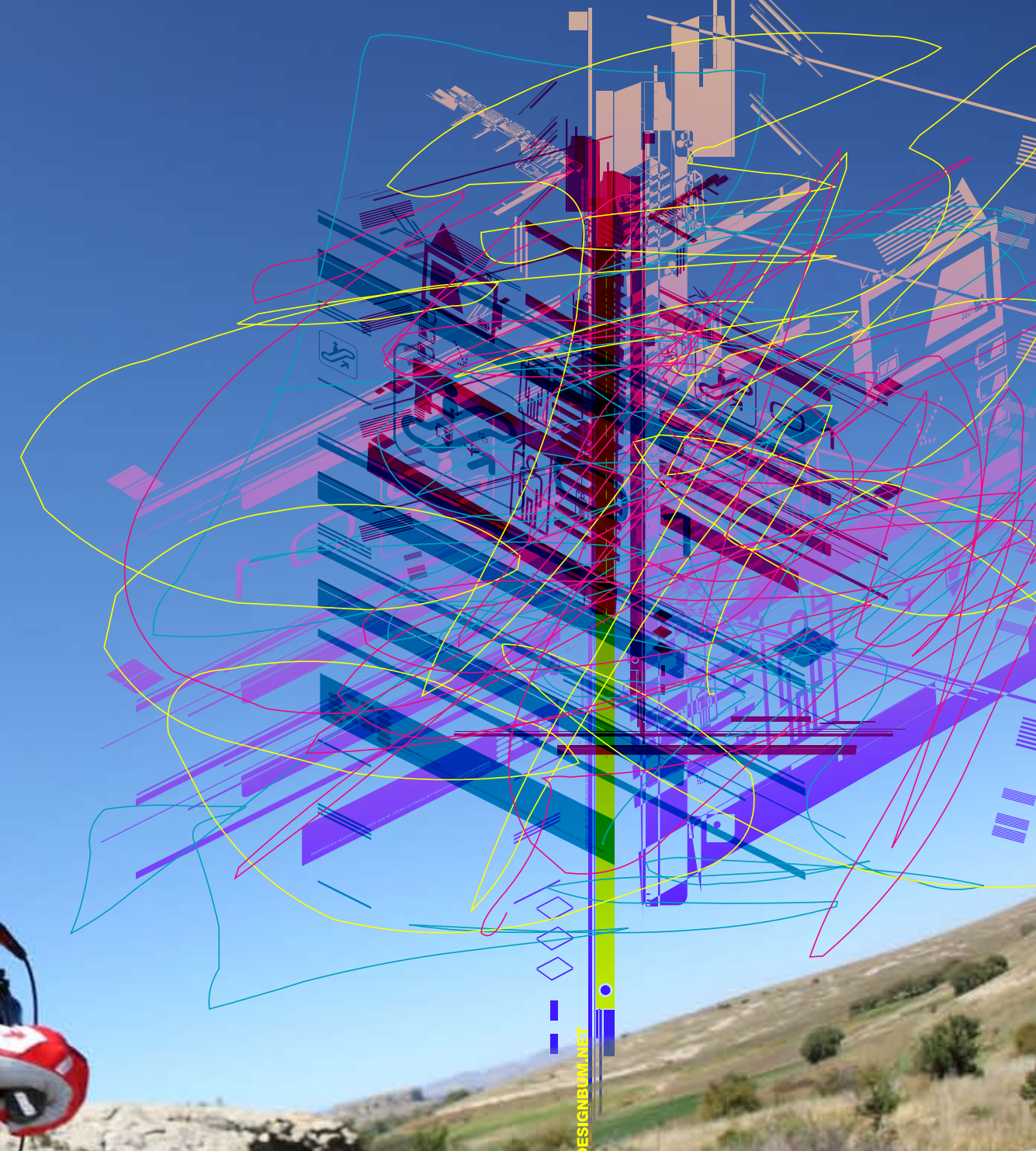


ELECTRIC REVOLUTION

Karl Nicolai and the future of mountainbiking



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Hoshi Yoshida photo

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Nicolai Bikes are undoubtedly one of the biggest innovators in the business. They willingly embrace new technology with the enthusiasm of scientists on the cusp of a new discovery, and are never content with just being good enough. We threw a few questions Falco Mille's way and the answers surprised even us! E-bikes and the death of chairlifts....it's a brave new world.

How did the brand start out?

Nicolai started producing frames under its own label in 1996. Earlier, Karl Nicolai had designed and built bikes for Mongoose. In 1995 Brian Lopes became NORBA champ and Leigh Donovan became world champion on Mongoose Amplifier Bikes, built and designed by Karl. In 1996 an upgrade of the Amplifier became the first Nicolai, named Trombone. Models like the Lambda and the BMXTB, which was actually the first dirt and dual mtb in the world, followed. In the late 90s Nicolai was the most common brand at the German national DH series. (You find more history facts at: <http://nicolai.net/company/e-history.html>)

Who are the creative minds behind the bike designs?

Karl has always been the creative head at Nicolai. Of course he gets valuable feedback and hints from team riders like David Graf, Frank Schneider or Joris Bigoni, from friends like former Nicolai team manager (now SRAM Europe PR manager) Elmar Keineke or Nicolai art director Hoshi K. Yoshida. But the final

design is his decision only.

Nicolai seems to be a pretty innovative company, is it fair to say that you are always looking for ways to improve on the traditional mountainbike template?

That's right. We don't take many things for definite except the wheel (perhaps). As the riders' skill levels have risen, the range of riding opportunities has become wider and this has created a demand for new engineering solutions. We've had to give the riders better toys that can keep up with the rigors of modern mountainbiking. Innovation is an ongoing process.

What is the future of the downhill bike as far as Nicolai is concerned?

It's not a secret that we are currently working on products that will be released in 5 years. We are sure that E-Bikes will be the next big thing in downhill and freeride. They make getting up the hill easier and make it possible to cover much larger distances. They take you to places where you've never dreamt of riding before. They make possible bike parks without expensive, scenery-destroying chairlifts. We've lately joined a co-production of an E-street-racer. (see www.grace.de). This winter we will present a prototype of a Nicolai E-mountainbike) The next big step will be to combine the G-Boxx technology with an E-motor to one unit.

Will we see the gearbox become the primary transmission method for DH in the next few years?

We've been working on numerous gear box solutions for 10 years now. G-Boxx 1, using the Rohloff 14 Speed gear, is a mature product since 2004 but it is too heavy for all-mountain use and it has got too many gears for DH use. The G-Boxx 2 is a good solution for DH use, as it is lighter and provides only the gears needed for going downhill. But it limits the frame designs and 7 gears are not enough for all-mountain. So we are currently working on a completely new system, combining the advantages of both existing systems and excluding their disadvantages.

What applications does Nicolai see the Gates Carbon-drive system being useful for?

The Gates Carbon drive is the perfect system for all single speed and gear hub bikes without suspension. The next step will be to modify some hardware in order to make the system compatible with full suspension bikes and gearbox bikes too. We see a high potential to use the Carbon Drive with E-Bikes, too.

What are the benefits over a chain, in your opinion?

The main benefit is that the carbon drive is dry running and that it is maintenance free. Once mounted and set, you never need to oil it or re-tension it again. It is smooth running, strong as a chain and there is no rubber-like flex. There is no screaming or rattling and you even save weight. (see www.carbondrivesystems.com)

Is it necessary to design the whole bike around the system?

You don't have to design the whole bike around the drive but there are some requirements when you want to run it with the Gates Carbon Drive system. There must be an opener in the rear triangle in order to mount and change the belt and there must be some mechanism to adjust the rear axle and tension the belt. And an important basic requirement is a precisely manufactured and aligned frame. When a bike brand wants to design their own Gates Carbon Drive bike, they have follow the Gates Carbon Drive instructions for frame builders. Then it's no big deal at all.

Will this system compete with gearboxes as being the next step in MTB evolution?

There is no competition between Gates Carbon Drive and Gearboxes, as they have got completely different purposes: The G-Boxx is shifting gears. The belt ist transmitting the pedal force to the rear wheel. In the near future a combination of both systems would be conceivable.

Are there any other exciting developments coming out of the Nicolai factory in the near future?

Our E-freerider prototype will be presented very soon.

How healthy is the sport of downhill in Germany?

Downhill in Germany is booming. More bike parks are opening each year. 10 years ago there were 2 bike parks in Germany. I don't know how many there are now. I guess about 20 plus numerous permanent and even legal tracks built by local riders. The season opener in Germany is the Dirt Masters Festival in Winterberg. It attracts over 30.000 visitors and 800 starters in the DH category. We've got 3 official racing series, the German Downhill Cup, the German Rookies Cup and the European Downhill Cup, plus the National Championships and many free races. We can't complain.

Can you tell us a little about the Nicolai pro team?

The Gates Nicolai Team is an international team of 3 riders from 3 countries: Frank Schneider, Germany, is part of the Nicolai Family since the very beginning. He has won the national DH series several times but he is not doing DH only. For some years now he's been doing the Megavalance DH endurance races, which he is successful at also. Or he is doing stunts like riding down the Zugspitze (highest German mountain 9262 m) with a unicycle. Joris Bigoni is a multiple French DH champion (in several junior categories) He is a young ambitious racer, trains very hard, and we believe that he has got what it takes to get to the very top of the DH world. Besides downhill he is doing road and track racing. His new Nicolai Argon Road track bike is equipped with the Gates Carbon Drive System, as his job is to test it under high stress and loads. The third player is David Graf. He's a 20 year old Swiss guy and probably the fastest racer in the team. He is competing in BMX and 4-Cross World Cups. He has achieved 2 top ten rankings in 4-Cross WC in 2009: 7th in Canberra and 9th in Andorra. David is also testing the Gates Carbon Drive system under the hardest conditions as they appear in BMX and 4-Cross racing.

Customization seems to be a big thing with Nicolai, do you ever get any strange requests?

Well, some would say that a lot of requests we receive are quite strange, but we don't. As a custom bike manufacturer it is our daily work to serve customers' special requests. As we do every manufacturing step in house, we can offer tailored geometries and individual modification without any difficulty. But we check every request for special modifications very carefully. When it is technically possible and technically reasonable and when the customer is willing to pay for extra work, we will do it.

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Special thanks to Karl Nicolai, Falco Mille and Hoshi Yoshida.



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