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GMG – we know color

GMG is the leading developer of high-end color management solutions. With more than 35 years of experience in managing color, GMG is a pioneer in its field and literally setting the standard in color management. GMG's clients range from creative agencies, prepress companies and printers to consumer brands. GMG is available globally through its subsidiaries and partner network.





Photo: Ivan Liandi

Patenggang Lake in Indonesia lies 1,600 meters above sea level and, with its stunning scenery, has become a popular tourist destination. Thankfully, there are still locals who live their lives undeterred by the many visitors from every corner of the world. For example, this fisherman who casts his nets every day. He does so with playful ease: One precise arm movement – practiced thousands of times – the net opens evenly like a parachute before gently lowering onto the water surface and immediately disappearing beneath it. The colorful circle design of the net adds to this magical moment: Play! So playful, so focused, so New Work.

EDITORIAL





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play

'Bread and circuses' is a phrase that dates back to the Roman Empire. Idea: to keep the plebeians happy with cheap grain and a colorful entertainment program – a loose translation for brutal gladiator fights. You're thinking of table football and late-night pizza deliveries designed to make employees in hip start-ups forget about the daily stresses they're facing, aren't you? No reason for cynicism! On a serious note, a little more fun would rarely go amiss.

Matthias Mey is Managing Director of the Swabian underwear brand named after him. He clearly enjoys playing with new ideas. And that despite the fact that the market is dominated by big names like Zara, H&M, Calzedonia, and Intimissimi – anything but an easy game (p. 14).

The enthusiasm is immediately contagious when visiting Caparol. Our hosts' eyes lit up as they talked about their work in the ColorDesignStudio. They explain: this is where we bring spaces alive. The playground seems huge – responsibility, too (p. 26).

If you think about playing, Lego immediately springs to mind. The company is 90 years young, at home in virtually every child's bedroom. All the more reason for continuous innovation. That sounds pretty grown-up. Luckily, it's colorful, too (p. 34).

Mutabor plays in the premier league of packaging design and, according to the specialist magazine Horizont, is the largest independent design agency in Germany. On page 40, Moritz Carstens and Ipek Molvali reveal what it means to develop packaging 'digitally first' and why brand and design are 'vehicles of transformation'.

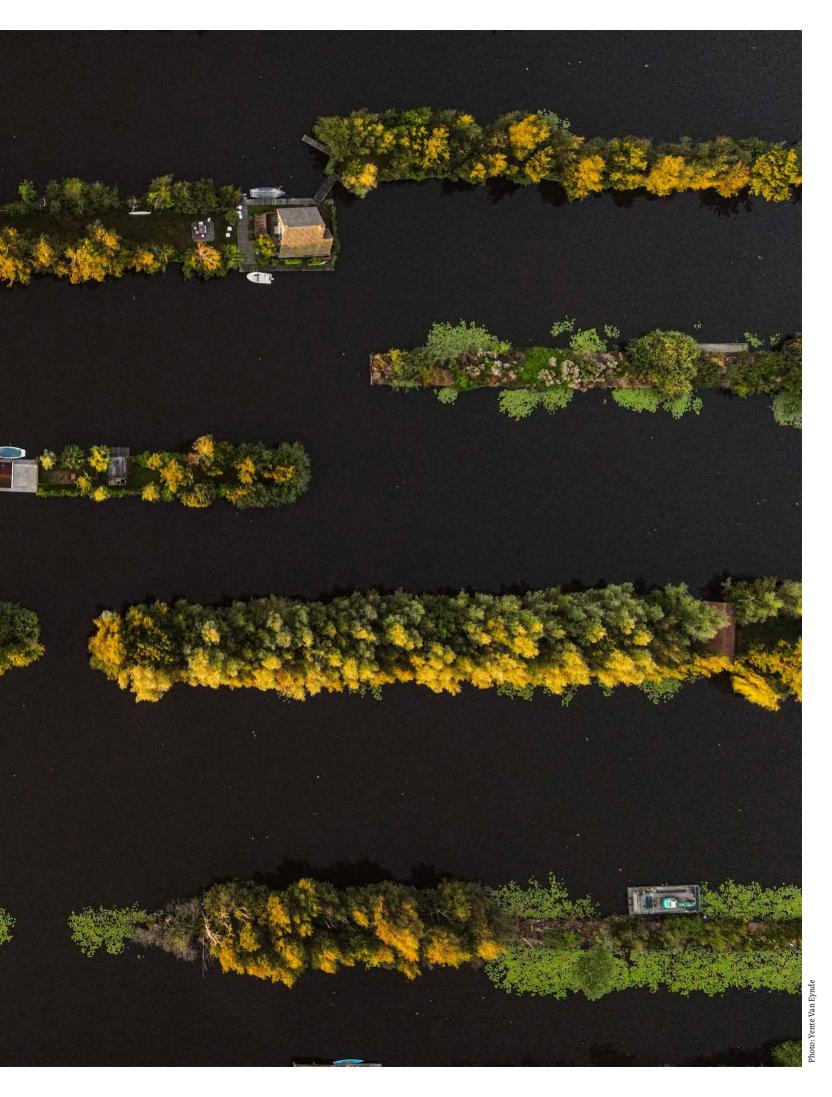
Meanwhile, at the printing ink manufacturer Siegwerk, the cards are being reshuffled – digitally. GMG ColorCard is the trump card that precisely depicts what a color reference looks like on any specific substrate. An exciting tech talk with interesting guests (p. 46).

Have fun with the new TrueColors!

Robert Weihing Co-Founder GMG GmbH & Co. KG

TrueColors

According to tourist information, the Dutch Loosdrechtse Plassen – the lakes of Loosdrecht – are the country's top attraction. Really? This aerial photograph shows that the rows of boathouse-wide islands are surely the real attraction. Arranged in tidy rows. Everything is neat, nothing or no one out of place. Even those who want to go for an after-dinner stroll around the block don't complain. It's just a straightforward up and down.



TrueColors

'Ho figures on vacation', 'family Krause on the beach', 'swimmers' and 'sun worshipers'. Even the product descriptions in the model railway shop reflect that toys can be serious business. Although, it doesn't have to be that way: get the old box from the attic, put the track around the Christmas tree, and go full throttle. There is nothing better than when the locomotive derails in the far corner.





+ TrueColors

At a height of 2,757 meters, the Stelvio Pass is the highest mountain pass in Italy. The road is only open between the end of May and November. Motorbike or bicycle? Only with the onset of twilight does the question appear to have been answered. While most cyclists sit in front of a plate of well-earned pasta, a number of motorbikes are still enjoying the winding road with 48 hairpin bends. At the summit, a monument honors the legendary Italian cyclist Fausto Coppi, and you can also enjoy the culinary highlight: bratwurst with cabbage. A sensation.



Play On!

Where they play, there you should stay.

Do you sometimes get the feeling that life has lost its lightheartedness and joyfulness? And that things used to be more playful and less serious?

It's possible that this phenomenon is accelerating the many crises that we are currently having a hard time dealing with. Because, if you believe the cultural scientist Johan Huizinga, then the process of rationalization that characterizes socalled modern societies inevitably goes hand in hand with a loss of playfulness. Rationalization defined: purpose aligned. The 'homo ludens' – a human who naturally approaches his environment in a playful manner – would then have to make space for the 'homo faber' – the rational, working human.

But is it true that we are increasingly losing the ability to play? That would be an inaccurate generalization: the games industry has recently presented record figures. During the pandemic year 2020, sales rose by 21 percent, and some board games sold out for a short time. The fact that the Germans, who are generally considered to be rather serious, host the world's largest trade fair for toys in Nuremberg speaks volumes. And, if you prefer a video game to the classics like Monopoly or Backgammon, you've come to the right place at Gamescom in Cologne. Reviving age-old gaming traditions in the 21st century? Sure, why not have a go at online chess – let tactics meet tech.

Apparently, we haven't lost the desire to play after all. On the contrary. Maybe the stresses of everyday life prove to be a trigger. Ultimately, daily worries are quickly forgotten for a few hours when escaping into the world of play. Games are democratic; they are levelers. If you play well, you might win. But it's not always about winning: when play-acting, for example, expression and emotion count; when playing shopkeeper with your children, the focus changes. A training ground for children, because following rules is an essential lesson too – in play as in life. And it's also important to learn the ability to lose gracefully. Ample reasons to support the importance for society to embrace its game culture and sufficiently develop important life lessons associated with it.

Because whether with or against each other, alone, in pairs, or in a group: no game works in the absence of rules. Ironically, without them, a fundamental requirement for fun is missing. Rules oppose the chaos that presents all around us. In art and design, too, they are only a limitation at first glance. Rules give space – be it in the context of color theory, the golden ratio, or in the form of various other design rules. They are the prerequisite for something new to emerge and for creativity to manifest itself.

What does that mean for us? Maybe that it can be rewarding to open oneself up to more play. As we open that door, we leave it slightly ajar – for that light to sneak back into our lives only to brighten it up ever so slightly.

Are you not a born player or a passionate gamer? You may find that there is something in playing games for everyone: competition and team play, practice and escape, discipline, and imagination. We may not always win. But when we play, we are all winners.



The Mey Story

The Swabian family business Mey plays in the top league of German underwear manufacturers – and does so playing by its own rules. Because Mey thinks vertically and holds the reins firmly in their own hands, from the fabric to the finished product and even the sales counter. With great success. Their 100th anniversary is coming up soon.



"Sustainability is not a trend at Mey, but a longstanding tradition."

Matthias Mey Director of Sales, Marketing and Design

lbstadt-Lautlingen, halfway between Stuttgart and Lake Constance, is a place like many in the Swabian Jura: half-timbered houses, a ski lift, and a traditional inn. Traffic on the B 463 usually only comes to a standstill when a car turns into the only petrol station in town. The fact that it is "always a coat cooler" up here, as the locals say, is very welcome in this record-breaking summer.

Mey is located on the western outskirts of the town, where the underwear specialist has seen record growth in recent years. Early morning, two employees unfold an eightmeter-high poster on the facade of the factory building adjoining the four-storey office building from the late seventies. On it, a woman wearing a slip and a bra. The claim: 'Fancy for Future'. The message can be seen from afar: Mey has its finger on the pulse, and at the same time assumes responsibility for future generations.

Intelligent and sexy, down-to-earth and up-to-date Mey has already attracted attention in previous seasons with its cunning brand messages. In autumn/winter 2021, 'Speaking Quality' referred to the high-quality standards firmly anchored in the DNA of the family business. In the same season, Mey delivered a tonguein-cheek play on words with 'Sense sells'. The textile company also showed a desire for this in the spring/summer 2019 season. Back then, Mey's claim 'Pretty German: Seduction in line with the rules of reason', made it unmistakably clear that anyone still envisaging high-waisted Y-front briefs when thinking of underwear from Germany, is clearly wrong. This kind of messaging was one of Immanuel Kant's favorite topics. The author of 'Critique of Pure Reason' liked to challenge people to think differently. Mey's advertising narrative was more than promotional messaging, it described the company's philosophy and the essence of their products; in other words it defined the brand: Mey is intelligent and sexy, down-to-earth and up-to-date – a balancing act that very few in the industry have mastered.

Mey is an exception in the medium-sized German textile industry. In six years, the company will celebrate its 100th anniversary. And where others complain about slowing sales or feel pushed aside by international vertical brands such as Zara, H&M, Calzedonia and Intimissimi, Mey has been able to grow steadily. The secret of success? Mey manages not only the manufacturing but also logistics, distribution, and sales; 85 percent of the fabrics used in the collection are produced in-house – up here in Lautlingen, between forests and the white Jura rocks.

Matthias Mey looks at the lush greenery through the open windows of his meeting room, which is elegantly furnished





High-quality women's and men's underwear, lingerie, nightwear, and loungewear – since Matthias Mey has been at the helm of the family business; the Mey universe has grown again.

with leather cantilever chairs and a thick, mud-colored carpet. He has taken off his jacket and is wearing a plain black crew-neck t-shirt. In his late forties, he belongs to the third

Not every aspiring designer dreams of a job in the Swabian Alb

generation of the family business. Since 2014, Matthias Mey has been responsible for sales, marketing and design as a joint Managing Partner. His sense of aesthetics is evident in how he dresses and how he aligns all aspects of the brand environment. Beyond that, he also has an impressive grasp of the

companies finances. "Our sales increased by 14 percent from 2018 to 2021." A growth in sales, which is also reflected in the increased number of employees, especially in Germany. "Of our 1,113 employees, 713 work in Germany. In the last six years, we have hired over 100 employees in Germany alone. However, finding good people in the creative field is not always easy."

Apparently, not every aspiring designer dreams of a job in the Swabian Jura. Mey, who shares management with his brother Florian, cousin Markus and financial expert Roland Kull, can relate to this to a certain extent. He returned to Albstadt-Lautlingen from Kreuzlingen in Switzerland eight years ago. Before that, the business graduate had worked for the fashion company Windsor in Switzerland. The return was not easy for him, he admits. "But I had a lot of ideas on how to get things moving here, and in the end, family and the roots of the family business won the argument." One of the first changes Matthias introduced was the expansion and modernization of the product range. The Managing Director's aim was to make the Mey collection more desirable. In 2016, he launched 'mey story', an exclusive heritage collection. Right from the launch of the new collection, the company was able to open doors to retailers such as Andreas Murkudis in Berlin, United Arrows in Tokyo, and Man on the Boon in Seoul.

Although heritage is very important, the family business founded in 1928 does not want to dwell in the past: In 2021, Mey, together with the Peter Schmidt Group, developed

a new brand identity. As part of what was the most comprehensive brand overhaul in 30 years, the underwear specialist received a new logo and redesigned packaging. The concise, well-arranged new packaging design is intended to convey the value and

A new logo and packaging redesign convey the quality of all Mey products

high-quality standards of all Mey products. Series-specific color coding provides orientation. Product certificates, serial numbers and QR codes provide insight into the production chain and product information.

But not only the new look convinces. "We've also reduced the use of plastics: we no longer deliver the classic product series in poly bags but in FSC-certified cartons with a high



Modern technology – but a lot of manual work too. Knitting and sewing are combined under one roof at the factory in Albstadt-Lautlingen.

proportion of recycled material. Different cardboard qualities are used, depending on the product requirements," says Mey, picking up one of the new natural-colored cardboard packaging designs with a clear window revealing the classic white boxer shorts. "In future, our claim and ambitions

FSC-certified packaging instead of poly bags

packaging oly bags box and taking out the cotton shorts from the 'my organics'

box and taking out the cotton shorts from the 'my organics' series. Only one of the many products featuring high-quality organic cotton.

One thing is clear: Matthias Mey also wants to set new personal accents. As a frequent traveler, he discovered a gap in the market a few years ago: underwear that meets his needs on long-haul flights. Consequently, he developed the 'Business Class' series, a small capsule line that has been on the market since the beginning of 2020. Patches made of double fabric with a hydrophilic and hydrophobic upper material are placed on the neck and under the armpits to absorb moisture, lock it in, and thus prevent sweat stains, while silver ions bind odors. Various nude tones make the underwear invisible under a shirt. "Fast-drying COOLMAX fibers with a propeller structure ensure that moisture is regulated," explains the Managing Director, handing one of the undershirts from the series across the table. How are these highly-engineered fabrics created? Matthias Mey suggests visiting the adjacent factory. The sun shines through the skylights and is reflected in the 7,000 shiny needles that dance rhythmically in the circular knitting machines. The passion for knitting has a long tradition in the Swabian Jura. The harsh climate and barren soil, which is only suitable for raising sheep, meant that people turned to other sources of income in the last century, and a growing new industry developed. In addition to knitters like Mey, suppliers to the industry also settled here. The manufacturer of circular knitting machines Mayer & Cie. for example, and the global market leader in knitting needles Groz-Beckert, who are based within a ten-kilometer radius. Such extraordinary short distances are still a locational advantage even today.

Nevertheless, many companies did not survive the change. While the region used to employ 35,000 people in the textile industry back in 1982, today, it is only a tenth. What did Mey do right? "My father was a tinkerer. He developed many fabric innovations from which we still benefit today. This has clearly contributed to us being able to stay put. And then, there was uncle Albrecht." The brother of Matthias Mey's father, who didn't speak English but was a tremendous visionary, trusted his gut instinct. "When the change came, many manufacturers started working for other companies to utilize spare capacity. My uncle refused; he was adamant



A new logo, modern packaging design, and a fresh color scheme: Mey's contemporary brand identity was developed by the Peter Schmidt Group.

that Mey should remain as a consumer brand – one of the key decisions leading to our success today." Importantly, Mey not only believed in his brand but also stayed faithful to its partners: Such partnerships with fiber suppliers, for example, have been formed over decades. Producing predominantly in Mey's own European factories delivers not only high social standards, but also short delivery routes. A circular reuse system for the hangers on which the goods are delivered has already caught on. At Mey, sustainability is not a trend but a tradition.

"We have been using e-scooters for a quarter of a century," laughs Matthias Mey at the end of the tour, climb-

"We have been using e-scooters for a quarter of a century"

ing onto one of the three-wheelers and dashing through the wide corridor of the sewing room, where on weekdays, 220 machines rattle in competition. As

of this afternoon, there will be peace and quiet here – three weeks of summer vacation. This is also a tradition Mey adheres to. Sensibly. After all, it's no secret that a good work-life balance and regular deceleration to relax and unwind can work wonders for one's effectiveness. Consumer brands are often forced to produce their folding boxes on different printing presses. The reason might be that production is split across different factories sometimes even in different countries or continents with varying production parameters.

On-demand production is a common method used to avoid the need for large storage facilities, having the further benefit of allowing spontaneous changes to the packaging design. Color management from GMG ensures that the color always remains the same. In digital, flexo or offset printing, in post-production, and even on different substrates.

WHO SAID IT?

"

The less you know, the more you believe.





When the days get shorter and the woolly jumpers replace the t-shirts, you realize: The chilled rosé from the south of France should give way to a full-bodied Bordeaux. Agreed. 'Pas de problème'. It's not hard to remember the casual elegance of a sparkling rosé.



04



01 Gluggle Jug XL with the typical 'Gluggle' sound, handmade in Great Britain, approx. 59 Euro, gluckigluck.com02 Sheepskin from Tibet: Shansi,55 x 95 cm, 100 mm hair length, 149 Euro, www.skinnwillehome.se03 Vacuum jug: EM77, designed by Erik Magnussen, manufactured in Denmark since 1977,77,95 Euro, stelton.com04 Silent Sofa: Muud, sound-absorbing, 5,890 Euro, www.walterknoll.de05 USB lamp: Panthella Portable Metal, designed by VernerPanton, three dimming levels, 270 Euro, www.louispoulsen.com06 Vase: Calabas H21, hand-blown glass Glas, 84,95 Euro, www.rosendahl.com

Hey, what are you up to?

Creative minds explain





HAMBURG: Daniel Ramirez Perez

I am an illustrator and create images for advertising campaigns, magazines, books, record covers, posters, and even ice cream trucks. So, while the uses of my illustrations couldn't be more diverse, I have a consistent and recognizable style in all my work which is something that is important to me. I work 100% digitally, from the first sketch on the iPad to the final vector artwork perfected on the computer. Sometimes clients approach me with a relatively specific brief, while with other jobs I'm free to bring my own ideas to the table. I also ensure I have enough time for my own work, which I publish on my Insta channel or print as a poster available to buy in my online shop. For me, the interplay of commercial work and free projects is very important – one often inspires the other.





ZURICH: Dafi Kühne

I am a poster designer and book printer from Switzerland. All of my work is created by hand on printing presses from the 1960s. Each poster design is created using a multi-layer process involving several print forms during the creative phase, before going into production. I use both analog and digital tools for this. You will find around 30 tons of new and old tools in my studio in the Glarner Alps that I have collected and used to create my typographic posters: printing presses, lead type, casting machines, digital laser cutters, pantograph milling, and engraving machines to list just a few. My posters have won international awards and are regularly shown in exhibitions around the world.



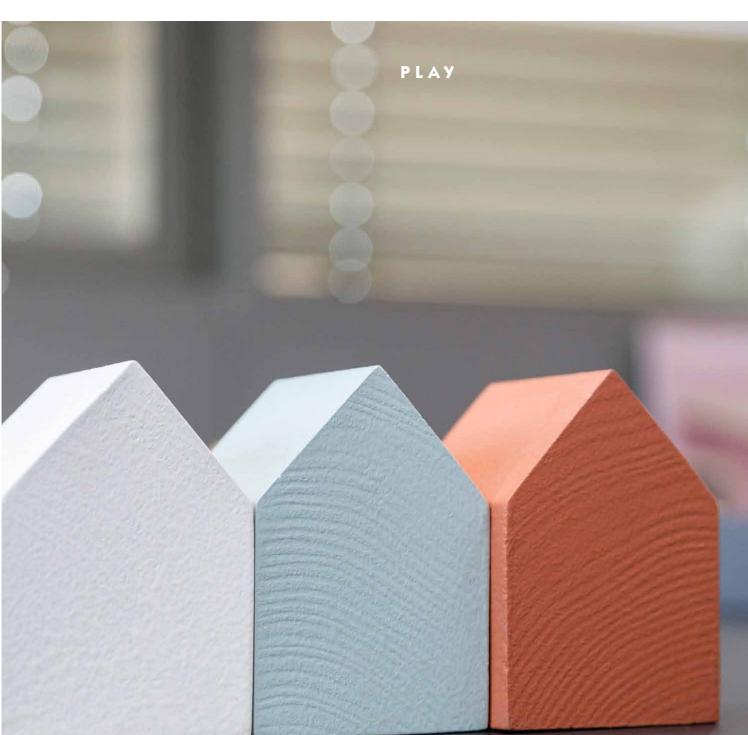
DUBLIN: Veronika Faustmann

As a freelance photographer, I particularly like the variety in my work. One day I'm in the studio shooting high-end designer fashion with a large production team, the next I put on my wellington boots and venture off into the Dublin Mountains to capture documentary photos of an animal shelter for Irish television, for example. I would describe my style as natural and authentic, which in turn is reflected in soft and natural colors. I prefer to work with daylight, enabling me to create the most beautiful color nuances and subtle tones. I just had a German fashion client here in Ireland for a shoot in a nature reserve. The colors of the wild plants complemented the shades of the collection perfectly.



LONDON: Julia Aden

When I got the chance to start my own cake studio, I was clear that I wanted to create an environmentally-friendly business from the start. Organic products and local suppliers are very important to me. Because that's how I can create a better offering to the cake world. We only use very little sugar or rely entirely on the natural sweetness of our ingredients. The Süss Cake Studio also goes its own way when it comes to coloring: seasonal fruit and fresh flowers give our cakes and tarts a natural look. The coloring of our creations is not as vibrant, but they taste all the better for it.



Decorative color patterns: These wooden block houses, with their play of light and shade, show off the full range of color effects.

Color spaces

Caparol's ColorDesignStudio researches, creates and provides information – enabling the right decisions to be made when designing building exteriors and interiors.

he entrance to Caparol's headquarters is spacious. Generous glass, barely any walls, open. At first glance, this seems like a contradiction. After all, the company sells paint, lots of paint. As part of DAW, Caparol is one of the biggest players in the industry with an annual turnover of 1.3 billion euros. The parent company employs almost 6,000 people. It seems customers have plenty of walls.

We are guests at the ColorDesignStudio, where we are greeted with an inviting smile. Apparently, working professionally with color and paint promotes a charismatic personality. However, as such a derivation seems a bit superficial, we get straight to the point: the surface.

Eva Helterhoff is an interior designer and heads the architectural design department. She runs her hand over the red wall in the stairwell and describes what you can not only see but also feel. The paint gives structure to the building – it stretches up from the reception, connecting different levels and work areas. And the surface itself presents its own texture. Several layers of paint were applied, one on top of the other – the result looks like a supersized brushstroke. We leave the red staircase, turn left and are in a tastefully designed meeting room. A glass wall gives us a clear view of the foyer. And the beautiful hills of the Odenwald greet you through the large glass front on the long side of the room. Blinds hint at it, and the norm light lamps on the ceiling confirm it: this room is all about color. And this topic is not only addressed with great passion but also meticulously with great expertise.

Andrea Girgzdies knows exactly what she is talking about. She has been with Caparol for over 20 years, and as a paint designer in the ColorDesignStudio, she is primarily responsible for concepts and trends. Once the interior designer starts to talk about her projects, she cannot stop herself. No sign of routine or boredom. She and her colleagues work on paint color collections, create trend books, visit trade fairs, study research, and, and, and.

Although it has been interesting, we probably haven't really understood half of it. So let's dig deeper and talk about something a bit more familiar: a color swatch. This one is called 3D-System Plus and contains around 1,400 colors. The system is based on colorimetric logic creating a sophisticated guide, aimed at experienced planners, architects, and painters. The parameters in this color space are described with LCH values: light, chroma for saturation, and hue.



Andrea Girgzdies (pictured on the left) is responsible for concepts and trends at Caparol, while her colleague Eva Heiterhoff is in charge of the architectural design department.

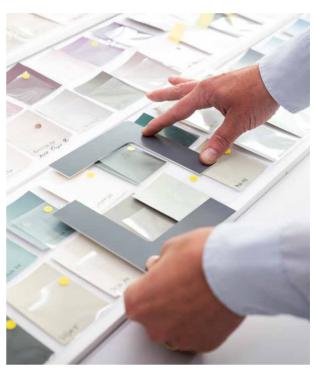
Despite a large number of shades, the color swatch in our hands shows only a small selection of all colors that, in theory, can be reproduced. The violet color pallet appears to be particularly thin. And that takes us to the purpose and function of a color collection. For Andrea Girgzdies and her team, it's all about making the right choices. Violet plays a rather niche role in European interior and exterior design. Research reveals insight into culturallyinfluenced color preferences. Furniture, fashion and architecture always embrace the zeitgeist – but it seems there are strongly anchored culturally-formed opinions when it comes to building facades.

Eva Helterhoff sees more movement in interior spaces. Maybe, she suspects, it's simply because of the renovation cycles. These are significantly longer for outside spaces, where logically, long-term color decisions need to be made. Inside, buildings are somewhat more flexible, and therefore, developers are more open to adopting the latest trends, accepting that sometimes tastes change after just a few years.

To ensure the choice of a color is successful, the ColorDesignStudio works continuously on collections that reflect trends and provide direction with appealing color schemes. A typical example is a project from Caparol France: a curated color wall should inspire and guide clients. The first task was to identify 125 bold and 125 light colors. Using a passe-partout, the individual colors have been arranged so that four adjacent colors can be viewed



We are constantly working on new collections; they reflect current trends and provide direction.



The principle of order: The color cards are arranged in such a way that four adjacent colors create a harmonious palette – one, that also allows for accents.

as a group. Four coherent shades that harmonize perfectly but still allow accents to be set.

A similar project for the Italian market resulted in a collection that allows even more complementary color combinations. The cultural influence in Italy is reflected in a more playful arrangement. Had the exact color tones been arranged as a gradient – flowing harmoniously into one another – it would be much more challenging to choose a color. The nuances would be difficult to assess. That's why color themes or color groups have a clear advantage, because individual tones form the overall picture and are always perceived in context, as a complete design.

What are the tools by which to measure expectations and results?

But is it even possible to make an assured decision based on a color swatch or a specially-created color wall? The responsibility is, of course, immense, explains Eva Helterhoff. And her team is also aware of

that. That's exactly why they would invest a lot of time and passion in preparing such a presentation. For Eva Helterhoff, imparting color knowledge is one of the most important aspects of her job. But what are the tools by which to measure expectations and results? Anyone who courageously got hold of a bucket of paint knows that color has this habit of looking surprisingly different in the morning light or when combined with furniture and fabrics.

Expectation management is, therefore, crucial at Caparol. Anyone who commissions the ColorDesignStudio not only benefits from the expertise and advice. The presentation and documentation are also optimized so that the color choice can be made confidently. According to Eva Helterhoff, every project is defined in a written concept. Understanding the driving factors of a project is crucial, and therefore, asking the right questions is essential to professionally accompany the client in the decision-making process. According to the interior designer, only those who really understand the background of a design can successfully guide a client through the project.

When presenting a color concept, traditional color swatches play a central role. But especially visualizations based on photorealistic renderings give a good impression of the overall look. When it comes to the design of an existing building facade, elaborately edited photos are often the method of choice. Caparol developed its own software called 'Spectrum' for precisely that purpose. Spectrum can create photorealistic images showing what a repainted building will look like. The interaction of light, shadow, and the environment is considered to achieve an overall realistic result. The visualization software is a great introduction to more in-depth advice and complements the classic approach. A slimmed-down but extremely user-friendly version of 'Spectrum' is used by specialist shops and decorating companies for advice. Although, precise color reproduction in printouts is only possible with the extended version at Caparol. The software is already common practice among younger users.



Reliable colors when designing facades: With the help of color management and proofing software from GMG, the colored architectural drawings have become a reliable planning tool. The printed colors correspond exactly with the proposed specification.

No wonder – 'Spectrum' is frequently used in training at many vocational schools.

However, 3D visualization will also in the future continue to be only one component of the presentation. The colorized 2D visuals, printed with GMG's color-accurate proofing solution, are crucial. Andreas Prodoehl is responsible for color management at Caparol. With GMG ColorProof, he can ensure that a printed color visual on the table shows exactly the same color as the color swatch. And this is according to Andrea Girgzdies indeed a typical scenario. "The proof is on the table, and the color swatch is passed around. If a discrepancy was visible here, even in nuances, it would create unnecessary uncertainty when making such important decisions."

When designing or redesigning a property, the color scheme is often the last step of a lengthy planning phase. Nevertheless, all those involved are aware of the responsibility they bear. Eva Helterhoff emphasizes that one's personal taste has to take a back seat. Because, with both residential and public projects, the decision must be made with the inhabitants in mind. This is where the two interior designers from the ColorDesignStudio score points with all their experience. The duo and their team have already managed countless projects. But, one project is not like another; the general conditions, the planners' ideas, and, of course, the purpose and function of the building are always different. In addition to their own experiences, the experts at Caparol also draw on other design studies. The topic 'living spaces' is an great example of responsibility in color design. "This is about design concepts with a special focus on living in old age. In order to design an age-appropriate environment, one has to understand human psychology and perception," explains Andrea Girgzdies. A successful environment enriches not only everyday life

but also facilitates organizational processes. So, how to design a room in a care home to ensure someone who has dementia or a visual impairment feels at home?

What should a room in a care facility look like?

The interior designer explains that the different areas of an accommodation require very different solutions. While the reception area has to radiate familiarity, the corridors should be designed much more stimulatingly. According to the expert, a clear color scheme provides not only interest but also orientation.

In the most recent Caparol campaign, things are much younger. A brightly colored video with a bold rap song sets the pace. But how bold is the business with decorators, planning offices, and investors? Of course, the reason for the rap is to attract attention.

But Caparol feels it is time for the sector to get a makeover. The industry is considerably more complex than the general public would assume. And designers from the ColorDesignStudio agree that it is time to send a signal to that respect.



Black isn't just black. The entirely black color swatch is much more extensive than expected – every nuance counts, especially on large surfaces.



New Colors, New Work: The newly-designed office spaces at Caparol in Ober-Ramstadt are an expression of a modern corporate culture.

With a 125-year history, the DAW group has set its course firmly for the future. Immediately apparent: the new expansion of the company's headquarters complements the old buildings like a logical continuation. The new facade references some of the old features. There is no break, no closed book, and no new chapter. The new and the old rather embody a kind of constant flow. The next step, the fifth generation.

In 2008, Dr. Ralf Murjahn took to the helm. Meanwhile, his father, Dr. Klaus Murjahn embarked on a new challenge only a stone's throw away from the company's premises. He runs an organic farm with cattle, pigs, and chickens. A farm shop is also part of the business, as is a professional kitchen and a small restaurant area. It is apparent: the topic of sustainability is not just a concept for the Murjahns but a reality integrated into their daily lives. Whether in the stables, on the fields, or in the factory. Likewise, the drive for innovation. All owners, past and current, are scientists. The selection of renewable raw materials used in today's production of paint, for example, sounds less like it belongs in a chemistry lab and more like a vegetarian recipe: potato starch, camelina oil, soybean oil...

"History and future go hand in hand at Caparol," explains Andrea Girgzdies during the site tour. This attitude becomes evident when entering the newly-designed 'CreativeFactory'. Andrea describes this space as a meeting place, creative space, or marketplace with its own unique quality. Not to be confused with hastily installed lounges in hip start-ups. Redundant, historic equipment was upcycled. Discarded lockers were laid sideways, stacked and turned into shelves. The sealed concrete floors also exude industrial charm. The concept received an 'Iconic Award' from the German Design Council. The new offices were also furnished with great attention to detail. And meeting rooms have been individually designed depending on their purpose, making it clear what Caparol is all about: People.

> The colors of interior spaces and building facades have defined the quality of their use and appearance for years. With GMG's software, color-accurate visualizations can be created, which help architects, investors, and other stakeholders to make the right decisions when choosing colors.

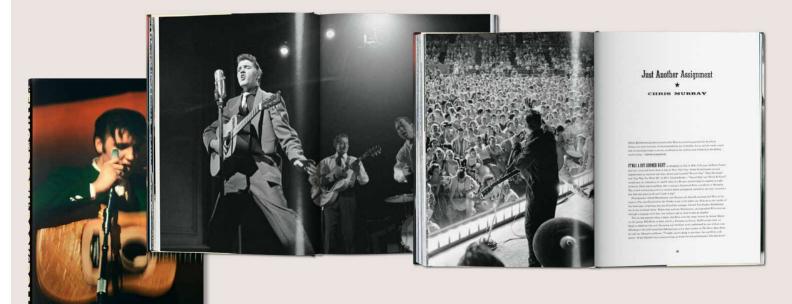
ALAIN BIEBER & FRANCESCA GAVIN THE ART OF PROTEST –

POLITICAL ART AND ACTIVISM

In an era of sensationalized news, artists around the world are observing politics and raising awareness on issues like authoritarian regimes, sustainability, climate change, diversity, and immigration.

The Art of Protest explores the connection between art, politics, and activism today. Understand how over the past decade, artists have been engaging with political and social issues of all kinds and often raising alarms that are missed by politicians. **Gestalten**





ALFRED WERTHEIMER Elvis and the Birth of Rock and Roll "Elvis who?" was photographer Alfred Wertheimer's response when, in early 1956, an RCA Victor publicist asked him to photograph an up-and-coming crooner from Memphis. Little did Wertheimer know that this would be the job of his life: just 21 years old, Elvis Presley was – as we now know – about to become a legend.

Elvis and the Birth of Rock and Roll collects Wertheimer's most remarkable Elvis shots from that magical year, along with a selection of his historic 1958 pictures of the star being shipped off to an army base in Germany. Each chapter is illustrated with a poster by Hatch Show Print, one of the oldest letterpress print shops in America, which created many early Elvis posters in the 1950s. **TASCHEN**

NICHOLAS FOULKES Louis Vuitton Manufactures

Louis Vuitton fosters the idea that an atelier can be a place of fulfillment and individuality. A place where savoir-faire can be learned, respected and transmitted – and innovation nurtured – by artisans who routinely challenge the image of a traditional workshop. In pursuit of regional expertise and artisanal excellence, Louis Vuitton's ateliers span the length and breadth of France and beyond, from Geneva (Switzerland), to Fiesso d'Artico (Italy) and even Texas (USA). It is to these ateliers and the inspiring people who work there that this book is dedicated. **ASSOULINE**

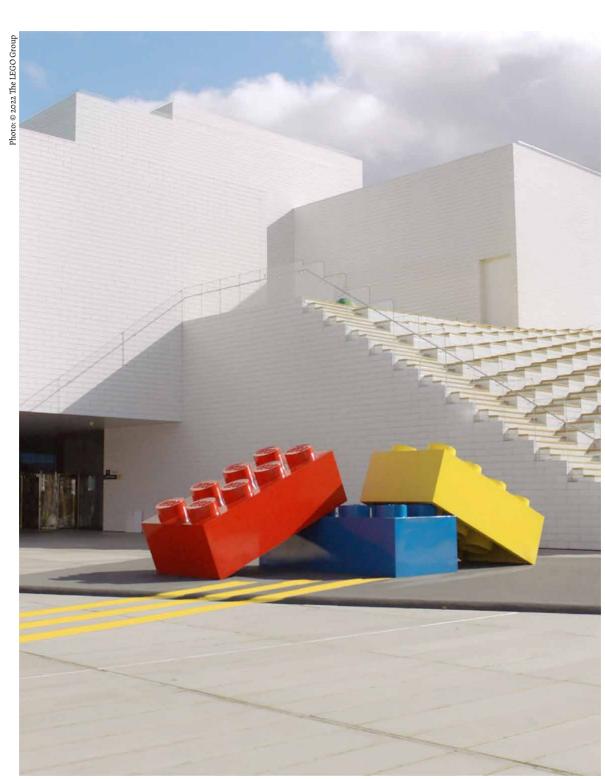






PHAIDON EDITORS 1000 Design Classics

The book showcases celebrated names alongside the new stars of modern design, including Le Corbusier, Alvar and Aino Aalto, Isamu Noguchi, Ronan and Erwan Bouroullec, Lani Adeoye, Faye Toogood, and Lindsey Adelman. This handsome book is the perfect reference guide for design enthusiasts, industry professionals, and all those interested in the creative process. **PHAIDON**



The Home of the Brick: the Lego House in Billund, Denmark.

Brick by Brick 90 years ago, a carpenter in Billund, De

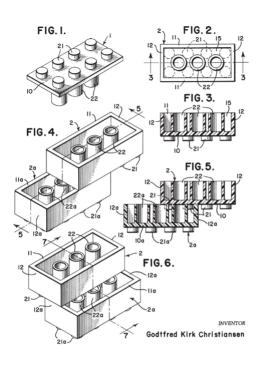
90 years ago, a carpenter in Billund, Denmark started making small wooden toys. The LEGO group was born – something Ole Kirk Kristiansen could not have imagined back in 1932 – and today it ranks amongst the biggest toy manufacturers in the world. With more than 24,000 employees, the family business achieved double-digit growth for the second time in a row in the 2021 financial year, posting sales of 7.4 billion euros.

he Lego success story has a lot to do with tradition, not just in 2022, which is its 90th anniversary year. Starting with design: The shape of the Lego brick has not changed since 1958. It is manufactured with the highest precision to an accuracy of 0.005 mm. This is the only way to achieve the firm fit that securely connects every creation, even when a brand-new brick meets a vintage find from the early 1960s.

Many young parents grew up with these colorful bricks themselves, making it child's play to pass on their own experiences to the next generation. This way, Mum, Dad and their children make playtime with the iconic toy a beautiful, shared experience. Something to build on. Although, behavioral changes and media influences have also left their mark on Lego. But one thing after another. Why are we even playing?

The Danish company wanted to know the answer to that question and reached out to 57,374 parents from Europe, North America and Asia in an online survey. 90% of respondents said play helps their child to develop essential core skills like creativity, communication, problem-solving and confidence. 95% of parents agreed that play promotes family well-being and strengthens bonds. As many as 87% of adults said playing helps them to relax and unwind. However, 84% of the children would like to be able to play more with their parents.

The importance of playing has long been understood in Denmark and the product range has, to no one's surprise, expanded over the years. This includes a number of products designed to conquer new age groups. One example is the not-entirely-new, but recently intensified collaboration with Adidas. An outfit, consisting of shoes, shirts and shorts is inspired by colorful fun and games. The collection is unisex and available from baby sizes to XXXL. This is more than a license agreement with the sporting goods manufacturer. The partnership is more creative and works in both directions: the classic sneaker 'Adidas Superstar', for example, is available as a special Lego edition for fans to wear, and the style icon is also available as a lego set - including the collectible shoe box. Like the original shoe, the Lego set features recognizable design elements, such as the shell toe, the trefoil logo, and the three stripes, of course. However, you need to bring some patience with you because a single shoe is made up of 731 parts.





Recycled plastic is the future: On average, a 1-liter PET bottle provides enough material for ten 2×4 LEGO bricks.

> Big children sometimes have even bigger dreams: If you were wondering, the little camper comprises of 2207 parts.



Fit guaranteed: The shape of today's Lego brick has not changed since 1958.

Incidentally, both the Lego set and the Adidas shoe are described as 'sets for adults'. What initially may sound a bit random is actually a strong concept. These brand partnerships also include film franchises, iconic art and architecture. If a consumer brand is well-loved, it will likely feature in the colorful world of Lego sooner or later. These partnerships enable Lego to reach out to new audiences or become relevant again for 'old' ones. But, of course, brands like Porsche, Ferrari, Marvel, and Nasa, to name just a few, love to be part of the inspiring universe.

No place for boredom. But so many creative ideas result in lots of bricks and, therefore, tons of plastic. Circa 19 billion Lego pieces are sold every year. Now, we have already learned that new and old bricks fit perfectly together, making it easily possible to use and re-use these Lego bricks for decades. Nevertheless, it is a simple fact that producing these toys requires significant resources. In order to achieve its own sustainability goals as quickly as possible, the Lego Group approved an investment package worth around 400 million US dollars as early as 2020. A significant proportion of these investments flow directly into product development - waste-free and CO2-neutral processes and the circular economy. In addition, the company wants to make all its packaging sustainable by 2025. The playful teaching of sustainability to children should also play an important role. "As a company, we look to children as role models and therefore take their calls for more urgent action on climate change very seriously," said Niels B. Christiansen, CEO of the Lego Group. With investments in wind power, the group has been offsetting 100% of the electricity used to manufacture Lego bricks with electricity from renewable resources for several years. In turn, the wind turbine Lego set – based on the example of the wind turbine manufacturer Vestas – is designed to inspire the next generation.

In 2018, Lego introduced new elements like leaves, bushes and trees. These products were made entirely from plantbased plastic – in this case, from sugar cane. Since then, the first prototype made of recycled plastic has been presented. It's not easy to meet the high demands in terms of quality, safety and experience with alternative materials. In particular, the so-called adhesive force – the solid connection from one brick to another – presented real challenges. This is probably one of the reasons why Tim Brooks, Vice President of Environmental Responsibility of the Lego Group, describes the prototype made of recycled PET as a real breakthrough. A team of 150 people takes care of sustainable solutions and has tested more than 250 variations of different PET materials and hundreds of other plastic mixtures in recent years.

One of the challenges was the demands on durability. Finally, a material composition was found, which has



Classic with Lego stud design: A somewhat different 'Superstar' from the Adidas X Lego collection.

> Everyone is Awesome: Matthew Ashton, Vice President of Design is proud of the clear statement and the values that Lego stands for.





since been patented. However, it will take some time before the bricks made from recycled material are ready for the market.

Another initiative shows how the Danish company thinks: With 'Everyone is Awesome', Lego celebrates diversity under the rainbow flag symbol. Employees who identify with the LGBTQ community are actively supported to avoid any kind of discrimination in the workplace. But Lego also wants to take responsibility outside of its own 4 walls and, together with various organizations, the group is committed to sensitizing children to topics such as inclusion and empathy.

For Lego, of course, flying the flag also means that the rainbow colors are given the right platform with a special Lego set: 11 boldly-colored mini figures in front of a rainbow background. Matthew Ashton, Vice President of Design created it himself and says, "This is one of the sets I'm particularly proud of. This clear statement makes me proud of the company I work for because it shows our attitude toward issues like these. I'm happy to have had the opportunity to create something that conveys pride and solidarity with our employees from the LGBTQIA+ community. It signals to the world what we at the Lego Group stand for and that we really are inclusive to everyone because we believe creativity is for all. Something we definitely live by. Everyone is special. We all have a right to be accepted, to be loved, and to be creative too. With this attitude, we want to show that we care about everyone."



The software from GMG ensures perfect color on Lego packaging, even when produced with varying materials. The printed motifs consistently reproduce just as colorful as the original bricks themselves.







Numbers person, navigator, team player

The affinity with numbers was probably instilled in him by his father – he was a business mathematics teacher. But it's not just numbers that fascinate Holger Sigloch. "I'm keen to understand the business," he clarifies and can't help but smile.

His level-headed manner, open demeanor, and friendly smile all highlight his natural soft skills. Not bad for a numbers man, the author thinks and instinctively tries to pin him against the ropes. Spoiler: the search for the disarming left hook is unsuccessful. Holger Sigloch says about himself that, at heart, he enjoys home life. The Swabian accent gives away where home is. Although, looking at his CV, you wouldn't think so: Holger has spent almost his entire professional life abroad. USA, Slovenia, Malaysia, Belgium, and Portugal. And yet, on closer examination, the dots seem to connect again. The companies he has worked for fit his professional, downto-earth nature: he spent about 12 years with Boss and 15 years with Bose. Not only are the two companies' names confusingly similar, but they are also both strong brands, rich in history, and known for quality you can trust. Holger Sigloch's calm nature seems to have a system.

To understand Sigloch's role at GMG, one must think bigger than accounting and vigorously push aside all prejudices often associated with the profession such as being inflexible and uninspiring.

Holger Sigloch is someone you'd trust, and consequently, you'd have confidence in him to deliver. He started at GMG almost two years ago. "That was just before the first corona wave in April 2020. Traveling was suddenly impossible, so I started working from Portugal. There was definitely a lot of trust involved," Sigloch recalls. In the meantime, not only has he moved back home, but his area of responsibility has also grown considerably. He sees himself as a partner to all departments. The close exchange with the sales team is crucial for him, and it goes without saying that the HR department is in good hands with him. After all, Sigloch is someone who can listen and navigate sensitive situations sympathetically, avoiding possible misunderstandings. He explains how he sees controlling. "It's less about controlling," says the controller, "and more about guiding and steering." Sigloch also finds another task particularly exciting: continuing to develop and strengthen GMG's corporate culture. A topic he

has been involved with before. Working on what is part of the business' DNA as a relatively new employee is ... that's right: it is a matter of trust. What makes GMG so unique is crystal clear to Sigloch: "The foundation is honesty and quality." Both owners are just good guys. And both Weihing brothers care about the well-being of the employees. "I am in regular contact with all managers as we need to nurture our culture continuously." That doesn't happen overnight; something the 'more-than-a-numbers-person' is well aware of. It seems obvious that Holger Sigloch is prepared to go the distance. A successful career in several countries and 13 marathons is what the good-humored hobby runner can look back on. He's arrived.



Moritz Carstens, Creative Director and Ipek Molvali, Managing Partner of Mutabor Packaging in Hamburg.



he start position could be worse: As a leading design agency, the company has made a name for itself far beyond Hamburg. With corporate designs for big brands, trade shows and retail, the content and packaging agency Mutabor has been doing pretty well since 1998. Suddenly, the packaging unit wanted to stand on its own two feet as Mutabor Packaging GmbH. As an independent company. So, it's getting serious! Does that mean the fun is over or is the real game just beginning? Ipek Molvali, the Managing Partner, makes it clear: "We are One Mutabor. Different specialists work closely together under one roof. This is how we differentiate ourselves in the packaging industry." Mutabor sees itself as a 360° design agency and has always looked at a brand from every imaginable perspective. According to the ranking of the specialist magazine Horizont, Germany's largest independent design agency is not only active in packaging design but also in the disciplines of branding, digital, spaces and content.



The iconic Adidas shoe box from 2001. "The design still looks fresh today," says Moritz Carstens.

Lyst Bioscience didn't launch until September 2022. The packaging was developed 'digital first' and comes with animated online graphics.



Molvali emphasizes the importance of their interdisciplinary culture and way of working.

Not only designers work on different projects. It's not unusual for a production technologist and a consulting team to be on board, but a historian would be a surprise to most. Mutabor Packaging wants to take a more holistic approach. But is it necessary to structure the business as a separate company? "Well," explains Creative Director Moritz Carstens, "packaging is nothing new for Mutabor. However, creating a separate company is a clear statement of intent to focus on this segment. The 360° approach is retained. We are and always will be – Ipek already mentioned it – One Mutabor." However, according to the Creative Director, we can address the packaging market much more focused as an independent company.

So, Mutabor Packaging is not starting from scratch. Last year, the packaging team generated a seven-digit turnover. The portfolio is unsurprisingly impressive with many well-known brands on the client list. And Moritz Carstens has plenty to say about all of the agency's projects. For him, good packaging is always part of the brand's narrative. "Packaging has to tell a story," says the experienced designer. The iconic Adidas shoe box is a project the agency was excited to work on back in 2001. The design is still looking fresh after more than 20 years. In fact, as Carstens explains: "The striped box is highly recognizable and is perceived to have been there forever – in other words, it has become part of the brand story."

Such continuity of appearance is exemplary, and achieving a consistent brand color is naturally critical. In general, color is a huge topic when it comes to telling a brand's story, explains Carstens. Although the rigid corporate designs we used to create are now often rethought and interpreted more freely – partly due to the digital transformation. Today, businesses should develop brand color schemes instead of a single brand color because a unique combination of colors can often represent an identity even better.

'Transformation' or the keyword 'change' are firmly anchored in Mutabor's make-up. Even the agency name

describes this mission – Mutabor means something like 'the desire to change.' In the hands of a creative, brands and design are vehicles for transformation. Ipek Molvali explains: "We want to enable companies to make change tangible."

'Transformation' or the keyword 'change' are firmly anchored in Mutabor's make-up.



After work or in the coffee break? The Mutabor Café in Hamburg-Altona is always a good meeting place.





The Mutabor packaging team may not be complete on this sunny afternoon, but they are in the best of moods. Pictured from left: Anne von Erhardt, Art Director; Moritz Maack, Designer; Angelina Simon, student work experience; Lasse Lemster, Senior Art Director; Carolin Stiller, Art Director.

Lara Resch: Art Director and Sustainability Designer.

That sounds like a good concept – but maybe a bit complicated. So Molvali adds: "Mutabor is also the magic word from the fairy tales Caliph Stork by Wilhelm Hauff." There's a thought. Perhaps the magic of the methodology lies in the combination of both stories. The seriousness with which Moritz Carstens and Ipek Molvali go about their work demonstrates the conviction that intelligent design can initiate lasting change. And all this with the playful ease of Hauff's fairy tale character.

The playful yet professional approach – is believable immediately when talking to the agency managers and the team.

Accepting the responsibility of our work.

For Ipek Molvali, the fact that some more unconventional ideas not only impress during the presentation but actually make it into production is a clear testament to the trust the agency enjoys from its clients. Carstens adds that making a difference is also possible with big brands – especially when it comes to sustainability,

which is much more than a label for the agency. Mutabor wants to take responsibility for its work. Not an easy task. Something the creative understands, despite not being satisfied with the relatively small steps of the big brands, but he is aware of the leverage of their extensive reach. When asked, Carstens explains the dilemma designers, who are willing to change, must come to terms with. He outlines the perspective of a design attitude is consistently shaped by sustainability. "You can only achieve 100% in the niche," he sums up, putting the effectiveness of this approach into perspective. The will to change is ethically undeniably correct, but doing this without compromise is difficult to put into practice. In all reality, only start-ups or regional brands are able to do so.

As important as these niche players are, the overall net effect of a small change by a global brand selling huge quantities is logically much more significant. The rejection of plastic foil or the use of innovative recycled materials by these big brands not only ensures material savings but successful implementation will also set an example for other brands to follow. Therefore even a small change can make a huge difference. For Mutabor, this kind of pragmatism is neither an excuse nor greenwashing. Instead, recognizing and acknowledging such facts is part of Mutabor's mission: "The desire to change, the energy of a positive transformation, the translation of this energy into outstanding design – that's what drives us," reads the website. And change is a process, says Moritz Carstens.

In order to not only initiate change on the customers' side but also to keep things fresh internally, the agency is in constant contact with other creatives. Mutabor has



Promotional packaging for Bahlsen: The 'Eye Candy' concept stands for less sugar in the biscuit and offers all the more for the eyes.



Eight artists and illustrators gave the Bahlsen special edition packaging their own look. When unfolded, the boxes open out into works of art.

created a network with former employees, for example. But what are the big trends in packaging? Even if the management duo does not spontaneously name one hot thing,

The mega-topic 'storytelling' is a central component of all marketing activities and also plays an essential role in packaging.

it is clear that almost everything at Mutabor revolves around the brand or – maybe more accurately – evolves from it. The mega-topic 'storytelling' is also a central component of all marketing activities and plays an essential role in pack-

aging. But what story can packaging tell? Ipek Molvali organizes the brand's touchpoints: branding, digital, and unboxing must be seen in context, and that's why storytelling always goes beyond packaging. The example of Bahlsen is what she means by that. The traditional brand has a long and successful history. The company's recipe for success? Bahlsen has always been open to new things and has pushed the industry forward with countless innovations. Also, in terms of branding. Starting with the term 'Keks' – which is the result of the pronunciation of 'cakes' translated into German. When it comes to ingredients, Bahlsen prefers to lead and has optimized its recipes with an alternative for refined sugar. This has inspired Mutabor to develop the 'eye candy' concept, which transforms sugar from the cookie into visual candy. Eight artists and illustrators interpreted the idea

and gave the special edition its own look. That's something to be proud of: when unfolded, the boxes open out into works of art – far too good to throw away and all the more sustainable when admired as a picture on the wall. And the cookie? It tastes just as good with fructose instead of cane sugar.

The construction of the artistic Bahlsen folding box with the distinctive TET emblem is based on a design from 1904. Derived from an ancient Egyptian hieroglyph, the abbreviation "TET" stands for 'forever'. It is still considered a seal of quality today, as the TET pack was the first carton pack that could keep the biscuits fresh for much longer.

Such historical references are a gift for Mutabor. But younger brands can also tell exciting stories, as the example of yfood shows.

The soft, light branding stands for conscious nutrition with essential nutrients. The pastel colors and the contemporary logotype are immediately likable and express a new design philosophy in packaging: 'digital first'.

For the creatives at Mutabor, digital sales channels are at the forefront of the POS landscape. And yet, to complicate matters even more, online comes in variations too.





Brand book for a visually agile brand: clearly identifiable design, open to future requirements.

yfood positions itself as the 'nutrition of tomorrow'. Mutabor (Patrick Schröder, Senior Art Director and Michael Gollong, Executive Creative Director) visually revised the brand in order to open it up to a broader audience.

A brand's own online shop offers completely different possibilities compared to the big platforms such as Amazon. The immediate environment on the digital shelf definitely looks different from that of a brick-and-mortar retail store. A fact that is reflected in the design. Legibility, color scheme, packaging material – digital channels require a completely new way of thinking.

From a design point of view, print production is often no longer the starting point of a packaging project but rather an adaptation of a digital concept. This does not make the technical challenges for prepress any easier.

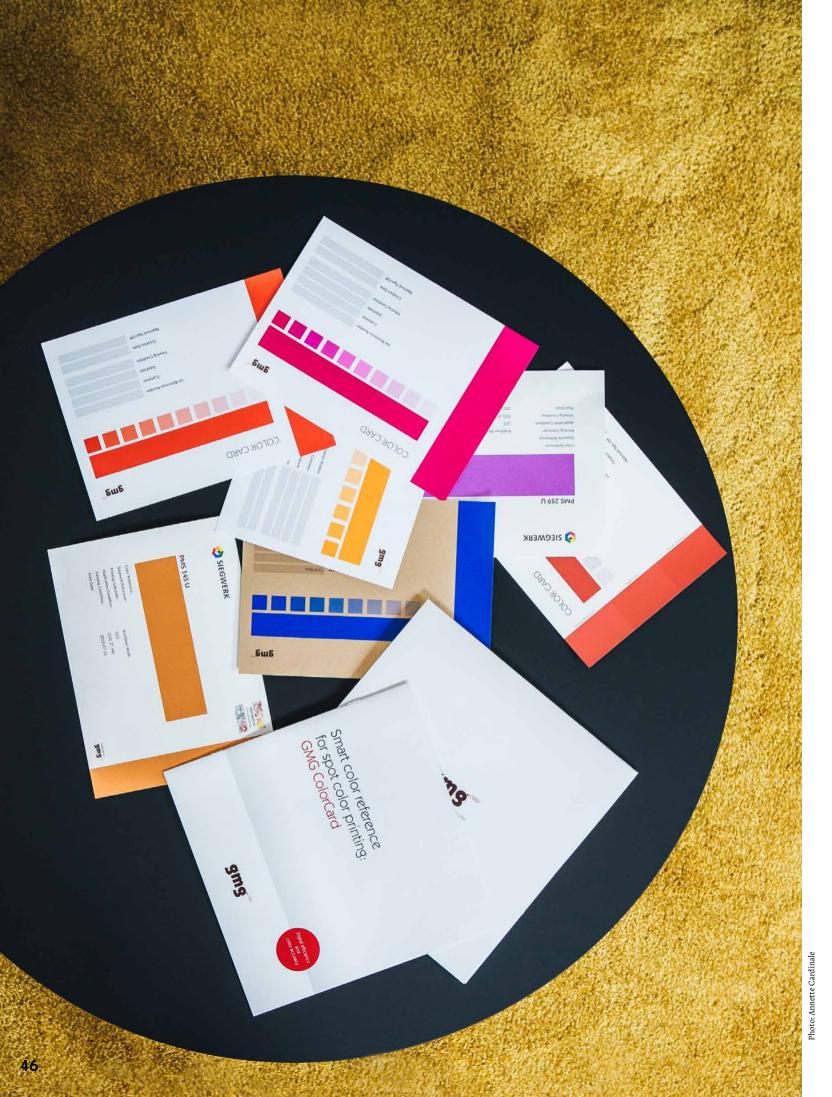
Print production is no longer the starting point of packaging but the adaptation of a digital concept The definition of special colors, suitable printing processes, and other technical parameters suddenly play a secondary role in packaging design.

It is similar with haptics. Elaborate embossing and special effect finishes offer no benefits online as purchase incentives.

The unboxing moment is all the more important today, emphasizes Moritz Carstens. If packaging is only physically experienced at home, designers have to ask themselves other questions: Can the expectations created online be met when the product is delivered? How does packaging feel in customers' hands?

High-quality print production or a special material can't say 'buy me!' in the online shop. Instead, 'love me!' at home. As part of a holistic user experience, packaging is now more than ever a brand investment.

> GMG's color management ensures that creative packaging designers can always rely on their color concepts being reproduced correctly in print production. Whether in digital, flexo, or offset printing – the software from GMG enables consistent colors across all processes.



House of Cards

Siegwerk is one of the world's largest printing ink manufacturers. Developing inks that are consistent with the original target color, even when printed on different white or brown cardboard, requires not only a trained eye but also digital know-how. The team of colorists, led by Melanie Frey and Fabian Rettinger, has both.

TrueColors: Melanie – according to your business card, you are responsible for application technology at Siegwerk. That sounds pretty abstract. Do you have anything to do with color yourself?

Melanie Frey: Well, I'm the interface between the customers – i.e., the printers – and our development and quality assurance teams. Hence, color is always a topic, even if I am not personally responsible for creating or evaluating colors and inks. In the color department of the Paper & Board business unit in Büdingen, Germany, we have a team of six who take care of the ink recipes.

What exactly does coloristic mean?

Fabian Rettinger: We create and adapt color recipes for all shades of inks. This means we develop inks – often based on the Pantone color chart – for a specific substrate, such as a corrugated board. It always depends on the printer's and their customer's requirements.

So, the brands set the tone?

Melanie Frey: We look almost exclusively after the printers. But of course, in the end, it's all about the requirements of the brands. And naturally, we want to meet the brand's expectations.

Results can vary greatly depending on substrates. So, is it all about getting the best possible outcome? A question of reference?

Fabian Rettinger: Exactly. That's why we produce color cards. With these cards, we can show everyone involved what the color reference looks like on a specific substrate. The color card is the binding reference for the best possible match of a color. It is used to check the result on press, ensuring it is within set tolerances.

Melanie Frey: That's why we provide a relatively large number of cards. If a print run is split over eight machines, we typically require several color cards. And this is where digitally-created cards present a considerable advantage. Once we have worked out a color tone, with GMG ColorCard we can simply print identical cards eight times. This is much faster than a conventional ink drawdown, each having to be manually cut out, glued and labeled, etc.

Color reference, color consistency, digital efficiency – that all sounds like GMG. Nevertheless, GMG ColorCard was only recently launched. What does GMG's Head of Research and Innovation has to say about that?

Jürgen Wurster: At GMG, we have several color scientists and an entire ColorLab team dedicated to these issues, and of course, color has been our topic for more than three decades. For example, we have developed our own color prediction modeling designed to predict color behavior, or rather, overprint behavior on different substrates. Our modeling software even allows us to display different ink densities enabling the accurate simulation of production tolerances. Some of this technology is driving GMG ColorCard.

Why have printing ink manufacturers such as Siegwerk not explicitly been addressed so far?

Jürgen Wurster: Our roots are in prepress. That's where we have earned our reputation. While we have exchanged views with ink manufacturers from time to time they have never really been our users or our typical customers until we realized that our technology can actually deliver solutions to some of their challenges. As obvious as it seems today, with GMG ColorCard we have addressed a completely new customer group for us.

Who had the idea to develop GMG ColorCard?

Jürgen Wurster: The impulse came from a customer. The company was already using our software and proof media. Many refer to solutions like GMG OpenColor as a Swiss army knife because it can do so many things. But getting the most out of it was beyond most users' capabilities.



Fabian Rettinger, Head of Coloristics Paper & Board (pictured left) and Melanie Frey, Regional Application Technology Manager Paper & Board, both from Siegwerk, lay their cards on the table: "We were definitely able to simplify our processes with GMG ColorCard."

A specialized solution was therefore needed. Did GMG also have contact with Siegwerk during this phase?

Jürgen Wurster: Yes, Siegwerk was one of our first contacts. At that time, our team was in lively exchange with the team of colorists. We listened a lot and accordingly learned a lot about their processes. Delivering the right results was one thing, but it was also about making the software much simpler to use.

The GMG ColorCard user interface is very tidy, almost basic. Is that a model for other solutions from GMG?

Jürgen Wurster: Yes and no. Usability is an important topic for our users and for us. However, GMG ColorCard is – unlike other GMG solutions to date – not a Swiss army knife. The user experience was specifically tailored the creation of digital color cards resulting in a very straightforward user interface.

What was the development time for GMG ColorCard?

Jürgen Wurster: Thanks to the agile working methods of our interdisciplinary project team, we were able to develop the solution relatively quickly. We approached the topic of usability in particular in a very focused manner: we wanted to understand exactly how a company like Siegwerk works in this area.

It's a good thing that the Head of Coloristics is with us. How well did the GMG development team listen? How do you rate the result as a user?

Fabian Rettinger: We were definitely able to simplify our

processes with GMG ColorCard. At the moment, we are still running parallel production – meaning we create both manual ink drawdowns and digital color cards side by side. However, more and more customers switch to digitally-created cards from GMG. The intelligent software not only ensures precise results, but the cards are also infinitely repeatable. The printer automatically measures whether the color values are correct. The card is only issued if everything fits. I'm quite critical and have often double-checked manually – the result was always spot on. Production is effortless, almost incidental, and we can always rely on the quality.

Jürgen Wurster: What surprises many: a manually-created color card is not only very time-consuming to produce, but it is also not always of the same quality. The amount of ink transfer on the small proofing machine is difficult to control. It really is a challenge to create ten identical ink drawdowns by hand, or to reproduce identical cards six months later.

Melanie Frey: The digital repeatability and the tight tolerances of GMG ColorCard are definitely key qualitative advantages over manually-created cards.

Speaking of repeatability – would that also work across locations? Work out a color recipe in Büdingen and, if print production runs in the USA, create a color card there from the CFX file sent?

Melanie Frey: There's nothing stopping us from doing so



"With GMG ColorCard, we benefit from digital efficiency and the customers also have added value: different layouts, production tolerances, company logo – and, above all, the certainty that the color is right," explains Fabian Rettinger.



Color cards – anywhere, anytime: "with color measurements of the target color printed on the production substrate to hand, digital color cards can be created in no time," says Jürgen Wurster, Head of Research and Innovation at GMG.

in principle. Although, as of today, we have not yet implemented it. We currently have a system in Büdingen and one in England. Other locations will certainly follow, given the positive results. Joint global processes will be an interesting model to explore soon.

When you hold the digitally-created color card in your hands for the first time, it looks very clean compared to the manually-created ones. Actually an advantage – but also unusual. What about acceptance?

Melanie Frey: There is indeed a visual difference in appearance. As a paint manufacturer, we have a duty to advise our customers. The most important argument: the color fits (laughs).

Jürgen Wurster: I think it's normal that there are a few reservations about digital innovations. Fabian also mentioned that he frequently double-checks results.

Melanie Frey: We can clearly state the advantages of digitally-created cards. It's always convincing when we point out, for example, that the lightfastness of GMG Color-Card is far superior compared to manually-created color cards.

Are color cards archived?

Melanie Frey: Yes, for example, for repeat orders. However, red or violet cards produced manually can change color surprisingly quickly. It definitely matters how the cards are stored.

What are the next steps for Siegwerk with GMG Color-Card? Will the analog color cards be phased out?

Melanie Frey: Our goal in the Paper & Board business unit is to get more customers enthusiastic about the digitallycreated cards from GMG. We are indeed very pleased with the quality of the GMG solution – notably, when compared to other solutions we have tested.

Fabian Rettinger: I can confirm that. We had been using a competitor's solution for almost two years, which our team never liked to use. The user interface was very complicated, and even worse, the entire process took much longer than a manual ink drawdown. With GMG Color-Card, we benefit from digital efficiency and the customers also have added value: different layouts, production tolerances, company logo – and, above all, the certainty that the color is right.

Jürgen Wurster: The benefit of having a reliable physical color card as a precise color reference – both at the printer and in the hands of the brand owner – is what makes GMG ColorCard so appealing to me.

Many thanks for the interesting exchange!

Melanie Frey: Pleasure. Fabian Rettinger: Thank you too. Jürgen Wurster: Likewise! Great insights, thank you.

SELECTIVE FACTS



Orange – what came first, color or fruit?

Before the beginning of the 16th century, the color orange, as we know it, did not exist in Europe. Or rather, the color existed, but it had no name. It was known simply as reddish-yellow. That changed when Portuguese merchants brought the first orange trees from Asia to Europe. The Sanskrit word nāraṅga became naranja in Spanish, laranja in Portuguese, and orange in English, eventually retrospectively becoming associated with the color. (domestika.org)

Red pens make teachers stricter

Teachers traditionally mark exams in red. An experiment conducted by Abraham Rutchick of California, shows how much this custom affects the psychology of the school or University. 133 volunteers agreed to correct two paragraphs of an essay riddled with spelling mistakes. Participants were asked to mark any mistakes, with Rutchick giving them either a red or blue pen. Lo and behold: Those who used a red pen found an average of 24 errors – five more than those with a blue pen. (alltagsforschung.de)

Cool: The whitest white (to date)

Scientists at Purdue University in West Lafayette, USA, have produced a white that reflects 98.1 percent of the light that hits it. It consists primarily of barium sulfate, a white pigment that has been used since historical times. One trick the scientists used was to prepare the barium sulfate with particles of different sizes. How well these granules reflect the light depends on their size. A variety of sizes also increases reflectivity across the spectrum of light. Even infrared light is emitted, the researchers write in a statement. Therefore, an area painted white can become cooler than its surroundings: in tests with small areas, the temperature difference was around ten degrees Celsius at night and four and a half degrees in full sun. (spektrum.de)

ALTERNATIVE QUESTIONS

Amy Young Marketing Manager



What is your favorite color? It changes, but I seem to have a lot of dusky pink, navy and teal green in my house at the moment.

What would you do if you won the lottery? Become a property developer.

Do you have an idol? Not an idol as such, but I really admire the wit of comedian, James Acaster.

Something most colleagues don't know about you: I represented Great Britain in tchoukball when I was younger. It's a bit like handball but with a rebound net.

What color describes you best? And why? Probably green, as I like gardening and being outdoors.

In what area of your life are colors most important? In my home. The colors on the walls and surroundings have an important effect on your mood. I tend to go for bold colors but in a muted tone. Farrow & Ball paints are my favorite. How do you spend your time when you are not at GMG? Playing football or pottering around the garden.

If you could have dinner with anyone, dead or alive, who would it be? I think Michael Palin would be both funny and really interesting. He could give you some great travel tips too.

What was your first job? Serving cakes in a bakery by the Norfolk Broads when I was about 16.

Your favorite song is: This changes quite often too but a classic is: Arctic Monkeys – Do I Wanna Know?

Reading or Netflix? Netflix.

If you could start your dream journey tomorrow, where would it lead you? The nature in Costa Rica looks amazing, and I'd like to take the family to Mexico. So perhaps I could combine both.

What TV show are you currently watching? The Sandman (on Netflix).

Your favorite season is: Spring – As soon as the bulbs start to appear I get excited for some greenery and warmer weather.

Singing or dancing? I can often be found singing along to tunes on the radio. **City or countryside?** Countryside walks are good for the soul.

Are you a morning person or a night person? I've never been a morning person, but nowadays I'm neither as I like sleep too much.



GMG ColorProof 5.14

Efficient, accurate and reliable proofing

- With this version, users benefit from improvements to the Manual Job Manager for remote proofing and from the Job Preview in combination with dynamic ProofStandards of GMG OpenColor.
- New sample files for simulating cardboard: The Paper Structure Simulation function allows users to simulate on GMG ProofMedia

the texture of materials with visible patterns, such as recycled paper, corrugated board or textiles.

- With the Calibration Creation Wizard it is now possible to create custom calibration sets for Roland LEC2 printers. The wizard also quickly and easily creates the corresponding output condition for GMG OpenColor.
- GMG ColorProof fully supports multicolor control strips defined by official print standards, i.e. Fogra MediaWedge Multicolor 5C, 6C, 7C, 8C and IDEAlliance ECG Digital Control Strip 2019. With an Epson proofer and an integrated ILS30 measuring device, the strips are now automatically measured and a verification label is printed on the proof.

GMG OpenColor 3.0

Patented spectral data profiler for color-accurate prediction of the interaction between colors and the substrate

Simple creation of precise proof and separation profiles

- Users of GMG OpenColor benefit from a fundamental performance improvement in this version. The updated ColorEngine enables proof profiling that is up to 15 times faster, while at the same time reducing the profile size by over 90%.
- Always up to date: GMG OpenColor automatically informs you when a new service update is available. You can then install the update directly via the application in a few clicks.
 - MX4 profiles, CMYK-ICC and LAB-based CGATS files can now

• With its solution variants, GMG

ColorServer now offers exactly

the right tools for every customer

segment - digital, conventional,

multicolor or hybrid. Plus, GMG

OpenColor is always on board.

GMG OpenColor and are then available as spectral characterization data. With the new optional CxF

be imported into

- With the new optional CXF export function, spectral spot colors can now be exported in CxF format.
- With the GMG ColorBook option, custom color swatches can be created to demonstrate real spot color reproduction. Both in digital printing and conventional printing with a fixed color set.

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option, custom color swatches

can be created to demonstrate

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Both in digital printing and in

conventional printing with a

fixed color set.

- Paper structure simulation for proofing with GMG ColorProof: This advanced proofing function simulates the texture of materials with visible patterns, such as recycled paper, corrugated board or textiles on GMG ProofMedia.
- Prototype Proofing from GMG: To expand the GMG Proofing Portfolio GMG ColorProof and GMG OpenColor support the creation of prototypes with the Epson SureColor SC-S80600 and the Roland LEC2 on production substrate. Now even the most demanding packaging designs can be reproduced.
- Smooth synchronization between GMG SmartProfiler and GMG OpenColor increases work efficiency and helps users to maintain a clear overview and avoid errors.

GMG ColorPlugIn 1.4

GMG ColorServer 5.3

The solution for automated

color conversion ensures

optimal color results and

now also for multicolor

stable printing processes -

Color conversion with color management from GMG in Adobe Photoshop

- Color Conversion: now supports custom Multicolor profiles.
 MinDat tools analysis the shacking
- MinDot tools enable the checking and adapting of minimum tonal values in flexo printing.
- With ChannelRemover individual channels in one image or one selection can be removed or compensated.
- ChannelChanger enables the replacement of CMYK channels with special color channels.
- GMG OpenColor Preview generates a color-accurate preview of process and special colors right in Photoshop.
- A new Photoshop palette has been added.
- The ChannelExtender for RGB enables Multicolor Separation.
- Users are receiving automated update notifications.



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