Grey
Mono

Family Overview

Styles

Grey Mono Light
Grey Mono Light Italic
Grey Mono Book
Grey Mono Book Mono

Scripts

Cyrillic кириллица
Greek Ελληνικά
Paneuropean abc абв αβγ

Separate PDF

Grey

About the Font

LL Grey is a sans serif born of a French grotesque, with all the rude, cabaret-like stroke endings of the genre. First called AS Gold, the typeface made its debut as part of Aurèle Sack's diploma project at ECAL in 2004.

Now distilled and extended into a playful yet highly readable text font, LL Grey has a contemporary, screen-friendly appearance. As with his previous efforts LL Purple and LL Brown, Aurèle used a historic predecessor for formal cues, but brought his signature surgical precision to its rendering. The result is a pleasant widening of the idiosyncratic proportions of 19th century grotesques.

File Formats: Opentype CFF, Truetype, WOFF, WOFF2

Design: Aurèle Sack (2020 – 2021)

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Glyph Overview

Latin

A B C D E F G H I J K L M N O P Q
R S T U V W X Y Z

Lowercase

a b c d e f g h i j k l m n o p q
r s ß t u v w x y z

Proportional, Mono Figures

0 1 2 3 4 5 6 7 8 9

Ligatures

fi fl

Extented Character set

À à Á á Â â Ã ã Ä ä Å å Ā ā Ă ă Ą
ą Å̊ å̊ Ǽ ǽ Æ æ Ç ç Ć ć Ĉ ĉ Ċ ċ Č č
Ď ď Đ đ È è É é Ê ê Ë ë Ē ē Ĕ ĕ Ė
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ÿ Ŷ ŷ Ž ž Ź ź Ż ż Ƶ ƶ Þ þ Ə ə

Cyrillic

А а Б б В в Г г Ѓ ѓ Ґ ґ Д д Е е Ё
ё Ж ж З з И и Й й К к Ќ ќ Л л М м
Н н О о П п Р р С с Т т У у Ў ў Ф
ф Х х Ч ч Ц ц Ш ш Щ щ Ҫ ҫ Ъ ъ Ы ы
Ь ь Љ љ Њ њ S s Є є Э э І і Ї ї Ј
ј Ћ ћ Ю ю Я я Ъ ђ Ъ ъ Ғ ғ Қ қ Ң ң
Ү ү Ұ ұ Ҳ ҳ Һ һ Ө ө Ѳ ѳ

Greek

Α α Β β Γ γ Δ δ Ε ε Ζ ζ Η η Θ θ Ι ι Κ κ
Λ λ Μ μ Ν ν Ξ ξ Ο ο Π π Ρ ρ Σ σ Τ τ
Υ υ Φ φ Χ χ Ψ ψ Ω ω Σ ς Α ά Ε έ Η ή Ι ί
Ο ό Υ ύ Ω ώ Ϊ ϊ Ÿ ϋ Ϊ ΰ

Punctuation

(. , : ; ? ! ¿ ¡ …) [& @ #]
{ - – — } « » ‹ › „ “ ” , ‘ ’ _ /
\ ' " † ‡ * ● ¶ § © ® ℗ ™

Case Sensitive Forms

( ) [ ] { } - – — ‹ › « »

Currency, Mathematical Operators

€ $ £ ¥ ¢ ƒ ¤ ₡ ₦ ₲ ₵ ₴ ₸ ₺ ₽ ฿ ₽
⁰/₀ ⁰/₀₀ + − × ÷ = ≠ ≈ < > ≤ ≥ ± ~ ¬ ◊
∂ Δ ∏ ∑ Ω µ ∫ ∞ √ · – ^ ≡ | ¦ ⋮
ℓ ℮ ° – №

Glyph Overview

Fractions	1 ½ ⅓ ¼ ⅕ ⅙ ⅛ ⅔ ⅖ ¾ ⅗ ⅜ ⅘ ⅚ ⅝ ⅞
Arrows	← → ↑ ↓ ↖ ↗ ↘ ↙ ↰ ↱ ↲ ↳
Ordinals	1 o a
Numerators, Denominators	H 0 1 2 3 4 5 6 7 8 9 H 0 1 2 3 4 5 6 7 8 9
Superscripts, Subscripts	H 0 1 2 3 4 5 6 7 8 9 H 0 1 2 3 4 5 6 7 8 9
Circled Numbers	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾
Symbols	■ □ ▉ ▯ ❑ ■ □ ▲ △ ● ○ ✦ ✧ ★ ☆ ▒ ♥ ☮ ☻ ☺ ✺ ◊ ○ ✓ ✕ ⛨ ⚚ ☗ ✂ ✌ ✎ ⛨ ⚚

Layout Features

Case Sensitive Forms	[Discret] May–July «Hello»	[DISCRET] MAY–JULY «HELLO»
Standard Ligatures	fly fiction	fly fiction
Arbitrary Fractions	61 2/5 × 9 4/5 4 1/6 ÷ 2 1/5 100 5/8 × 32 3/8	100 ⅖ × 9 ⅘ 4 ⅙ ÷ 2 ⅕ 100 ⅝ × 32 ⅜
Superscript	North1, East2	North¹, East²
Subscript	H2O	H_2O
Ordinals	1a 1o	1ª 1º
Sharp S	Nebenstrasse	Nebenstraße

Layout Features

Stylistic Set 1: Alternate a	Retina Adapting Gestalt	Retina Adapting Gestalt
Stylistic Set 2: Alternate y	Delaunay Angularity Poetry	Delaunay Angularity Poetry
Stylistic Set 3: Alternate Q	Quadrant Quest Quarter	Quadrant Quest Quarter
Stylistic Set 5: Alternate 3	30 × 30 cm 1963	30 × 30 cm 1963
Stylistic Set 8: Historical Form	Essential Asymmetric	Eſſential Aſymmetric
Stylistic Set 9: Cyrillic Alternates	Оптическ Обман Иллюзия Позже	Оптический Обман Иллюзия Позже

100 Points
Latin

Distortion

Cyrillic
– Russian

Искажение

Greek

Παραμόρφωση

LL Grey Mono Light

4.5 Points

When an observer moves, the apparent relative motion of several stationary objects against a background gives hints about their relative distance. If information about the direction and velocity of movement is known, motion parallax can provide absolute depth information. This effect can be seen clearly when driving in a car. Nearby things pass quickly, while far off objects appear stationary. Some animals that lack binocular vision due to their eyes having little common field-of-VIEW EMPLOY MOTION PARALLAX MORE EXPLICITLY THAN HUMANS FOR DEPTH CUEING. WHEN AN OBJECT MOVES TOWARD THE OBSERVER, THE RETINAL PROJECTION OF AN OBJECT EXPANDS OVER A PERIOD OF TIME, WHICH LEADS to the perception of movement in a line toward the observer. The dynamic stimulus change enables the observer not only to see the object as moving, but to perceive the distance of the moving object. Thus, in this context, the changing size serves as a distance cue. A related phenomenon is the visual system's capacity to calculate time-to-contact of an approaching object from the rate of optical expansion – a useful ability in contexts ranging from driving a car to playing a ball game. HOWEVER, CALCULATION OF TTC IS, STRICTLY SPEAKING, PERCEPTION OF VELOCITY RATHER THAN DEPTH. IF A STATIONARY RIGID FIGURE IS PLACED IN FRONT OF A POINT SOURCE OF LIGHT SO THAT ITS SHADOW FALLS ON a translucent screen, an observer on the other side of the screen will see a two-dimensional pattern of lines. But if the cube rotates, the visual system will extract the necessary information for perception of the third dimension from the movements of the lines, and a cube is seen. This is an example of the kinetic depth effect. The effect also occurs when the rotating object is solid (rather than an outline figure), provided that the projected shadow consists of lines which have definite corNERS OR END POINTS, AND THAT THESE LINES CHANGE IN BOTH LENGTH AND ORIENTATION DURING THE ROTATION.THE PROPERTY OF PARALLEL LINES CONVERGING IN THE DISTANCE, AT INFINITY, ALLOWS US TO RECON-

6 Points

Cubism was based on the idea of incorporating multiple points of view in a painted image, as if to simulate the visual experience of being physically in the presence of the subject, and seeing it from different angles. The radical experiments of Georges Braque, Pablo Picasso, Jean Metzinger's Nu à la cheminée, Albert Gleizes's La Femme aux Phlox, or Robert Delaunay's views OF THE Eiffel TOWER, EMPLOY THE EXPLOSIVE ANGULARITY OF CUBISM TO EXAGGERATE THE TRADITIONAL ILLUSION OF THREE-DIMENSIONAL SPACE. THE SUBTLE USE OF MULTIPLE POINTS OF VIEW CAN BE FOUND IN THE pioneering late work of Cézanne, which both anticipated and inspired the first actual Cubists. Cézanne's landscapes and still lives powerfully suggest the artist's own highly developed depth perception. At the same time, like the other Post-Impressionists, Cézanne had learned from Japanese art the significance of respecting the flat rectangle of the picture itself; Hokusai and HIROSHIGE IGNORED OR EVEN REVERSED LINEAR PERSPECTIVE AND THEREBY REMIND THE VIEWER THAT A PICTURE CAN ONLY BE "TRUE" WHEN IT ACKNOWLEDGES THE TRUTH OF ITS OWN FLAT SURFACE. BY

7 Points
– SS01
Alternate a

Isaac Newton proposed that the optic nerve of humans and other primates, has a specific architecture on its way from the eye to the brain. Nearly half of the fibres from the human retina project to the brain hemisphere on the same side as the eye from which they originate. That architecture is labelled hemi-decussation or ipsilateral visual projections. In most other animals these nerve fibres cross to the opposite side of the brain. Bernhard von Gudden showed that the OC contains both crossed and uncrossed retinal fibers, and Ramon y Cajal observed that the grade of hemidecussation differs between species Walls FORMALIZED A COMMONLY ACCEPTED NOTION INTO THE LAW OF NEWTON-MÜLLER-GUDDEN (NGM) SAYING: THAT THE DEGREE OF OPTIC FIBRE DECUSSATION IN THE OPTIC CHIASM IS CONTRARIWISE RELATED TO THE DEGREE OF FRONTAL ORIENTATION OF THE OPTICAL AXES OF THE EYES. IN OTHER WORDS THAT THE NUMBER OF fibers

9 Points

Most open-plains herbivores, especially hoofed grazers, lack binocular vision because they have their eyes on the sides of the head, providing a panoramic, almost 360°, view of the horizon - enabling them to notice the approach of predators from almost any direction. However, most predators have both eyes looking forwards, allowing binocular depth perception and helping them to judge distances when they pounce or swoop down onto their prey. Animals that spend a lot of time in trees take advantage of binocular vision in order to accurately judge distances when rapidly moving from branch to branch. Matt Cartmill, a physical anthropologist & anatomist at BOSTON UNIVERSITY, HAS CRITICIZED THIS THEORY, CITING OTHER ARBOREAL SPECIES WHICH LACK BINOCULAR VISION, SUCH AS SQUIRRELS AND CERTAIN BIRDS. INSTEAD, HE PROPOSES A "VISUAL PREDATION HYPOTHESIS", WHICH ARGUES THAT ANCESTRAL

10.5 Points

Physiological illusions, such as the afterimages following bright lights, or adapting stimuli of excessively longer alternating patterns, are presumed to be the effects on the eyes or brain of excessive stimulation or interaction with contextual or competing stimuli of a specific type–brightness, color, position, tile, size, movement, etc. The theory is that a stimulus follows its individual dedicated neural path in the early stages of visual processing and that intense or repetitive activity in that or interaction with active adjoining channels CAUSES A PHYSIOLOGICAL IMBALANCE THAT ALTERS PERCEPTION. THE HERMANN GRID ILLUSION AND MACH BANDS ARE TWO ILLUSIONS THAT ARE OFTEN EXPLAINED

LL Grey Mono Light

12 Points

To make sense of the world it is necessary to organize incoming sensations into information which is meaningful. Gestalt psychologists believe one way this is done is by perceiving individual sensory stimuli as a meaningful whole. Gestalt organization can be used to explain many illusions including the rabbit-duck illusion where the image as a whole switches back and forth FROM BEING A DUCK THEN BEING A RABBIT AND WHY IN THE FIGURE-GROUND ILLUSION THE FIGURE AND GROUND ARE REVERSIBLE. IN THIS THERE IS NO “DRAWN” WHITE TRIANGLE. CLICK CAPTION

16 Points

Afterimage, Ambiguous
Bending of a stick, Biological
Cognitive/Connective
Disproved, Disambiguate
Effects of Excessive Stimulation
Four kinds, Far-away Object
Fiction Illusion
Gregory Richard, Geometrical
Gestalt psychologists
HYPOTHETIC, INFERENCES, ILLUSIVE

20 Points

Kokichi Sugihara
Lateral Inhibition, Limb
Luminance, Lightness
Mach Bands
Necker cube, Neural
Perception
Physiological, Perception
Rabbit-Duck Trick
RICHARD GREGORY, RECEPTORS

30 Points
– SS02
Alternate y

Syndrome, Specific
Schizophrenia
Understanding Optic
Unfamiliar
Visual Pathway
WATERFALL M.C ESCHER

LL Grey Mono Light Italic

4.5 Points

The Hering illusion is one of the geometrical-optical illusions and was discovered by the German physiologist Ewald Hering in 1861. When two straight and parallel lines are presented in front of radial background (like the spokes of a bicycle), the lines appear as if they were bowed outwards. The Orbison illusion is one of its variants, while the Wundt illusion produces a similar, but inverted effect. There are several possible explanations for why perceptual distortion produced by the radiating pattern. The illusion was ascribed by Hering to an overestimation of the angle made at the points of intersection. If true, then the straightness of the parallel lines yields to that of the radiating lines, implying that there is a hierarchical ordering among components of such illusion. Others have suggested that angle overestimation results from lateral inhibition in visual cortex, while others have postulated a bias inherent in extrapolating 3D angle information from 2D projections.A different framework suggests that the Hering illusion are caused by temporal delays with which the visual system must cope. In this framework, the visual system extrapolates current information to "perceive the present": instead of providing a conscious image of how the world was ~100 ms in the past (when signals first struck the retina), the visual system estimates how the world is likely to look in the next moment. In the case of the Hering illusion, the radial lines trick the visual system into thinking it is moving forward. Since we are not actually moving and the figure is static, we misperceive the straight lines as curved, as they would appear in the next moment. It is possible that both frameworks are compatible. The Hering illusion can also be induced by a background of optic flow (such as dots flowing out from the center of a screen, creating the illusion of forward motion through a starfield). Importantly, the bowing direction is the same whether the flow moves inward or outward. This result is consistent with a role for networks of visual

6 Points

The Ebbinghaus illusion has played a crucial role in the debate over the existence of separate pathways in the brain for perception and action (for more details see Two Streams hypothesis). It has been argued that the Ebbinghaus illusion distorts perception of size, but not action. A study by neuroscientist Melvyn A. Goodale showed that when a subject is required to respond to a physical model of the illusion by grasping the central circle, the scaling of the grip aperture was unaffected by the perceived size distortion. While other studies confirm the insensitivity of grip scaling to size-contrast illusions like the Ebbinghaus illusion, other work suggests that both action and perception are fooled by the illusion. Neuroimaging research suggests an inverse correlation between an individual's receptivity to the Ebbinghaus and similar illusions and the highly variable size of the individual's primary visual cortex. Developmental research suggests that the illusion is dependent on context-sensitivity. The illusion was found more often to cause relative-size deception in

7 Points

The visual system comprises the sensory organ (the eye) and parts of the central nervous system (the retina containing photoreceptor cells, the optic nerve, the optic tract and the visual cortex) which gives organisms the sense of sight (the ability to detect and process visible light) as well as enabling the formation of several non-image photo response functions. It detects and interprets information from the optical spectrum perceptible to that species to "build a representation" of the surrounding environment. The visual system carries out a number of complex tasks, including the reception of light and the formation of monocular neural representations, colour vision, the neural mechanisms underlying stereopsis and assessment of distances to and between objects, the identification of particular object of interest, motion perception, the analysis and integration of visual information, pattern

9 Points

The Ponzo illusion is a geometrical-optical illusion that was first demonstrated by the Italian psychologist Mario Ponzo (1882–1960) in 1911. He suggested that the human mind judges an object's size based on its background. He showed this by drawing two identical lines across a pair of converging lines, similar to railway tracks. The upper line looks longer because we interpret the converging sides according to linear perspective as parallel lines receding into the distance. In this context, we interpret the upper line as though it were farther away, so we see it as longer, a farther object would have to be longer than a nearer one for both to produce retinal images of the same size.One of the explanations for the Ponzo illusion is the "perspective hypothesis", which states that the perspective feature in the figure is obviously produced by the converging

10.5 Points

The retina consists of a large number of photoreceptor cells which contain particular protein molecules called opsins. In humans, two types of opsins are involved in conscious vision: rod opsins and cone opsins. An opsin absorbs a photon and transmits a signal to the cell through a signal transduction pathway, resulting in hyperpolarization of the photoreceptor. Rods and cones differ in function. Rods are found primarily in the periphery of the retina and are used to see at low levels of light. Cones are primarily in the center of the retina. There are three types of cones that differ in the wavelengths of light they absorb; they are usually called short or blue, middle or green, and long

LL Grey Mono Light Italic

12 Points

"Evolution has seen to it that geometric drawings like this elicit in us premonitions of the near future. The converging lines toward a vanishing point are cues that trick our brains into thinking we are moving forward as we would in the real world, where the door frame (a pair of vertical lines) seems to bow out as we move through it and we try to perceive what that world will look like in the NEXT INSTANT." THE WUNDT ILLUSION IS AN OPTICAL ILLUSION THAT WAS FIRST DESCRIBED BY THE GERMAN PSYCHOLOGIST WILHELM WUNDT IN THE 19TH CENTURY. THE TWO RED VERTICAL LINES ARE

16 Points

Ambiguities
Bent geometry, Bulged forms
Circle or Square
Concentric Circles, Contingent
Depth Perception
Elliptical, Eye Simulation
Floating Triangle
Following Bright Lights, Fields
Generated Cube
GESTALT ORGANIZATION

20 Points

Gray Hues & Glares
Hallucinations, Hollow Face
Illusory palinopsia
Lightness spot
Lobe, Long exposure, LSD
Motion Blindness
Necker Cube, Orbison
Percept, Phantom,
PROPRIOCEPTION/PROTOTYPICAL

30 Points

Radial Line
Rubin Vase Figures
Stimulate
Superimposed, Tilted
Two Dimensional
USE OF PERSPECTIVE

LL Grey Mono Book

4.5 Points – SS05 Alternate 3

An autostereogram is a single-image stereogram (SIS), designed to create the visual illusion of a three-dimensional (3D) scene from a two-dimensional image. In order to perceive 3D shapes in these autostereograms, one must overcome the normally automatic coordination between accommodation and horizontal vergence. The illusion is one of depth perception and involves stereopsis: depth perception arising from the different perspective each eye has of a three-dimensional scene, CALLED BINOCULAR PARALLAX. THE SIMPLEST TYPE OF AUTOSTEREOGRAM CONSISTS OF HORIZONTALLY REPEATING PATTERNS AND IS KNOWN AS A WALL-PAPER AUTOSTEREOGRAM. WHEN VIEWED WITH PROPER CONVERGENCE, THE repeating patterns appear to float above or below the background. The well-known Magic Eye books feature another type of autostereogram called a random dot autostereogram. One such autostereogram is illustrated above right. In this type of autostereogram, every pixel in the image is computed from a pattern strip and a depth map. A hidden 3D scene emerges when the image is viewed with the correct convergence. Autostereograms are similar to normal stereograms except they ARE VIEWED WITHOUT A STEREOSCOPE. A STEREOSCOPE PRESENTS 2D IMAGES OF THE SAME OBJECT FROM SLIGHTLY DIFFERENT ANGLES TO THE LEFT EYE AND THE RIGHT EYE, ALLOWING US TO RECONSTRUCT THE ORIGINAL object via binocular disparity. When viewed with the proper vergence, an autostereogram does the same, the binocular disparity existing in adjacent parts of the repeating 2D patterns. There are two ways an autostereogram can be viewed: wall-eyed and cross-eyed. Most autostereograms (including those in this article) are designed to be viewed in only one way, which is usually wall-eyed. Wall-eyed viewing requires that the two eyes adopt a relatively parallel angle, while cross-eyed VIEWING REQUIRES A RELATIVELY CONVERGENT ANGLE. AN IMAGE DESIGNED FOR WALL-EYED VIEWING IF VIEWED CORRECTLY WILL APPEAR TO POP OUT OF THE BACKGROUND, WHILE IF VIEWED CROSS-EYED IT WILL

6 Points

However, almost all geometrical optical illusions have components that are at present not amenable to physiological explanations. The subject, therefore, is a fertile field for propositions based in the disciplines of perception and cognition. To illustrate: Instead of interpreting them as just a pair the sloping lines within which one feature is seen smaller than an identical one NEARER TO THE POINT OF CONVERGENCE, THE PONZO PATTERN MAY BE TAKEN FOR A RAILROAD TRACK RENDERED AS A PERSPECTIVE DRAWING. A BARREL LYING WITHIN THE RAILS WOULD HAVE TO BE PHYSICALLY wider to cover the increased portion of the width of the track if it were farther away. The consequence is the judgment that the barrels differ in diameter, whereas their physical size in the drawing is equal. A scientific study will include the recognition that a representation of the visual word is embodied in the state of the organism's nervous system at the time the illusion IS EXPERIENCED. IN THE DISCIPLINE OF EXPERIMENTAL NEUROSCIENCE, A TOP-DOWN INFLUENCE HAS THE MEANING THAT SIGNALS ORIGINATING IN HIGHER NEURAL CENTERS, REPOSITORY OF MEMORY TRACES, INNATE

7 Points

The Müller-Lyer illusion is an optical illusion consisting of three stylized arrows. When viewers are asked to place a mark on the figure at the midpoint, they tend to place it more towards the "tail" end. The illusion was devised by Franz Carl Müller-Lyer (1857–1916), a German sociologist, in 1889. A variation of the same effect (and the most common form in which it is seen today) consists of a set of arrow-like figures. Straight line segments of equal length comprise the "shafts" of the arrows, while shorter line segments protrude from the ends of the shaft. The fins can point inwards to form an arrow "head" or outwards TO FORM AN ARROW "TAIL". THE LINE SEGMENT FORMING THE SHAFT OF THE ARROW WITH TWO TAILS IS PERCEIVED TO BE LONGER THAN THAT FORMING THE SHAFT OF THE ARROW WITH TWO HEADS. RESEARCH HAS SHOWN THAT PERCEPTION OF THE MÜLLER-LYER ILLUSION CAN VARY. AROUND THE TURN OF THE 20TH CENTURY

9 Points

Linear or point-projection perspective is one of two types of graphical projection perspective in the graphic arts; the other is parallel projection. Linear perspective is an approximate representation, generally on a flat surface, of an image as it is seen by the eye. The most characteristic features of linear perspective are that objects appear smaller as their distance from the observer increases, and that they are subject to foreshortening, meaning that an object's dimensions along the line of sight appear shorter than its dimensions across the line of sight. All objects will recede to points in the distance, usually along the horizon LINE, BUT ALSO ABOVE AND BELOW THE HORIZON LINE DEPENDING ON THE VIEW USED. ITALIAN RENAISSANCE PAINTERS AND ARCHITECTS INCLUDING MASACCIO, PAOLO UCCELLO, PIERO DELLA FRANCESCA AND LUCA PACIOLI STUDIED LINEAR PERSPECTIVE,

10.5 Points

Isaac Newton proposed that the optic nerve of humans and other primates, has a specific architecture on its way from the eye to the brain. Nearly half of the fibres from the human retina project to the brain hemisphere on the same side as the eye from which they originate. That architecture is labelled hemi-decussation or ipsilateral visual projections. In most other animals these nerve fibres cross to the opposite side of the brain. Bernhard von Gudden showed that the OC contains both crossed and uncrossed retinal fibers, and Ramon y Cajal observed THAT THE GRADE OF HEMIDECUSSATION DIFFERS BETWEEN SPECIES WALLS FORMALIZED A COMMONLY ACCEPTED NOTION INTO THE LAW OF NEWTON-MÜLLER-GUDDEN (NGM)

12 Points

Hallucinations are associated with structural and functional abnormalities in primary and secondary sensory cortices. Reduced grey matter in regions of the superior temporal gyrus/middle temporal gyrus, including Broca's area, is associated with auditory hallucinations as a trait, while acute hallucinations are associated with increased activity in the same regions along with the hippocampus, parahippocampus, and the right HEMISPHERIC HOMOLOGUE OF BROCA'S AREA IN THE INFERIOR FRONTAL GYRUS. GREY AND WHITE MATTER ABNORMALITIES IN VISUAL REGIONS ARE

16 Points

Accomodation Reflexes,
Akiyoshi Kitaoka,
Anterior and posterior pathways
Brain, Bipolar Cell,
Bird Vision
Curvilinear, Concave/Convex,
Color Constancy
Detects & Interprets,
Distinguishment
FANTASTIC ENDLESS STAIRS

20 Points

Gradients,
Generate Percepts, Grey
"Impossible Objects"
Kenneth Craik, Lotto
Mach Ernst, Möbius Strip 2
Nonlinear Stability
Neurotransmitter receptor
Parietal Cortex
PATRICK BOKANOWSKI, PENROSE

30 Points
– SS01
Alternate a

Relativity
Representations
Salvador Dalí
Segment of Eyeball
Trompe l'Œil
UNSHARP MASKING (USM)

LL Grey Mono Book Italic

4.5 Points

Max Wertheimer, Kurt Koffka, and Wolfgang Köhler founded Gestalt psychology in the early 20th century. The dominant view in psychology at the time was structuralism, exemplified by the work of Hermann von Helmholtz, Wilhelm Wundt, and Edward B. Titchener. Structuralism was rooted firmly in British empiricismand was based on three closely interrelated theories: "atomism", also known as "elementalism", the view that all knowledge, even complex abstract ideas, is built from simple, ELEMENTARY CONSTITUENTS, THE VIEW THAT THE SIMPLEST CONSTITUENTS, THE ATOMS OF THOUGHTARE ELEMENTARY SENSE IMPRESSIONS, AND "ASSOCIATIONISM", THE VIEW THAT MORE COMPLEX IDEAS ARISE FROM THE ASSOciation of simpler ideas. The Gestaltists took issue with this widespread "atomistic" view that the aim of psychology should be to break consciousness down into putative basic elements. In contrast, the Gestalt psychologists believed that breaking psychological phenomena down into smaller parts would not lead to understanding psychology. The Gestalt psychologists believed, instead, that the most fruitful way to view psychological phenomena is as organized, STRUCTURED WHOLES. THEY ARGUED THAT THE PSYCHOLOGICAL "WHOLE" HAS PRIORITY AND THAT THE "PARTS" ARE DEFINED BY THE STRUCTURE OF THE WHOLE, RATHER THAN VICE VERSA. ONE COULD SAY THAT THE APPROACH WAS BASED on a macroscopic view of psychology rather than a microscopic approach. Gestalt theories of perception are based on human nature being inclined to understand objects as an entire structure rather than the sum of its parts. Wertheimer had been a student of Austrian philosopher, Christian von Ehrenfels, a member of the School of Brentano. Von Ehrenfels introduced the concept of Gestalt to philosophy and psychology in 1890, before the advent of Gestalt psychology as such. Von Ehrenfels OBSERVED THAT A PERCEPTUAL EXPERIENCE, SUCH AS PERCEIVING A MELODY OR A SHAPE, IS MORE THAN THE SUM OF ITS SENSORY COMPONENTS. HE CLAIMED THAT, IN ADDITION TO THE SENSORY ELEMENTS OF PERCEPTION

6 Points

Moiré patterns are often an artifact of images produced by various digital imaging and computer graphics techniques, for example when scanning a halftone picture or ray tracing a checkered plane. This can be overcome in texture mapping through the use of mipmapping and anisotropic filtering. The drawing on the upper right shows a moiré pattern. The lines could represent fibers IN MOIRÉ SILK, OR LINES DRAWN ON PAPER OR ON A COMPUTER SCREEN. THE NONLINEAR INTERACTION OF THE OPTICAL PATTERNS OF LINES CREATES A REAL AND VISIBLE PATTERN OF ROUGHLY PARALLEL DARK AND LIGHT bands, the moiré pattern, superimposed on the lines. The moiré effect also occurs between overlapping transparent objects. For example, an invisible phase mask is made of a transparent polymer with a wavy thickness profile. As light shines through two overlaid masks of similar phase patterns, a broad moiré pattern occurs on a screen some distance away. This phase moiré EFFECT AND THE CLASSICAL MOIRÉ EFFECT FROM OPAQUE LINES ARE TWO ENDS OF A CONTINUOUS SPECTRUM IN OPTICS, WHICH IS CALLED THE UNIVERSAL MOIRÉ EFFECT. THE PHASE MOIRÉ EFFECT IS THE BASIS FOR

7 Points

Illusion is a distortion of the senses, which can reveal how the human brain normally organizes and interprets sensory stimulation. Although illusions distort our perception of reality, they are generally shared by most people. Illusions may occur with any of the human senses, but visual illusions (optical illusions) are the best-known and understood. The emphasis on visual illusions occurs because vision often dominates the other senses. For example, individuals watching a ventriloquist will perceive the voice is coming from the dummy since they are able to see the dummy mouth the words. Some illusions are based on GENERAL ASSUMPTIONS THE BRAIN MAKES DURING PERCEPTION. THESE ASSUMPTIONS ARE MADE USING ORGANIZATIONAL PRINCIPLES, AN INDIVIDUAL'S CAPACITY FOR DEPTH PERCEPTION AND MOTION PERCEPTION, AND PERCEPTUAL CONSTANCY. OTHER ILLU-SIONS OCCUR BECAUSE OF BIOLOGICAL SENSORY STRUCTURES WITHIN THE

9 Points

In mathematics, physics, and art, moiré patterns or moiré fringes are large-scale interference patterns that can be produced when an opaque ruled pattern with transparent gaps is overlaid on another similar pattern. For the moiré interference pattern to appear, the two patterns must not be completely identical, but rather displaced, rotated, or have slightly different pitch. Moiré patterns appear in many situations. In printing, the printed pattern of dots can interfere with the image. In television and digital photography, a pattern on an object being photographed can interfere with the shape of the light sensors to generate unwanted artifacts. They are also SOMETIMES CREATED DELIBERATELY – IN MICROMETERS THEY ARE USED TO AMPLIFY THE EFFECTS OF VERY SMALL MOVEMENTS. IN PHYSICS, ITS MANIFESTATION IS WAVE INTERFERENCE SUCH AS THAT SEEN IN THE DOUBLE-SLIT EXPERIMENT AND THE BEAT

10.5 Points

A visual illusion or optical illusion is characterized by visually perceived images that are deceptive or misleading. Therefore, the information gathered by the visual sense is processed to give, on the face of it, a percept that does not tally with information from other senses or physical measurement. A conventional assumption is that there are physiological illusions that occur naturally and cognitive illusions that can be demonstrated by specific visual tricks that say something more basic about how human perceptual systems work. The visual SYSTEM (EYE AND BRAIN) CONSTRUCTS A WORLD INSIDE OUR HEAD BASED ON WHAT IT SAMPLES FROM THE SURROUNDING ENVIRONMENT. HOWEVER, SOMETIMES IT TRIES

LL Grey Mono Book Italic

12 Points
– SS02
Alternate y

Illusions can be based on an individual's ability to see in three dimensions even though the image hitting the retina is only two dimensional. The Ponzo illusion is an example of an illusion which uses monocular cues of depth perception to fool the eye. But even with two-dimensional images, the brain exaggerates vertical distances when compared with horizontal distances, as in the vertical-horizontal illusion where the TWO LINES ARE EXACTLY THE SAME LENGTH. IN THE PONZO ILLUSION THE CONVERGING PARALLEL LINES TELL THE BRAIN THAT THE IMAGE HIGHER IN THE

16 Points

Acutance,
Amplitude of the Derivative
Bicubic Interpolation
Barberpole illusion/Barber pole
Craik–O'Brien–Cornsweet
Café wall Illusion
Deconvolution, Delirium Tremens
Delusional Perceptions
Edge Enhancement
FRASER SPIRAL ILLUSION

20 Points

Hypnagogia,
Hidden Faces, J.J. Oppel
Kinetic Depth Effect
Lilac Chaser,
Mirage, Multistable
Müller-Lyer, Neural Path
Photoreceptors, Pinna-Brelstaf
Parallel Lines
RECEPTIVE FIELS, RETINA

30 Points

Scintillating
Shifted Chessboard
Troxler's Fading
Unrealizable Object
Wilhelm Wundt
X AND Y CO-ORDINATES

LL Grey Mono — Script Options

7 Points
Light + It.
– Cyrillic

В октябре 1911 года Мондриан увидел в Амстердаме радикальные в своем напористом аналитическом кубизме работы Жоржа Брака. Подобно двум скалолазам, Брак и Пикассо отправились к вершинам чистого эксперимента. В конце года Мондриан находится в Париже. Сначала он был установлен на авеню дю Мэн, 33, а в мае 1912 года он переехал в мастерскую на улице Рю дю Депар, 26, недалеко от станции Монпарнас. Питер Корнелис Мондриан решил отныне называть себя Питом Мондрианом. Он сразу же встанет на путь кубизма и, следовательно, откажется от ярких цветов, сократив свою ПАЛИТРУ ДО ДИАПАЗОНОВ СЕРОГО И ОХРИСТОГО. О КУБИЗМЕ ОН СКАЖЕТ: *«Я ЧУВСТВОВАЛ, ЧТО ТОЛЬКО КУБИСТЫ НАШЛИ ПРАВИЛЬНЫЙ ПУТЬ, И ДОЛГОЕ ВРЕМЯ ОНИ НАХОДИЛИСЬ ПОД СИЛЬНЫМ ВЛИЯНИЕМ.»* И быстро это усиливает тенденцию к абстракции, которая работает в аналитическом кубизме: серии экспериментов, постро-енные на основе имбирного горшка и цветущей яблони, достигают границы, на которой фигура исчезает в структуре. Он сводится к формальным вариациям нескольких знаков: тугие изгибы ветвей яблони и их натяжение в пространстве по вертикали, но со временем изгибаются к горизонтали. Делоне. В январе 1914 года Мондриан написал своему другу Бреммеру: *«Я выстраиваю линии и сочетания цветов на плоских поверхностях, чтобы выразить с величайшей ОСОЗНАННОСТЬЮ ОБЩУЮ КРАСОТУ. ПРИРОДА (ИЛИ ТО, ЧТО Я ВИЖУ) ВДОХНОВЛЯЕТ МЕНЯ, СТАВИТ МЕНЯ, КАК И ЛЮБОГО ХУДОЖНИКА, В ЭМОЦИОНАЛЬНОЕ СОСТОЯНИЕ, КОТОРОЕ*

9 Points
Book + It.
– Cyrillic
– SS09
Cyrillic
Alternate

Бергсон осудил в *«Очерке прямых данных сознания» то, что он называет «иллюзией» заблуждения, «интенсивного и обширного»*. Интенсивные цены,термин, который сегодня немного устарел, - это значения, которые постепенно увеличиваются, но которые не могут относиться ни к числу, ни к степени. Напротив, расширенное относится к степени. мы чувствуем определенную величину, которая определяется контрастом, оттенком, и мы пытаемся несколько грубо определить ее с помощью объективно данной величины, которая сама по себе принадлежит субъективному сознанию. Итак, *«чувство - это психологический факт, выходящий за рамки всякой меры»*. Бергсон не отрицает измерения дифференциальных порогов Вебера, которые определяют возбуждение и, следовательно, вызывают его. Но он КРИТИКУЕТ АМАЛЬГАМУ ФЕХНЕРА, КОТОРАЯ ПРИВОДИТ ПРИЧИНУ В ДЕЙСТВИЕ. ПОЭТОМУ ОН ВЫСТУПАЕТ ЗА РАДИКАЛИЗАЦИЮ МЫШЛЕНИЯ, КОТОРАЯ ДЕЛАЕТ БОЛЬШИЙ УПОР НА СУБЪЕКТИВНЫЕ СИТУАЦИИ. ОН ДОЛЖЕН, КАК ОН УЧИТ НАС, ВОССТАНОВИТЬ ИСТИНУ *«ПРЯМЫХ*

7 Points
Light + It.
– Greek

Τον Οκτώβριο του 1911, ο Mondrian είδε ριζοσπαστικούς στον δυναμικό αναλυτικό κυβισμό του έργου του Georges Braque. Όπως δύο αναρριχητές, Μπρακ και ο Πικάσο πήγε στα ύψη του καθαρού πειράματος. Στο τέλος Το έτος Mondrian βρίσκεται στο Παρίσι. Αρχικά ήταν avenue du Maine, 33 ετών, και τον Μάιο του 1912 μετακόμισε σε εργαστήριο στη Rue du Depard, 26 ετών, κοντά από το σταθμό Montparnasse. Ο Peter Cornelis Mondrian αποφάσισε πλέον να ονομαστεί Pete Mondrian. Θα ξεκινήσει αμέσως το μονοπάτι του Κυβισμού και, επομένως, θα εγκαταλείψει τα φωτεινά χρώματα, ΜΕΙΩΝΟΝΤΑΣ ΤΗΝ ΠΑΛΕΤΑ ΤΟΥ ΣΕ ΣΕΙΡΕΣ ΓΚΡΙ ΚΑΙ ΩΧΡΑΣ. ΘΑ ΠΕΙ ΓΙΑ ΤΟΝ ΚΥΒΙΣΜΟ: *"ΕΝΙΩΣΑ ΟΤΙ ΜΟΝΟ ΟΙ ΚΥΒΙΣΤΕΣ ΒΡΗΚΑΝ ΤΟ ΣΩΣΤΟ ΔΡΟΜΟ ΚΑΙ ΕΠΗΡΕΑΣΤΗΚΑΝ ΠΟΛΥ ΓΙΑ ΜΕΓΑΛΟ ΧΡΟΝΙΚΟ ΔΙΑΣΤΗΜΑ"*. Και ενισχύει γρήγορα την τάση για αφαίρεση που λειτουργεί στον αναλυτικό κυβισμό: μια σειρά πειραμάτων, κατασκε-υάζοντας βασισμένο σε μελόψωμο κατσαρόλα και ένα ανθισμένο δέντρο μηλιάς, φτάστε στα σύνορα όπου το σχήμα εξαφανίζεται στη δομή. Βγαίνει σε επίσημες παραλλαγές διαφόρων σημείων: σφιχτές στροφές των κλαδιών μηλιάς και η ένταση τους στο διάστημα κάθετα, αλλά κάμψτε προς την οριζόντια με την πάροδο του χρόνου. Delone. Τον Ιανουάριο του 1914, ο Mondrian έγραψε στον φίλο του Bremmer: *"Ευθυγραμμίζω γραμμές και συνδυασμούς χρωμάτων σε επίπεδες ΕΠΙΦΑΝΕΙΕΣ ΓΙΑ ΝΑ ΕΚΦΡΑΣΩ ΤΗ ΣΥΝΟΛΙΚΗ ΟΜΟΡΦΙΑ ΜΕ ΤΗ ΜΕΓΑΛΥΤΕΡΗ ΕΠΙΓΝΩΣΗ. Η ΦΥΣΗ (Η ΑΥΤΟ ΠΟΥ ΒΛΕΠΩ) ΜΕ ΕΜΠΝΕΕΙ, ΜΕ ΒΑΖΕΙ, ΟΠΩΣ ΚΑΘΕ ΚΑΛΛΙΤΕΧΝΗΣ, ΣΕ ΜΙΑ*

9 Points
Book + It.
– Greek

Ο Μπέργκσον κατήγγειλε στο *"Δοκίμιο για τα άμεσα δεδομένα της συνείδησης" αυτό που αποκαλεί "ψευδαίσθηση" σύγχυσης "το εντατικό και το εκτεταμένο"*. Οι εντατικές τιμές, ένας όρος που είναι λίγο ξεπερασμένος σήμερα, είναι τιμές που αυξάνονται κατά μοίρες, αλλά οι οποίες δεν μπορούν ούτε να σχετίζονται με έναν αριθμό, ούτε να σχετίζονται με έναν βαθμό. Αντιθέτως, το εκτεταμένο αναφέρεται σε ένα βαθμό. Νιώθουμε μια συγκεκριμένη ποσότητα, που ορίζεται από την αντίθεση, την απόχρωση, και επιδιώκουμε λίγο καταχρηστικά να την ορίσουμε με μια ποσότητα αντικειμε-νικά μια δεδομένη που ανήκει από μόνη της στην υποκει-μενική συνείδηση. Τώρα, *"η αίσθηση είναι ένα ψυχολογικό γεγονός που ξεφεύγει από κάθε μέτρο"*. Ο Μπέργκσον δεν αρνείται τη μέτρηση των διαφορικών κατωφλίων του Weber, ΤΑ ΟΠΟΙΑ ΚΡΙΝΟΥΝ ΤΟΝ ΕΝΘΟΥΣΙΑΣΜΟ ΚΑΙ ΣΥΝΕΠΩΣ ΤΗΝ ΑΙΤΙΑ. ΑΛΛΑ ΕΠΙΚΡΙΝΕΙ ΤΟ ΑΜΑΛΓΑΜΑ ΤΟΥ FECHNER, ΤΟ ΟΠΟΙΟ ΘΕΤΕΙ ΣΕ ΙΣΧΥ ΤΗΝ ΑΙΤΙΑ. ΕΠΟΜΕΝΩΣ, ΥΠΟΣΤΗΡΙΖΕΙ ΜΙΑ ΡΙΖΟΣΠΑΣΤΙΚΟ-ΠΟΙΗΣΗ ΤΗΣ ΣΚΕΨΗΣ ΠΟΥ ΔΙΝΕΙ ΜΕΓΑΛΥΤΕΡΗ ΕΜΦΑΣΗ ΣΤΙΣ

LL Grey Mono — Script Options

12 Points
Book + It.
– Cyrillic

Он подчеркивает, что существует неотъем-
лемая часть сознания и тела, которую
необходимо учитывать при анализе
восприятия. Примат восприятия означает
примат опыта, поскольку у восприятия
есть активное и конститутивное измерение.
С Полом Ватцлавиком реальность стала
результатом мысленного построения. *«Из
всех иллюзий наиболее опасно думать,
что существует только одна реальность»*.
ИССЛЕДОВАНИЯ, ПРОВЕДЕННЫЕ В ПОСЛЕДНИЕ
ГОДЫ НЕВРОЛОГАМИ, ТАКИМИ КАК ДЭВИД ИГЛМАН
ИЛИ ДЭН АРИЭЛИ, ПОДЧЕРКИВАЮТ ВЛИЯНИЕ

12 Points
Book + It.
– Greek

Τονίζει ότι υπάρχει μια εγγενής συνείδηση
και το σώμα που πρέπει να λαμβάνει
υπόψη η ανάλυση της αντίληψης. Η υπεροχή
της αντίληψης σημαίνει την υπεροχή
της εμπειρίας, στο βαθμό που η αντίληψη
έχει ενεργή και συστατική διάσταση.
Με τον Paul Watzlawick, η πραγματικότητα
έγινε το αποτέλεσμα μιας διανοητικής
κατασκευής. *“Από όλες τις ψευδαισθήσεις,
το πιο επικίνδυνο είναι να πιστεύουμε
ΟΤΙ ΥΠΑΡΧΕΙ ΜΟΝΟ ΜΙΑ ΠΡΑΓΜΑΤΙΚΟΤΗΤΑ”*.
ΜΕΛΕΤΕΣ ΠΟΥ ΠΡΑΓΜΑΤΟΠΟΙΗΘΗΚΑΝ ΤΑ ΤΕΛΕΥΤΑΙΑ
ΧΡΟΝΙΑ ΑΠΟ ΝΕΥΡΟΕΠΙΣΤΗΜΟΝΕΣ ΟΠΩΣ Ο DAVID

16 Points
Light + It.
– Cyrillic
– SS09
Cyrillic
Alternates

Как только опыт позволил
понять двойственность образа,
ограничения восприятия или
суждения могут быть легко
преодолены. Как сказал Гете,
мы видим только то, что знаем.
И *«открытие-это видеть то,
что видели все остальные, и
ДУМАТЬ О ТОМ, О ЧЕМ ЕЩЕ НИКТО
НЕ ДУМАЛ»*. МЫ ТАКЖЕ МОЖЕМ

16 Points
Light + It.
– Greek

Όταν η εμπειρία έχει καταστήσει
δυνατή την κατανόηση της
διττότητας της εικόνας, οι περι-
ορισμοί στην αντίληψη ή στην
κρίση μπορούν εύκολα να ξεπερα-
στούν. Όπως είπε ο Goethe,
βλέπουμε μόνο όσα γνωρίζουμε.
Και, “η ανακάλυψη βλέπει τι
ΕΧΟΥΝ ΔΕΙ ΟΛΟΙ ΟΙ ΑΛΛΟΙ ΚΑΙ
ΣΚΕΦΤΟΝΤΑΙ ΤΙ ΔΕΝ ΕΧΕΙ ΣΚΕΦΤΕΙ

Technical Information

Latin

Afrikaans
Albanian
Asturian
Asu
Basque
Bemba
Bena
Breton
Catalan
Chiga
Colognian
Cornish
Croatian
Czech
Danish
Dutch
Embu
English
Esperanto
Estonian
Faroese
Filipino
Finnish
French
Friulian
Galician
Ganda
German
Gusii
Hungarian
Icelandic
Igbo
Inari Sami
Indonesian
Irish
Italian
Jola-Fonyi
Kabuverdianu
Kabyle
Kalaallisut
Kalenjin
Kamba
Kikuyu
Kinyarwanda
Koyra Chiini
Koyraboro Senni
Langi
Latvian
Lithuanian
Lower Sorbian
Luo
Luxembourgish
Luyia
Machame
Makhuwa-Meetto
Makonde
Malagasy
Maltese
Manx
Meru
Morisyen
North Ndebele
Northern Sami
Norwegian Bokmål
Norwegian
Nynorsk
Nyankole
Oromo
Polish
Portuguese
Prussian
Quechua
Romanian
Romansh
Rombo
Rundi
Rwa
Samburu
Sango
Sangu
Scottish Gaelic
Sena
Serbian
Shambala
Shona
Slovak
Slovenian
Soga
Somali
Spanish
Swahili
Swedish
Swiss German
Tachelhit
Taita
Tasawaq
Teso
Turkish
Upper Sorbian
Uzbek
Volapük
Vunjo
Walser
Welsh
Western Frisian
Yoruba
Zarma
Zulu

Open Type Features

aalt	Access All Alternates	ss01	Stylistic Set 01
afrc	Alternative Fractions	ss02	Stylistic Set 02
case	Case-Sensitive Forms	ss03	Stylistic Set 03
dnom	Denominators	ss05	Stylistic Set 04
hist	Historical Forms	ss08	Stylistic Set 05
liga	Standard Ligatures	ss09	Stylistic Set 06
mgrk	Mathematical Greek	subs	Subscript
numr	Numerators	sups	Superscript
salt	Stylistic Alternates	tnum	Tabular Figures
sinf	Scientific Inferiors		

Codepage

Please refer to the Technical Document

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