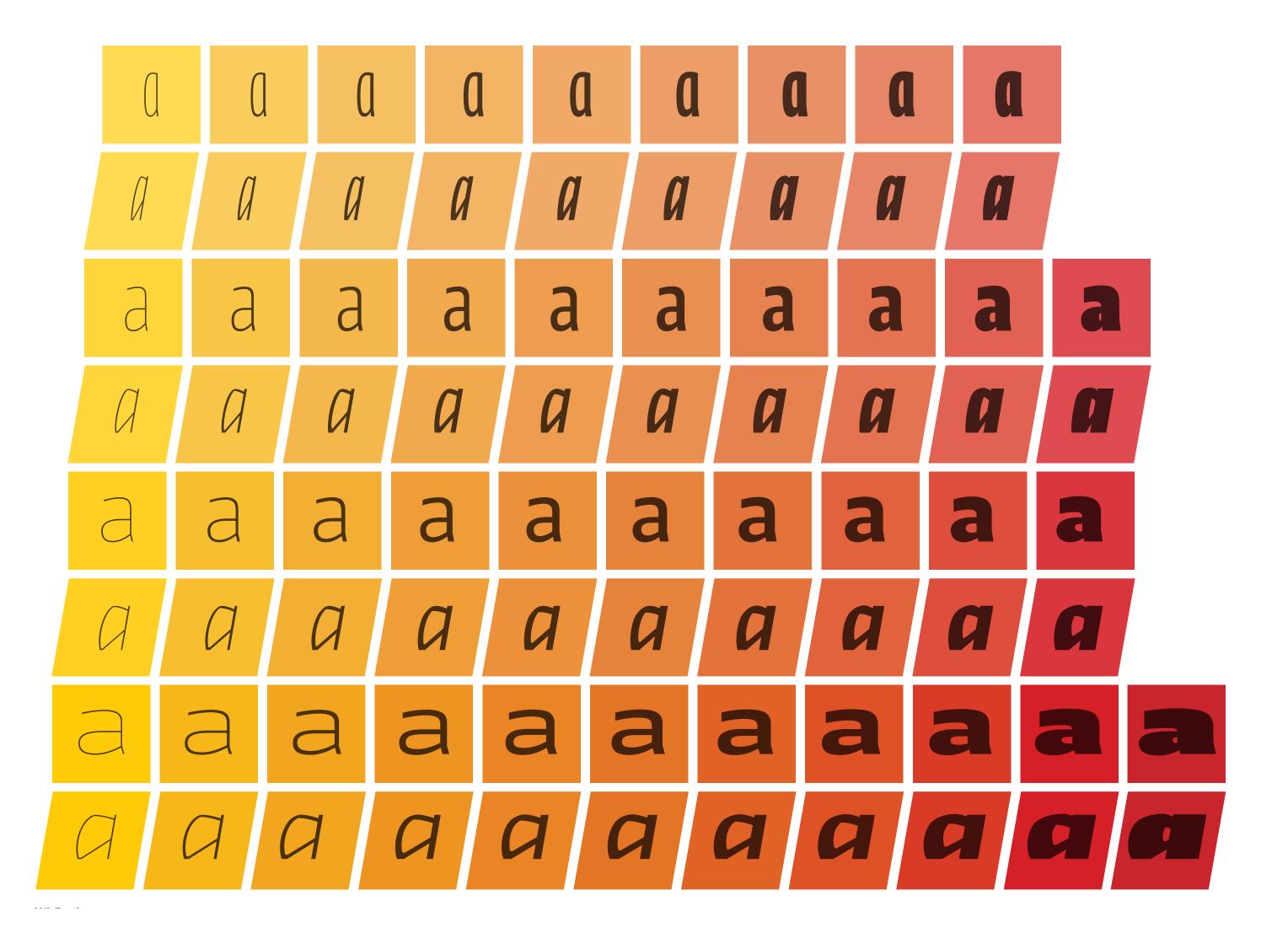
#### Typotheque presents:

# Greta Sans

The complete type system for online and offline publishing.

#### Styles

Greta Sans is a powerful toolbox capable of dealing with the most complex typographical situations. It explores a multidimensional continuum of possibilities. Greta Sans comes in 10 weights which, combined with its four widths (Compressed, Condensed, Extended), create a tremendous range of possibilities. Even the intervals between the styles are an integral part of this unified typeface system.



#### Language versions

Available for Latin alphabet, and also Cyrillic, Greek, Arabic, Hebrew, Thai, Devanagari, and Korean support makes it truely an unprecedented type system, supporting over 300 languages, and over 2 billion speakers. This is not just a unique technical tool, but a contribution to a multilcultural dialogue, created with the highest possible aesthetic and technological standards.



#### Widths

Greta Sans is designed as a continuous optical size system. While the basic text styles are spaced and kerned for small sizes, the sourrounding extremes (Hairline, Black), or Compressed and Condensed are designed to be used as Display types and thefore tighly spaced and kerned.

abadefyhijklmr abadefghijklmr abadefghijk abadefghijklmr abadefghijklmr abadefghijklmr abadefghijklmr abdefqhijklm abcdefghijklm abcdefghijk abcdefghijklm n abdefqhijk abcdefghijk abcdefghijk abcdefghijk lmr abcdefqhijk abcdefghijkln abcdefghijk abcdefghijklm r abcdefqhij abcdefghijklr abcdefghijl abcdefghij klmi abdefghij abcdefghijkli abcdefghij abcdefghij kIm abdefghi abdefghijkl abddefghij abddefghijklm abcdefghi abcdefghijk abcdefghij abcdefghijkIn abcdefgh abcdefghijk abcdefghi abcdefghijkli abdefghij abdefgh abdefghijkl abcdefghij

### International Typography

### with a modern, authentic voice

ا من العروف عمومًا أن جوتينبرغ هو الذ In spite of all the attention t यह आमतौर पर अभिस्वीकृत है कि गुते ในสมัยกรุงศรีอยุธยา กรุงเทพมหาเ and the unprecedented cor आविष्कार किया था। यह आमतौर पर الله الله الله الله عام 1436. ولكن النقطة التي تنسي بش for type designers, the vast लापता है वह यूरोप में आवश्यक विशेष । الاعتراف يفتقد إلى المؤهل في أوروبا، وا of new fonts desperately la का धन्यवाद कि हम काफी हद तक मृ ของเมืองหลวง แห่งคือ กรุงธนบุรี originality. Just as in the m इतिहास हैं, लेकिन अधिक संभावना ३ และกรุงรัตนโกสินทร์ใน กรุงเทพา تواريخ مماثلة خارج أوروبا، وثمة اindustry, where cover vers अभिलिखित जंगम प्रकार का सिस्टम เป็นหัวใจของการทำให้ประเทศสย القابلة للنقل الذي تم تسجيله للم remixes are often more p، आसपास बनाया। उनके द्वरा बनाए : และเป็นเวทีกลางของการต่อสู้ทา حوالي عام 1040 ميلادي في الصير े than new music, font des लकड़ी का बनाया गया था है जो ः งของประเทศตลอดคริสต์ศตวร على لُوحات الخشب، ثم تخلى عنږ seemingly prefer to expl छोड़ दिया गया था जिस से कोम เติบโตอย่างรวดเร็วและปัจจุบัน عكس الكتابة اللاتينية التي تست successful models from स्क्रिप्ट के विपरीत जिसमें 26 अः ทบสำคัญต่อการเมือง เศรษฐเ

ראם יש צורך אמיתי לעצב ולהמציץ Но несмотря на ажиотаж и Пар' όλο αυτό то ενδιαφέρον 서울 도심 주변에는 도심을 관통하  $\sigma$ הרשת מוצפת בכמות כה גדולה שי возможности для дизайна  $\sigma$ тоιχεία και τις πρωτόγνωρες 으로 북악산과 남산에서 산기슭이 אכן, מיותר לעצב גופנים חדשים א шрифтов, большинство со тоиς σχε $\delta$ ιαστές τους η συντ, 형이 되었다. 을지로에 있던 구리가  $_{\perp}$ בהחלט יש צורך ודרישה לגופנים крайне скучны и неоригин тων νέων γραμματοσειρών  $\pi$ ר 현 이란 기복은 가로공사와 도시개 בתחום עיצוב־האות אנו נמצאים Точно также, как в и музы πρωτοτυπίας. Όπως συμβαίν 아볼 수 없으나, 현재도 율곡로·퇴 יש יצרני פונטים רבים יותר מאיי кавер-версии песен и ре $\iota$  βιομηχανία, όπου οι διασκευ፣ 복을 찾아볼 수 있다.이러한 기복 🛭 בדרך נוחה וישירה פונטים הם נ более популярны, чем нс  $\sigma$ υχνά έχουν μεγαλύτερη απ 또는 현 이란 지명이 남아 있다. 이 בבלוגים ובמגזינים, ולעתים ק произведения, современ πρωτότυπη μουσική, φαίνε 학교 부근의 풀무고개 또는 대장고 רם את הציבור הרחב והלא־מי дизайнеры шрифтов пр ох $oldsymbol{\delta}$ ונם את הציבור הרחב והלא־מי дизайнеры шрифтов пр ох $oldsymbol{\delta}$ ים נפתחים חדי не искать новых решен να εκμεταλλεύονται προί 현·배고개 등이 있다.이러한 지형 $\{$ 

# Greta Sans Extended

BERLIN – Chancellor Angela Merkel of Germany defended over the weekend her government's decision to phase out **nuclear power** by 2022 and replace it with renewable energy sources, dismissing critics who said the government would never make the deadline. Ms. Merkel made the decision nearly a year ago after a devastating earthquake and tsunami on March 11, 2011, caused a meltdown at a nuclear plant in **Fukushima**, **Japan**. The accident heightened anxieties about nuclear safety around the world, and set off new soul-searching about the wisdom of relying on nuclear power. Weeks after the tsunami, Ms. Merkel's government had already taken the nation's old-

**Greta Sans Extended Regular & Bold** 

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### Greta Sans

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**Greta Sans Regular & Bold** 

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# Greta Sans Condensed

BERLIN — Chancellor Angela Merkel of Germany defended over the weekend her government's decision to phase out nuclear power by 2022 and replace it with renewable energy sources, dismissing critics who said the government would never make the deadline. Ms. Merkel made the decision nearly a year ago after a devastating earthquake and tsunami on March 11, 2011, caused a meltdown at a nuclear plant in **Fukushima**, **Japan**. The accident heightened anxieties about nuclear safety around the world, and set off new soul-searching about the wisdom of relying on nuclear power. Weeks after the tsunami, Ms. Merkel's government had already taken the nation's oldest eight reactors off line; it decided in June that the remaining nine would follow over the next 11 years. But members of the opposition and environmental organizations say the government has not moved quickly enough to meet Germany's target of drawing 35 percent of its energy from **renewable sources**. Last year, the total was 20 percent. The critics directed much of their fire at the nation's distribution grid, which they said was incapable of transporting enough renewable energy from wind farms in the north to the industrial heartland in the south. They doubted the problems with the grid could be ad-

**Greta Sans Condensed Regular & Bold** 

Comic Sans takes part in Rio fur Comic Sans takes part in Rio fun run European Parliament says no European Parliament says nothing Anger grows over faux small Anger grows over faux small caps High turnout at anti-hintin High turnout at anti-hinting rally Three flies killed in Afghan Three flies killed in Afghanistan Abkhazia says yes to webf Abkhazia says yes to webfonts Tabloid drops all text sect Tabloid drops all text sections Nude designers stage protest Pope warns against the Pope warns against the user Mass protests caused b Mass protests caused by the

# Greta Sans Compressed

**BERLIN** — Chancellor Angela Merkel of Germany defended over the weekend her government's decision to phase out nuclear power by 2022 and replace it with renewable energy sources, dismissing critics who said the government would never make the deadline. Ms. Merkel made the decision nearly a year ago after a **devastating earthquake and tsunami on March 11, 2011**, caused a meltdown at a nuclear plant in Fukushima, Japan. The accident heightened anxieties about nuclear safety around the world, and set off new soul-searching about the wisdom of relying on nuclear power. Weeks after the tsunami, Ms. Merkel's government had already taken the nation's oldest eight reactors off line; it decided in June that the remaining nine would follow over the next 11 years. But members of the opposition and environmental organizations say the government has not moved quickly enough to meet Germany's target of drawing 35 percent of its energy from renewable sources. Last year, the total was 20 percent. The critics directed much of their fire at the nation's distribution grid, which they said was incapable of transporting enough renewable energy from wind farms in the north to the industrial heartland in the south. They doubted the problems with the grid could be addressed by 2022. "After deciding to exit nuclear energy, it seems as if Ms. Merkel's coalition stopped its work," said Sigmar Gabriel, a former environment minister and the leader of the opposition Social **Democrats.** "There is great danger that this project will fail, with devastating economic and social consequences." Ms. Merkel conceded in her weekly podcast that, "of course, we need a lot of new investment" for the plan to be carried out. But she insisted that her decision was the right choice. Legislation to expand the energy grid will be given "absolute priority" and passed in June,

**Greta Sans Compressed Regular & Bold** 

Comic Sans takes part in Rio fun run for the first time Comic Sans takes part in Rio fun run for the first time ever

European Parliament says absolutely nothing ab European Parliament says absolutely nothing about anything Anger grows over the continuous use faux sm *Anger grows over the continuous use faux small caps* High turnout at anti-hinting rally by the High turnout at anti-hinting rally by the opposition Three flies killed in Afghanistan, as fan *Three flies killed in Afghanistan, as families mourn* Abkhazia says yes to webfonts in an u Abkhazia says yes to webfonts in an unpreceden Tabloid drops all text sections in sea Tabloid drops all text sections in search for high Nude designers stage protest agair *Nude designers stage protest against using* Pope warns against the A-B user! Pope warns against the A-B user testing

# 

**Greta Sans Devanagari** 

अधिकतर भाषाओं की तरह देवनागरी भी बायें से दायें लिखी जाती है। प्रत्येक शब्द के ऊपर एक रेखा खिंची होती है (कुछ वर्णों के ऊपर रेखा नहीं होती है) इसे शिरोरेखा कहते हैं। देवनागरी का विकास ब्राह्मी लिपि से हुआ है। यह एक ध्वन्यात्मक लिपि है जो प्रचलित लिपियों (रोमन, अरबी, चीनी आदि) में सबसे अधिक वैज्ञानिक है। इससे वैज्ञानिक और व्यापक लिपि शायद केवल अध्वव लिपि है। भारत की कई लिपियाँ देवनागरी से बहुत अधिक मिलती-जुलती हैं, जैसे- बांग्ला, गुजराती, गुरुमुखी आदि। कम्प्यूटर प्रोग्रामों की सहायता से भारतीय लिपियों को परस्पर परिवर्तन बहुत आसान हो गया है। भारतीय भाषाओं के किसी भी शब्द या ध्वनि को देवनागरी लिपि में ज्यों का त्यों लिखा जा सकता है और फिर लिखे पाठ को लगभग 'हू-ब-हू' उच्चारण किया जा सकता है, जो कि रोमन लिपि और अन्य कई लिपियों में सम्भव नहीं है, जब तक कि उनका विशेष मानकीकरण न किया जाये, जैसे आइट्रांस या IAST इसमें कुल ५२ अक्षर हैं, जिसमें २४ स्वर और ३८ व्यंजन हैं। अक्षरों की क्रम व्यवस्था (विन्यास) भी बहुत ही वैज्ञानिक है। स्वर-व्यंजन, कोमल-कठोर, अल्पप्राण-महाप्राण, अनुनासिक्य-अन्तस्थ-उष्म इत्यादि वर्गीकरण भी वैज्ञानिक हैं। एक मत के अनुसार देवनगर (काशी) में प्रचलन के कारण इसका नाम देवनागरी पड़ा। भारत तथा एशिया की अनेक लिपियों के संकेत देवनागरी से अलग हैं पर उच्चारण व वर्ण-क्रम आदि देवनागरी के ही समान हैं, क्योंकि वे सभी ब्राह्मी लिपि से उत्पन्न हुई हैं (उर्दू को छोड़कर)। इसलिए इन लिपियों को परस्पर आसानी से लिप्यन्तरित किया जा सकता है। देवनागरी लेखन की दृष्टि से सरल, सौन्दर्य की दृष्टि से सुन्दर और वाचन की दृष्टि से सुपाठ्य है।

देवनागरी एक भारतीय लिपि है जिसमें अनेक भारतीय भाषाएँ तथा कई विदेशी भाषाएँ लिखी जाती हैं। यह बायें से दायें लिखी जाती है। इसकी पहचान एक क्षेतिज रेखा से है जिसे 'शिरोरेखा' कहते हैं। संस्कृत, पालि, हिन्दी, मराठी, कोंकणी, सिन्धी, कश्मीरी, हरियाणवी, डोगरी, खस, नेपाल भाषा (तथा अन्य नेपाली भाषाएँ), तमांग भाषा, गढ़वाली, बोडो, अंगिका, मगही, भोजपुरी, नागपुरी, मैथिली, संताली, राजस्थानी बघेली आदि भाषाएँ और स्थानीय बोलियाँ भी देवनागरी में लिखी जाती हैं। इसके अतिरिक्त कुछ स्थितियों में गूजराती, पंजाबी, बिष्णूप्रिया मणिपुरी, रोमानी और उर्दू भाषाएँ भी देवनागरी में लिखी जाती हैं। देवनागरी विश्व में सर्वाधिक प्रयुक्त लिपियों

# 한국어 문자

**Greta Sans Korean** 

한국은 삼국시대부터 이두 와 구결 을 써 왔는데, 구결은 본래 한문에 구두 를 떼는 데 쓰기 위한 일종의 보조 편법에 지나지 않았고, 이두는 비록 한국어를 표시함에 틀림이 없었지만 한국어를 자유자재로 적을 수 없었으며, 그 표기법 의 일원성 이 없어서 설사 이두로써 족하다 해도 한자교육이 선행되어야 했다. 이러한 문자생활의 불편은 한자를 쓰지 않고도 배우기 쉽고 쓰기 쉬운 새로운 글자의 출현이 절실히 요구되었다. 이러한 사조가 세종 때에 특히 두드러져 드 디어 1443년 음력 12월에 문자혁명의 결실을 보게 되었다. 훈민정음 창제의 취지는 세종이 손수 저술한 《훈민정음》 예의편 첫머리에 잘 나타나 있는데, 첫 째로 한국어는 중국말과 다르므로 한자를 가지고는 거의 제대로 표기하기 어려 우며, 둘째로 우리의 고유한 글자가 없어서 문자생활의 불편이 매우 심하고, 셋 째로 이런 뜻에서 새로 글자를 만들었으니 일상생활에 편하게 쓰라는 것이다. ' 훈민정음'은 "백성을 가르치는 바른 소리"라는 뜻으로, 세종의 어제 서문과 정 인지 서에서 분명히 밝히고 있는바, 당시까지 한문 의존에 따른 어려움을 근본 부터 극복하기 위해 한국어의 고유 문자로서 창제되었다. 한편 훈민정음 창제 5년 뒤에 《동국정운》이 간행되는데, 당시 조선에서 통용되던 한자음을 중국어 원음으로 교정하기 위한 책으로서 이것의 발음 표기에 훈민정음이 사용되고 있 다. 따라서 세종의 훈민정음 창제가 한자 및 한문의 폐지를 목적한 것은 아니라 고 보이며, 훈민정음의 활용 범위가 상당히 넓었음을 짐작할 수 있다. 훈민정음 에 반대하는 신하들이 있었는데, 대표적으로 최만리는 상소를 올려 반대하였 다. 그러나 세종은 "경이 운서를 아는가? 사성칠음에 자모가 몇이나 있는가? 만일 과인이 운서를 바로잡지 아니하면 누가 이를 바로잡을 것인가?" 라고 말 하였다. 처음 만들었을 때는 낱자 28글자와 성조를 나타내는 기호(방점)가 따

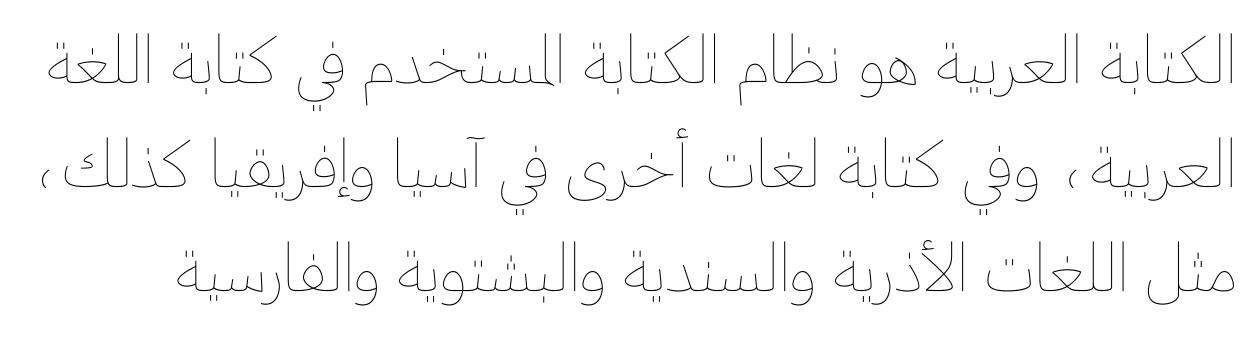
한글은 홀소리와 닿소리 모두 소리틀을 본떠 만든 음소문자[1]로 한글 맞춤법에서는 닿소리 14개와 홀소리 10개, 모두 24개를 표준으로 삼 는다. ('나랏말이 중국과 달라) 문제를 느낀 조선의 세종대왕이 한국어 는 물론 이웃나라 말까지 나타내도록 1443년 창제하여 1446년 반포 하였다. 낱글자가 낱소리만 나타내므로 음소 문자이며 낱내로 초성, 중 성, 종성을 묶어 모아 쓰기 때문에 음절 문자의 특성도 갖는다. 한글 창 제 초기에는 닿소리 17개에 홀소리 11개, 총 28개였으나, 뒤에 4개를 잃고 현재는 24개만 쓴다. 대한민국과 조선민주주의인민공화국, 옌볜 조선족 자치주에서는 공용 문자로, 인도네시아의 부톤 섬에서는 찌아 찌아어의 보조 문자로 채택하였다. 또한 조선민주주의인민공화국에서 는 조선글이라 부른다. 한글은 조선의 4대 왕인 세종대왕이 창제한 한 국의 문자이며, 한글은 자음 14자, 모음 10자이다. 최초 세종이 한글 을 만들었을 때 한글의 이름은 (훈민정음) 이다. 훈민정음은 (백성을 가 르치는 바른 소리'라는 뜻이다. 이전에는 세종이 백성들을 위하여 농사 에 도움이 되는 책을 만들었지만 그 책은 한문으로 되어있어 백성들이 읽지 못했다. 그러나, '농사직설'은 한글로 만들어 백성들의 농사를 풍 년으로 만들 수 있었다. 미국 또는 다른 나라의 학자들도 '한글은 알파

# 7981816516

**Greta Sans Thai** 

ราว พ.ศ. 400 ไทยได้อพยพจากถิ่นเดิมมาตั้งภูมิลำเนาอยู่ใกล้อาณาเขตมอญ ซึ่งกำลังเป็นชาติที่เจริญรุ่งเรืองในสมัยนั้น เริ่มแรกคงเริ่มเลียนแบบตัวอักษร มาจากมอญ ต่อมาราว พ.ศ. 1500 เมื่อขอมขยายอำนาจเข้ามาในดินแดนของ คนไทยซึ่งตั้งอยู่บริเวณริมแม่น้ำยม และได้ปกครองเมืองเชรียงและเมือง สุโขทัย ไทยก็เริ่มดัดแปลงอักษรที่มีอยู่เดิมให้คล้ายกับอักษรขอมหวัด อักษร มอญและอักษรขอมที่ไทยนำมาดัดแปลงใช้นั้นล้วนเป็นอักษรที่รับและแปลง รูปมาจากอักษรพราหมี ของพวกพราหมณ์ซึ่งแพร่หลายในอินเดียตอนเหนือ และอักษรสันสกฤตในสมัยราชวงศ์ปัลลวะ ซึ่งแพร่หลายบริเวณอินเดียตอนใต้ อักษรอินเดียทั้งคู่นี้ต่างก็รับแบบมาจากอักษรฟินิเชียนอีกชั้นหนึ่ง อักษรเฟ นีเซียนับได้ว่าเป็นอักษรที่เก่าแก่ที่สุด และเป็นแม่แบบตัวอักษรของชาติต่างๆ ทั้งในเอเชียและยุโรป ราว พ.ศ. 1826 พ่อขุนรามคำแหงทรงประดิษฐ์อักษรไทย ที่เรียกกันว่า "ลายสือไทย" ขึ้น ซึ่งได้เค้ารูปมาจากอักษรมอญและอักษรเขมร ที่มีอยู่เดิม ทำให้อักษรไทยมีลักษณะคล้ายคลึงกับอักษรทั้งสอง แม้บางตัวจะ ไม่คล้ายกัน แต่ก็สามารถรู้ได้ว่าดัดแปลงมาจากอักษรตัวไหน อักษรไทยมีการ ปรับปรุงอยู่เรื่อยๆ ในสมัยพญาฦๅไทราว พ.ศ. 1900 มีการแก้ไขตัวอักษรให้ผิด เพี้ยนไปบ้างเล็กน้อย โดยเฉพาะการเพิ่มเชิงที่ตัว ญ ซึ่งใช้ติดต่อเรื่อยมาจนทุก วันนี้ คาดว่าน่าจะเอาอย่างมาจากเขมร ในสมัยสมเด็จพระนารายณ์มหาราช ราว พ.ศ. 2223 ตัวอักษรเริ่มมีทรวดทรงดีขึ้นแต่ก็ไม่ทิ้งเค้าเดิม มีบางตัวเท่านั้นที่ แก้ไขผิดไปจากเดิม คือตัว ฎ และ ธ ซึ่งเหมือนกับที่ใช้อยู่ในปัจจุบัน นักวิชาการ จำนวนหนึ่งเชื่อว่าในสมัยสมเด็จพระนารายณ์มหาราช ตัวอักษรและการใช้งานมี

อักษรไทย เป็นอักษรที่ใช้เขียนภาษาไทยและ ภาษาของกลุ่มชาติพันธุ์ต่าง ๆ ในประเทศไทย มี พยัญชนะ 44 รูป สระ 21 รูป วรรณยุกต์ 4 รูป และ เครื่องหมายอื่น ๆ อีกจำนานหนึ่ง พยัญชนะไทยจะ 5899711971111711011 779111177 771475202 อยู่หน้า บน ล่าง และหลังพยัญชนะประกอบดำแล้ว แต่นนิดบองสระ อักษรไทยไม่มีการแยกอักษรตัว ใหญ่หรืออักษรตัวเล็กอย่างอักษรโรมัน และไม่มีการ เว้นารรคระหว่างคำ เมื่อจบหนึ่งประโยคจะลงท้าย จ้ายการเว้นวรรค กับมีเครื่องหมายวรรคตอน จำนานหนึ่ง ภาษาไทยมีตัวเลบเป็นของตัวเอง แต่ นิยมให้เลขอารบิกเป็นส่วนใหญ่ในชีวิตประจำวัน



والبنجابية والكردية واللرية والأردية والمندنكوية وغيرها.

وكان مسلمو الصين يستخدمونها لكتابة لهجاتهم

الصينية، وكان الأندلسيون الستعربون حتى القرن

السادس عشر يكتبون بالأعجمية وهي لهجاتهم الإسبانية

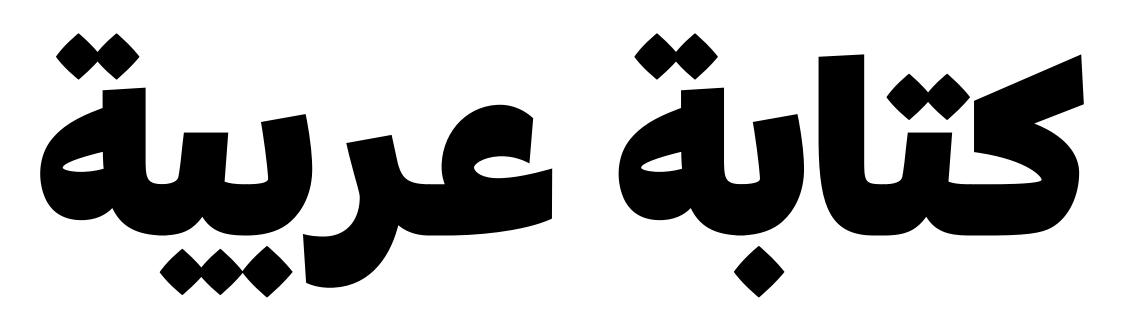
والبرتغالية المرسومة بالخط العربي، إضافة لذلك، كانت

اللغة التركية قبل 1928 تكتب بنسخة من الخط العربي،

[1] الخط العربي هو ثاني أكثر أنظمة الكتابة استخداما

في العالم حسب عدد الدول المستخدمة لها ثالث أكثرها

استخداما حسب عدد الستخدمين، بعد نظم الألفبائية



**Greta Sans Arabic** 

لوئم الخط العربي للاستخدام في مجموعة واسعة من اللغات بالإضافة إلى العربية، بما فيها الفرسية والملايوية والأردية وهي لغات غير سامية. وتضم مثل هذه الملائمات حروفا جديدة أو معدلة لتمثيل أصوات لغوية لا توجد في نطقيات اللغة العربية. على سبيل المثال، لا يوجد في اللغة العربية صوت شفتاني وقفي مهموس (صوت الـ) فالكثير من اللغات تضيف حرفا لنظام الكتابة تمثيلا لهذا الصوت، والحرف المختار يختلف من لغة إلى أخرى.وهذه التعديلات تنقسم إلى مجموعتين: كل اللغات الهندية والأتركية تستخدم ما يسميه الخبراء الأبجدية الفارسية، أما لغات [إندونيسيا فهي تميل إلى الأبجدية الجاوية.[بحاجة لمصدر في حال نظم كتابة اللغات البوسنوية والكردية والكشميرية والأويغورية فالأصوات الصائتة ضرورية، ويمكن استخدام الخط كأبوجيدا أو أبجدية بحاجة لمصدر] يستخدم الخط العربي في كتابة لغات غرب أفريقيا وخصوصا في الساحل، والعادات تتبع العادات في المغرب العربي (موضع النقطة بالنسبة لحرف الفاء وحرف القاف، مثلا). وتضاف نقاط إعجام إضافية لتسهيل كتابة الكلمة العربية طلاق على سبيل المثال، عادة ما تكون مكتوبة على أنها (تهلاق) في السوراني، لتحل محل الحرف الصوتي "ط" حرف ("ت"). و يستخدم أيضاً في السورانية الأحرف الأربعة التي تستخدم في الأبجدية الفارسية ولكن غير موجودة في قائمة الأحرف العربية الأصلية. لا يستخدم نظام الكتابة السوراني شفرة التشكيل (التضمين) الموجودة في نظام الكتابة العربية الأصلي. بدلاً من ذلك، في الحالات القليلة التي يتم فيها العثور على أحرف ساكنة مزدوجة، يتم كتابة الحرف الساكن

# 1727 MIZATIN

**Greta Sans Hebrew** 

הכתב העברי הקדום ששימש עד לתקופת בית שני, הוא נוסח מקומי של האלפבית הפיניקי, שבתורו התפתח מהאלפבית הפרוטו-כנעני. בכתב הפרוטו-כנעני כל ציור מייצג את העיצור שבתחילת המילה המתוארת בציור (העקרון האקרופוני). כך למשל נבחר ציור של ראש לייצג את הצליל "ר"; ציור של עין לצליל "ע", וכך הלאה. לתנועות לא יוחדו סימנים. הכתב הכנעני הקדום הלך והתפשט, וסימניו היו מוכרים כל כך, עד כי המשתמשים בו התחילו "להתעצל" בהשלמת הציורים, והניחו כי הקורא יבין גם מתוך שרטוטים סכמתיים באיזו אות מדובר. כך, למשל, הפך הראש למשולש עם צוואר; כף היד מלאת האצבעות הפכה לשרטוט דל, ומהדג נותר רק הזנב. מרבית החוקרים סוברים כי כשהעברים אימצו את הכתב הכנעני, הם התקשו לזהות חלק מהציורים המקוריים, והניחו למשל כי הסימן המתאר את המילה "זהה" הוא כלי נשק; שזנב הדג המשולש הוא דלת, ושדווקא הנחש הוא דג. כך נולדו שמותיהם העבריים של האותיות זי"ן, דל"ת ונו"ן, בהתאמה (נון הוא דג, כמו אמנון, שפמנון וכו'). הציורים שהפכו לסימנים התגלגלו לכתבים נוספים, ואפילו ליוונית וללטינית. גם בכתב העברי המודרני ניתן לזהות המשך התפתחותי ברור מן הכתב הכנעני הקדום, והשתמרות שמות האותיות מקלה מאוד על פענוח המקור.

האלפבית העברי הנוכחי נמצא בשימוש מאז תקופת בית שני, במקום הכתב העברי העתיק, ומקורו בכתב הארמי, האלפבית העברי מונה 22 אותיות ועוד 5 אותיות סופיות, כתב זה משמש עד ימינו לכתיבת השפה העברית, שפת היידיש, לאדינו הכתב העברו הוא אבג'ד או אלפבות עיצורי; כל אות בו מיוצגת עיצור, לעיתים יותר מעיצור אחד, וקבוצת אותיות קטנה הקרויות אימות הקריאה עשויות לייצג גם תנועות. ייצוג שלם וחד משמעי של ,התנועות והעיצורים מתאפשר רק בעזרת הניקוד הוא אוסף הסימנים הדיאקריטיים המתווספים לאותיות האלפבית העברי (להבדיל מהכתב הלטיני

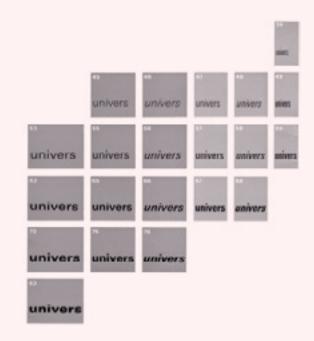
#### Extra Bold. Extra Extended

Greta Sans comes with styles for all occassions, even those that don't come very often. Greta Sans Extended Super is one of those.



### **Designing Type Systems**

BLACK 33PT



Univers specimen, Deberny et Peignot, Paris, 1964. *Illustration courtesy of Linotype GmbH.* 

CONDENSED BOLD & ITALIC 8PT

I remember a conversation from back in my student days where my typophile friends and I debated what the ultimate typeface of the 20th century was, a typeface that summed up all of the era's advancements and knowledge into a coherent whole, one that would be a reference for years to come. Helvetica was one of the candidates for its sheer ubiquity, proof of its overall acceptance. Another, more subtle proposal was Jan van Krimpen's Romulus, one of the first typefaces to have related Sans and Serif versions. And another, my personal pick, was Univers by Adrian Frutiger.

IGHT 8PT

Univers goes beyond the quest to design individual letters, attempting instead to design space, to create a system of relationships between different sets of shapes which share distinctive parameters. Prior to Univers, type designers concerned themselves with the relationships between letters of the same set, how an *a* is different from a *b*. Univers creates a situation in which there are a's of many

Univers goes beyond the quest to design individual letters, attempting instead to design space, to create a system of relationships between different sets of shapes which share distinctive parameters.

CONDENSED HAIRLINE ITALIC 23PT



Sketches from 2010: planning Greta Sans type system.

different shapes, and each has to be positioned on the axes of weight and width, distributed sufficiently far away from the next, but no further, in order to create a usable system. How heavy ought the Medium to be in order to leave space for yet another weight, the Bold, and how will this translate into a design with condensed proportions? These were all new questions for type designers, and Frutiger opened up completely new territory for those who were to come after him.

LIGHT 9PT

Thanks to Frutiger it is now common practice to produce a dozen or more styles when working on a new type family. In terms of typeface innovation there is much more room for originality when you only look at the individual lettershapes. Thus to create truly useful new works, type designers need to examine not only how characters relate to each other within a style, but also how different styles relate to each other within a family.

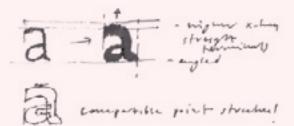
LIGHT 10PT

I've designed large typeface families before. Fedra, for example, now has over 116 individual styles supporting 170 languages, and has been used in the most complex typographic situations from dictionaries to newspapers, Bibles and information graphics. But it is not really an example of a font designed to be a typographic system from the start. It started in 2001 as a relatively small family of Sans, and over the next 10 years it grew to include Serif, Monospaced, Condensed and Display styles, as well as different language versions. Fedra is an example of a bottom to top approach, in which a relatively simple design gets larger and more complicated over time. Composer Brian Eno calls this the gardener's approach: nurturing simple things towards greater complexity, carefully planting seeds, and helping them grow to their full potential.

DECLII AD ODT

The opposite organising principle, again in Eno's words, is the architect's approach. An architect traditionally starts with a concept, developing the complete idea first, working from top to bottom. History (2008) is an example of the architectural approach, in which each individual style contributes to a greater purpose, sharing proportions with the rest of the family. Greta Sans is another example of this approach. It has been carefully planned from the outset, designed as a system of interrelated styles. From the very





Different design masters were conceived and drawn at the same time, investigating how the same design characteristics would be translated into extreme weights and widths.

beginning work proceeded on multiple styles simultaneously; not only when sketching the extreme and middle styles on paper, but also when converting the resulting shapes into digital format, the emphasis was on testing how certain letterforms react to extremely compressed dimensions as well as very generous ones. Only after being tested at each end of the proposed spectrum would the designs be selected and adopted into the typeface family-to-be. Each glyph would have to anticipate all its variations and maintain a basic structure that could function across all designated width and weight variations.

For example, at the lighter end of the weight axis, the circular dot over 'i', (or in diacritics and punctuation) has to become a rectangle to avoid becoming too small. On the width axis, shapes would sometimes have to be modified even more dramatically: the double storey 'g' typical for Greta becomes a single storey 'g' in Compressed width, where the lack of space demanded greater simplification. Dollar and cent signs have full crossbars in the wider versions, but divided crossbars in the condensed versions. Dozens of other changes happen when taking the design to extreme dimensions, in order to maintain the general design characteristics and preserve the natural look of the shapes.

MEDIUM

Greta Sans is an example of the architectural approach. It has been carefully planned from the outset, designed as a system of interrelated styles. From the very beginning work proceeded on multiple styles simultaneously.

The nature of systems is to dic-

ONDENSED HAIRLINE 25PT

\$\$\$\$

ggg

Some of the exceptions to the linear interpolation of the Greta Sans type system: dots change from circular to rectangular; dollar signs lose their crossbars, and 'g' uses a single-storey form in Compressed widths.

tate a certain direction; the role of designers is to recognise when the original design idea ceases to work within the system, and then to create exceptions to the system rather than letting the system have a negative impact on the design. In large type families of related styles this impact is that while the starting point is usually characteristic and recognisable, the design becomes blander and less interesting as it is stretched across its variations. My intention was to design a highly flexible system while also ensuring that the resulting shapes were not just compromises, but maintained the strong personality of the Greta typeface.

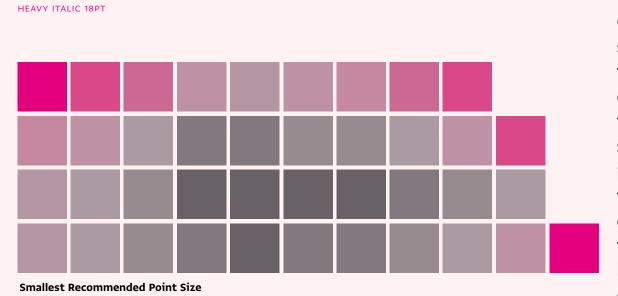
While the Fedra Sans family was created from two design masters, Light and Bold, (Book, Demi and Medium were interpolated), Greta Sans' 13 design masters were individually designed, as were another 13 masters for italics, and all 26 included Small Caps. The masters (Hairline, Regular, Black), were interpolated and expanded to 10 weights. Four widths were imagined and implemented, resulting in 80 styles.

MEDIUM 8P

In the earliest age of movable type, optical sizes became the main organising principle of typefaces. For example, Jannon's caractères de l'Université from the 1530s include numerous optical versions ranging from 6 to 36 points, each slightly different. The design of the typeface would be reinterpreted at each given point size, often

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Greta Sans is designed as a continuous optical size system. While the basic text styles (Regular) are spaced and kerned for small sizes, the surrounding extremes (Hairline, Black) are designed to be used as Display types, and therefore tightly spaced and kerned.



5	6	7	8	9	10	11	12	14	16

Compressed	Condensed	Normal
16pt Hairline	11pt Hairline	9pt Hairline
14pt Thin	10pt Thin	8pt Thin
12pt ExtraLight	8pt ExtraLight	7pt ExtraLight
10pt Light	6pt Light	5pt Light
9pt Regular	6pt Regular	5pt Regular
10pt Medium	7pt Medium	5pt Medium
11pt SemiBold	7pt SemiBold	5pt SemiBold
12pt Bold	8pt Bold	6pt Bold
14pt Heavy	10pt Heavy	7pt Heavy
	14pt Black	8pt Black

resulting in different weights, different proportions, different letter spacing. These different designs would blend into a harmonious size progression and function as one design. Optical sizes disappeared with the transition from hot metal press to photocomposition sometime in the 1950s. After about 50 years of neglect optical sizes have made a comeback, and many typefaces now come with versions specifically designed for text and display applications. Optical sizes, however, represent a range of variations. In the old days, as in the Jannon example, typefaces would come in as many as 15 optical versions. All the in-between sizes progressively added or removed features, getting continuously darker and looser when meant for small sizes, or continuously lighter and tighter for large sizes. The word continuously is important here. There weren't text or display versions as is common now. Each size was discretely adjusted for to maintain the characteristics of the typeface.

**Extended** 

9pt Hairline 8pt Thin

7pt ExtraLight

6pt Light

5pt Regular

6pt Medium

6pt SemiBold

Bold

8pt Heavy 10pt Black

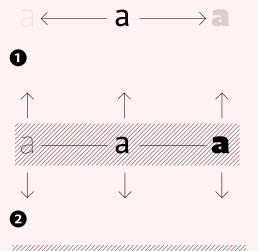
14pt Super

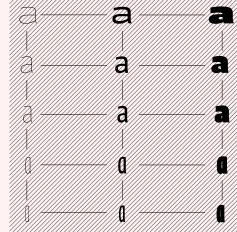
**Greta Sans is designed as a continuous** optical size system. While the basic text styles (Regular) are spaced and kerned for small sizes, the surrounding extremes (Hairline, Black) are designed to be used as Display types, and therefore tightly spaced and kerned. The resulting interpolation then runs continuously from Display to Text to Display use. A similar pattern (Extended, Condensed Extended) can be seen on the width axis, as the Normal styles are most suited for small text, and extremes are optimised for large sizes.

While the key characteristics of most typefaces are defined by the outlines of the letterforms, Greta Sans' design also extends to the gaps between styles. All its characteristics, including the visual

All its characteristics, including the visual contrast between styles, weights and widths have been orchestrated into a unified typeface system. Greta Sans explores the entire space of possibilities and is designed for extraordinary design flexibility.

CONDENSED HEAVY 25PT



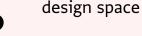


The process of drawing Greta Sans started in the middle of the imagined design space **O**, and from

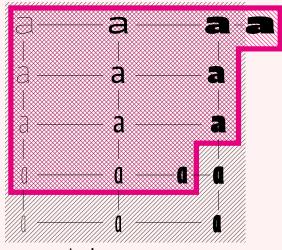
there the extremes were explored **②**. The idea was

to adapt the design to the available proportions,

while preserving the main design characteristics.



font space (published)



design space

When creating the design masters, we made the heavy weight as heavy as possible, even when those exact weights would not be used. It is easy to interpolate and make the Black weight lighter; making it heavier is complicated. This allowed us to keep the design space as large as possible **⊙**, and reduce it later when we made the final selection of styles 4. We decided not to use the Compressed Black as a master, and stepped it down one weight. We also dropped extra-compressed styles. On the other hand, we added an extra weight to the available space at that end of the spectrum.

contrast between styles, weights and widths have been orchestrated into a unified typeface system. Greta Sans explores the entire space of possibilities and is designed for extraordinary design flexibility. It is a toolbox that addresses a broad spectrum of design situations from the simplest to the most complex, offering multiple options for establishing a visual hierarchy.

Greta's Latin fonts set up some formal parameters, but the most exciting phases of this project are still to come. While such a versatile system of similar proportions is rare within the context of Latin typefaces, it is unheard of in the domain of non-Latin type. We intend to bring this system to a number of non-Latin styles planned for 2013-14. There is no reason why only Latin type should benefit from these advances in typography.

Translation is not a matter of words only Η μετάφραση δεν είναι θέμα μόνο των λέξεων Суть перевода не только в словах Թարգմանությունը միայն բառերի հարց չէ الترجمة ليست مسألة كلمات فقط अनुवाद केवल शब्दों की बात नहीं है תרגום אינו עניין של מילים בלבד การแปลความไม่ใช่เพียงเรื่องของคำเท่านั้น 번역은 단어만의 문제가 아닙니다



#### **Credits**

Greta Sans was designed by Peter Bil'ak, produced together with Nikola Djurek in 2012. Irina Smirnova designed the Cyrillic version and Peter Bil'ak created the Greek version in 2015. In 2015, Greta Sans was recognised by the Tokyo TDC, and in 2016, it was selected as the winner by The Society of Typographic Arts, Chicago. The Arabic version was designed by Kristyan Sarkis and published in 2015. Greta Sans Devanagari was published in 2017, designed by Hitesh Malaviya at ITF under the supervision of Satya Rajpurohit. The Hebrew version was designed jointly by Peter Bil'ak with Daniel Berkovitz, and released in 2017. The Thai version was designed by Smich Smanloh from Cadson Demak, and published in 2019. Greta Sans Thai has been recognised at The 11th Granshan Type Design Competition in 2019. Korean version was designed by Sandoll, directed by Wujin Sim and designed by Sandoll designer Yejin Wi and Chorong Kim in 2020.

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See more information online: https://www.typotheque.com/fonts/greta\_sans

