful not to suggest that I actually had, or knew of, a stone with the properties I described, I asked our senior geology professor, Dr. Rockland Hardstuf, whether any such properties existed. His response was that none had ever been discovered and if they were, it would probably make the finder rich and famous. He also said that if such a rock were found anywhere near Yosemite National Park, it would undoubtedly reopen the old Whitney - Muir debate of the late nineteenth century. Dr. Hardstuf, incidentally, is no slouch; he's known world-wide for his work in deep crystal geology. But, I have no idea where Cathleen found the rock."

"But what was the Professor talking about," Rachel asked, "when he mentioned that Whitney-Muir stuff?"

"I do know about that," said Quentin, that's western U.S. Geology 101. Josiah Whitney was Director of the California Geological Survey back in the 1850's or '60's and held the unusual view that a valley as deep as the Yosemite Valley must have been caused by a huge and sudden drop of the earth below it - an enormous subsidence. The famous John Muir argued that it was carved by glacial action - a more conventional explanation. The debate went on for many years, probably because Whitney was so prestigious - he was a Harvard man, after all. Ultimately Muir's idea was regarded as closest to what actually happened. But there's always been a sense of mystery about the Yosemite Valley's beginnings.

Everyone turned to Cathleen, who hesitated only momentarily, "I've thought about little else since Quentin told me, on the trail, about the properties he found in my rock. I realize, of course, that the rock may be worthless. Quentin would be the first to admit that he is a very young geologist. Even without that factor, the chip I sent him and the rock itself could simply be an aberration of some sort and not duplicated anywhere. Also, having unique properties doesn't mean that it is useful- and that's true even if, incredibly, it is a new element. Most new elements, as I understand it, are discovered with atomic accelerators and all that stuff. Finding a new one in the raw is almost impossible.

"But what if I have stumbled onto something new and valuable? Then I'm put to the test that Quentin mentioned and I want to pass the test. We've agreed that we are an extension of four remarkable people, in three cases by genes and in Rachel's case by the personal influence of a man who was an incredible exemplar of independent thought, selflessness and gutsiness. All of them knew that the rest of the world thought they were crazies. And that didn't matter to them. In short, if this turns out to be a great find, it's better for me that I use it without regard to what others might deem my personal interest, and to use it, as we deem it best, to achieve a broader goal - without seeking to profit from it.

"So . . . I propose that we ask Quentin to further pursue the properties of the rock, and to consider the possible applications, keeping us informed along the way; that assuming the properties are, in fact, unique, and have valuable applications, we decide as a group the next step. I also suggest that we form a successor to C P R & Q and that we name it C' P' R' & Q'."

Rachel quickly raised her hand, "Three cheers for Cathleen. I think that expresses the essential attitude of our parents. Suppose we followed the conventional course; suppose we tried to squeeze every bit of benefit we could out of Cathleen's rock; what would that lead to? Is the predictable outcome really a "practical" denouement? Wouldn't it just lead to patent clams, to lawyers and maybe to lawsuits, merchandisers and advertisers, brokers and agents, hangers-on, ad nauseam. But why go through with all that, why not simply give it at the outset to those best able to use its benefits? And I really like the name, C' P' R' & Q'."

Soon after returning home Quentin called Peter and enlisted his direct help on the grounds that biochemistry might be even more important to the project than geology. "Dr. Hardstuf seemed to be suggesting that stuff with these properties would have important medical applications." Together they made arrangements for use of a

laboratory in which they could work with security. Operating on weekends and holidays, in a reprise of Quentin's earlier tests, they slowly wrung from the rock sample its expected properties, but also a special property that had puzzled Quentin in the first place and now puzzled Peter as well. At a temperature lower than one might expect, a sticky amber-like substance oozed from the rock. Once the flow had fully started, an increase in the temperature made it stop, not increase. The amber material appeared inert until about an ounce had accumulated, at which time it emitted a bright golden glow.

"Holy cow," Peter exclaimed, "it must be radioactive." Quentin was more cautious, "Not necessarily, though it seems to have some similar properties."

These comments led them to check on just how many radioactive substances were known. It turned out that there are many such substances, about which much has been written, but none of them matched or even came close to the rock's other unusual properties. Moreover, use of a Geiger counter produced nothing like the familiar series of clicks, but instead it emitted a wavering hum, which Quentin and Peter thought might be disabling the instrument. It had become exceedingly warm.

When the two of them reached Cathleen by phone, she first insisted on telling them that she had gone alone to the spot where she had found the rock and, by climbing laterally in both directions, as well as up and down, she had found considerably more occurrences. It appeared to be a long narrow vein which surfaced on the cliff face for a distance only to disappear into other rock and then reappear again, at irregular intervals. "I can't tell if the visible parts of the vein are actually within Yosemite or just outside the boundary. Nor do I know how far into the face they go, and I certainly don't know how much has slid into the Pacific."

Peter allowed that was a problem, but proceeded to report to Cathleen as to what he and Quentin had found out so far. Cathleen assured him that she would pass on the information to Rachel.

As they waited to hear from Cathleen and Rachel, Quentin and Peter, each thinking about the glowing qualities of the amber substance, had reached the same idea: try it out on a mouse which had a readily accessible cancer, an idea so obvious that Peter brought twelve afflicted mice to the next meeting at the laboratory.

Within forty-eight hours after Quentin and Peter had applied the amber substance to the cancerous mice, the hastily assembled group, after considerable inconvenience, gathered at Cathleen's condo. As Quentin and Peter described the effect of the amber on the mouses' skin cancers, Cathleen and Rachel were, at first, too stunned to speak. But then Cathleen said what Rachel was thinking, "My God, Quentin, do you mean it destroys cancers?"

"It certainly appears to do so - and to confine its effect to cancerous cells, without killing healthy cells. Moreover, it seems to seek out the cancer and then move toward it."

"Oh my God," Cathleen exclaimed again, "What now?"

Despite the many complications that lay ahead, and given my insightful audience this evening, the rest of this story has virtually written itself. As it turned out, the incredible promise of Cathleen's rock was fulfilled. The new element was given the name CATH-YO-SEM-ITE. With the help of a few philanthropists, who were glad to be involved, it ultimately was distributed to all human beings who needed it, without charge. The devastation of cancer in all its forms gradually ended all over the world. Those with a sense of history and who trusted in the potential of mankind, came to believe that the horror of the "Big One" had been redeemed by Cathleen's discovery and by the sublime spirit of C' P' R' & Q'.

At the ceremony, Cathleen, Peter, Rachel & Quentin, each dressed to the nines, bowed to King Carl Gustav and received from him the gold medal. Cathleen, on behalf of the four colleagues, then addressed the distinguished audience, briefly describing the events leading up to the presence of the members of C' P' R' & Q', not omitting the role of the geological catastrophe. She concluded by saying, "We are aware of the special exception that has been made by the Academy to permit all four of us to be honored; moreover, we are extremely pleased that, in the gracious judgment of the Academy, our contribution represents an advance in human understanding which is far more significant than an advance in biology, as important as that advance is. Thus, our award reflects the Academy's view that it is not the substance which, we discovered, but the manner of distribution, freely to all mankind, which is the reason for our being honored.

"In choosing to make distribution in such manner, we were influenced by a thought from the great Spanish philosopher, Miguel de Unamuno. His message is clear and simple, 'Do not adjust the hugeness of your desire to the smallness of reality.' It was our desire to follow the example of our parents - anything less would have been an unworthy adjustment to reality. I most humbly accept, on behalf of myself and my colleagues, the Nobel Peace Prize. Thank you, Ladies and Gentlemen, on behalf of C' P' R' & Q'."
