CLUNKERS: BREAKTHROUGH IN BICYCLING

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Cresting the top of 10,700' Farewell Gap in the southern Sierra Nevada mountains, the hiker stared in mild incredulity at the two men and one woman sitting next to their unusual looking bicycles. No one spoke for half a minute, the cyclists guaging the hiker's reaction to their invasion of what had previously been strictly pedestrian territory, the hiker gathering his thoughts and selecting one to voice.

Finally the hiker broke the silence. "I don't know how you got those things up here, but I'm impressed."

Scenes similar to this one are likely to become common in the next few years as what began as a grass-roots movement in Northern California spreads through the country. And spread it will, because a small group of anonymous and unsung tinkerers have developed a machine that vastly expands the parameters of bicycling.

They invented a bicycle that would go anywhere.

Over a period of five years or so Clunker bicycles have evolved from the familiar fat-tired one-speed newsboy's bike to sophisticated, hand made machines employing the latest bicycle technology and costing in the neighborhood of $1000. Although their owners still refer to these expensive hybrids as 'Clunkers,' the major difference between them and fine European racing machines is the fact that they are designed around the 26 x 2.125 balloon tire instead of the more fragile high

pressure road tire. Other minor differences include the use of flat-track motorcycle handlebars and thicker tubing for strength. While the number of these sophisticated Clunkers in use is currently around two dozen, they are clearly the wave of the future in back country bicycling.

In Europe the sport of Cyclocross (cross country bicycle racing) is very popular, and although the specialized lightweight bikes used are designed for rough terrain, they have thin, high pressure tires to reduce weight and rolling friction. Since Cyclocross courses are closed loops, usually not more than a mile in length, wheels are considered expendable and supplies of spares are close at hand. For obvious reasons these light wheels are unsuited for extended cross country use, so Clunker riders use the wide, low pressure balloon tires, not only for their durability, but for the cushioning effect on rough surfaces and the superior handling on downhills.

Meanwhile, hundreds of Northern Californians remain happily mounted on machines which represent the evolutionary stage immediately preceeding that of the hand made model. These are for the most part old Schwinns or similar rugged ballooner species which have been modified by the addition of drum brakes and multiple gearing. Not as high-performance as the hand-built variety, these Clunkers still go anywhere, and can be bought or built for $150-$300.

Clunkers, Ballooners, Cruisers, Bombers, Beach Bikes, whatever the local nomenclature, unmodified old bicycles have long been popular in California, especially in the beach towns and college campuses because they represent cheap, dependable short distance transportation with few of the maintenance problems of

ten-speeds. In many areas ballooners and ten-speeds have existed side by side for years, yet until recently no one thought to merge the best features of each type, i.e. the ruggedness of the ballooner and the convenience of multiple gears.

In the Bay Area several elements combined to produce the modified ballooner or Clunker. These were: a good supply of old bikes; availability of new parts; proximity to mountainous terrain laced with fire roads; and the presence of a well organized and fiercely competitive cycling subculture.

Credit for the first Clunker bike activities worthy of note must go to a loose group of individuals locally referred to as the "Canyon Gang." Living at the base of a good sized mountain and provided with one of the more intense downhill fire roads, these young men became the first artists of the downhill ballooner ride. About ten years ago the Canyon Gang started taking truckloads of whatever bikes were available to the top of the mountain and riding home in the most direct fashion, on a steep dirt road that earned the name "Roller Coaster" from a series of dips and peaks.

As personal skill and familiarity with the road improved rides became faster and more demanding on equipment, forcing riders to upgrade bikes at least to the point where they would stand the abuse. Certain frame styles became popular as did the Morrow coaster brake, which has not been manufactured for decades, but which is still the best of this type of brake built to date. The Canyon Gang contributed the first significant step in the evolution of the cross country bicycle when they began using front drum brakes, similar to lightweight motor-

cycle brakes, in order to preserve their rare old coaster brakes. Since most of the rider's weight shifts onto the front wheel during extreme braking, especially on steep hills, the use of a front brake cuts stopping distances by over 50%, as well as representing a backup system in case of brake failure.

The nature of the Roller Coaster road inspired the Canyon Gang to perform legendary feats of skill, such as riding at 40 mph under a single-pipe gate with perhaps two inches of clearance above the handlebars. The object of this was to maintain enough speed to launch the bike off a sharp crest for a 40 foot jump. To this day no one rides like the members of the Canyon Gang.

As riders primarily concerned with downhill, the Canyon Gang saw no need to improve the uphill characteristics of their machines, and it was not until these bikes became popular among the more fanatical cycling element that further progress was made.

A number of racing cyclists in Marin County began riding balloooners for local errands in preference to their more delicate racing machines, which are poorly designed for such mundane uses as grocery shopping and which are also subject to sudden disappearance from the sidewalk. Two facts became immediately obvious to these sophisticated riders. The first was that these bikes could be ridden over any surface. The second was that there was considerable room for improvement in performance. Although there was no conscious direction to their tinkering, these home-grown innovators solved in logical order all the major problems inherent in old bicycles and created in

the process an entirely new concept in cycling. Due to the close contact within the local cycling community and the small number of those involved, innovations spread quickly; the entire evolution from one-speed to true cross country machine took less than two years.

It is worth noting that for every successful innovation there were several that failed either due to lack of sturdiness or because they could not be made to work effectively. For each of these failures some anonymous rider paid with skin, blood, or in a few cases, bone. In short order fanatical Clunker enthusiasts had shattered at least one example of every part to be found on their bikes. Frames, hubs, handlebars, gears and numerous other minor but no less essential parts collapsed far from civilization, leading to some long walks or on occasion ingenious repairs using primitive tools or hastily commandeered pieces of barbed wire fencing.

One rider always rides with a pair of Vice-Grips casually clamped to his frame. He claims that he can fix anything with Vice-Grips and his Swiss Army knife, or, if he can't fix it, he can clamp it together long enough to get home.

When a front wheel collapsed two riders bolted the front forks of the damaged machine onto the rear wheel of a healthy one and rode back in three-wheel tandem fashion. They swore that it worked, except that the rear rider had to lean the opposite direction on the turns.

Since the Canyon Gang had solved the most serious braking problems with the introduction of front brakes, riders turned their efforts toward improved gearing. As long as coaster brakes were in use, three speeds were the most possible; since

caliper brakes work inefficiently on Clunker wheels, regular ten-speed hubs, which require the use of rim brakes, were not considered acceptable. The problem was solved when one rider discovered that tandem bicycles had drum rear brakes as well as the five speed cluster from the lightweight road machines. A little tinkering, bending and filing, and a derailleur was mounted on an old ballooner. The first field test saw the innovator ride away from his fellows in such convincing fashion that the event entered into the local legend. Clunker freaks immediately descended on every bike shop in the Bay Area looking for tandem hubs.

With the introduction of derailleur gears the basic Clunker was born, and for the next couple of years it was refined as various minor advances were made. Accessories such as gears, cranks and derailleurs were gradually upgraded to the best available, and different frames were analyzed for handling characteristics.

During this period a small number, no more than about 50 locals, found the ideal race course, and the serious competition began.

In early 1976 two riders found what had to be the steepest dirt road in the area. In two miles it loses 1300 feet of elevation and includes everything Clunker riders love: ruts, rocks, off camber corners, and cliffs. As the two rode their brakes, skidding downhill, one mentioned to the other that this would be an ideal place for a race. When they reached the bottom they noticed that their coaster brakes had heated to the point where all the grease had evaporated, requiring that they be 'repacked' with grease. Thus the famous 'Repack' racecourse was discovered

and named.

With the advent in late 1976 of organized Clunker racing progress accelerated. The Repack downhill race is conducted in a manner similar to ski racing, with riders making timed solo runs. Synchronized clocks at each end of the course and pre-arranged starting times eliminate the need for communication between start and finish lines once the race is under way. It goes without saying that the race itself is unbelievably hairy. Only a dozen riders in the history of the event have ridden the course in under five minutes, although the record stands at 4:22. This dozen or so 'experts' all have the course memorized, and in places where the natural tendency is to jam on the brakes, they are standing up in their highest gears, striving for more speed.

As bikes and riders were tested against the same standard it became obvious to everyone involved in the movement which modifications worked and which didn't. Photography of competitors invited analysis of riding styles and comparison of fast riders against slow ones. Interestingly, the three fastest times ever recorded were by riders who were also experienced road racers.

Over the course of a number of races and hundreds of miles of casual riding one particular model of old frame stood out as having the best overall geometry for Clunkers. In this frame handling and stability had been perfectly melded with a high clearance that was ideal for Clunker conversion. This bike, the Excelsior X, was in such demand that the price for an unadorned frame, if available, was $50. The stage was set for the final step in the evolution, the construction of custom frames.

Joe Breeze of Mill Valley had all the qualifications; a veteran Clunker rider, he was a machinist who built and raced road bicycles. When a number of his friends prevailed upon him he consented to duplicate the Excelsior geometry in high quality Chrome-Moly tubing, making provisions for the use of the latest hardware. In 1978 Joe delivered ten of these bikes, until recently the only examples of this stage of development. This year other frame builders have shown interest in building Clunkers, and Tom Ritchey and Jeff Richman have both built machines which represent another step up from the Breeze bike, weighing in the neighborhood of 33 lb.

The next obvious improvement to be made is to the rims and tires, which are still heavier than necessary and not up to the high performance standards implied by the rest of the machine. In this area at least, advances will come about only with recognition by the bicycling industry, since fabrication of these items is best carried out on a large scale.

With the introduction of hand-made machinery, it would seem that the Clunker movement has defeated its original purpose. At around $1000 these are no longer disposable bikes to be destroyed and replaced with impunity, and all that expensive equipment, derailleurs, alloy cranks, and so on, looks a lot more delicate than the simple old one-speed that started it all.

Actually, these new bikes are a lot tougher than any of the old ones, and to date no one has been able to break a frame. One rider who is known for his ability to reduce all machinery to ruin has been unable to damage his Breeze bike, even tough he

swears that he is actively trying to destroy it. A certain amount of maintenance is necessary, of course, but this has been reduced to a minimum by the use of sealed bearings. The derailleur seems to be in danger due to its location, but in practice damage is rare. These custom machines have demonstrated their sturdiness under a wide variety of conditions, from high-speed racing to touring rides in the Coast Range, the Sierra Nevada, and the Rockies, and none has yet failed to return intact, a remarkable record.

One of the reasons for the popularity of Clunkers is certainly their versatility. As well as being fine off-road bikes, Clunkers are excellent local transportation, and in some Bay Area towns they are as common a sight on the streets as lightweight ten-speeds. Clunkers are superior to the lightweights in handling and braking, although the top speed is slower because of the high rolling resistance of the balloon tires. For the Clunker owner routes are no longer limited to the confines of the paved world, and short cuts through creeks, over logs, down paths or whatever, become preferable to dealing with auto traffic.

Clunker fever is obviously spreading. While the Bay Area is still the major enclave of the movement, other pockets of devotees are making themselves known. In 1978 five Californians went to Colorado to join in the Third Annual Crested Butte to Aspen Clunker Ride. This two day event is climaxed by the ascent and subsequent tooth loosening descent of 12,700' Pearl Pass, on a road that may be charitably described as unmaintained mule path. Although the somewhat isolated Colorado group lacked the technological flash of the Californians, being mounted for the most part on only slightly modified one-speeds, this exposure

to the current state of the art is certain to accelerate development there.

The future of the Clunker movement seems assured, since these bikes are eminently practical transportation on the street as well as on back roads and trails. Rising fuel costs are certain to spark another boom in cycling such as the one following the 1973 fuel shortage. Many of the ten-speeds purchased during this last boom now sit idle in garages, victims of their own fragility. Clunkers offer as one of their main selling points the fact that they are as nearly impervious to abuse as a bike can be built.

The Clunker concept gives the non-motorized explorer immense range, several times that of a hiker, yet speeds are not such that the rider misses anything. The swift, silent approach of the Clunker offers many opportunities to observe animal life that is too shy to be seen by hikers. Up to eighteen gears make it possible to climb steep hills, and of course the downhill is all free. For general exploration Clunkers are perfect vehicles, since they can be ridden anywhere with approximately the same ecological impact as a hiker, and can be carried if necessary over any obstacle. In fact, rivers or unscalable cliffs are just about the only barriers to the determined enthusiast.

When the Clunker movement reaches the point where it is seriously considered by the bicycling industry, mass production could drop the price for the latest generation of machines to under $500. The Schwinn company last year began marketing a five speed balloon tired bike, coincidentally named the Klunker 5, and sales have far exceeded initial projections.

For transportation or exploration, backcountry touring or racing, Clunkers represent a distinct advancement to the sport of cycling. Who knows, in the mid '80's we may see a movie entitled "The Man Who Clunked Mount Everest."

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