

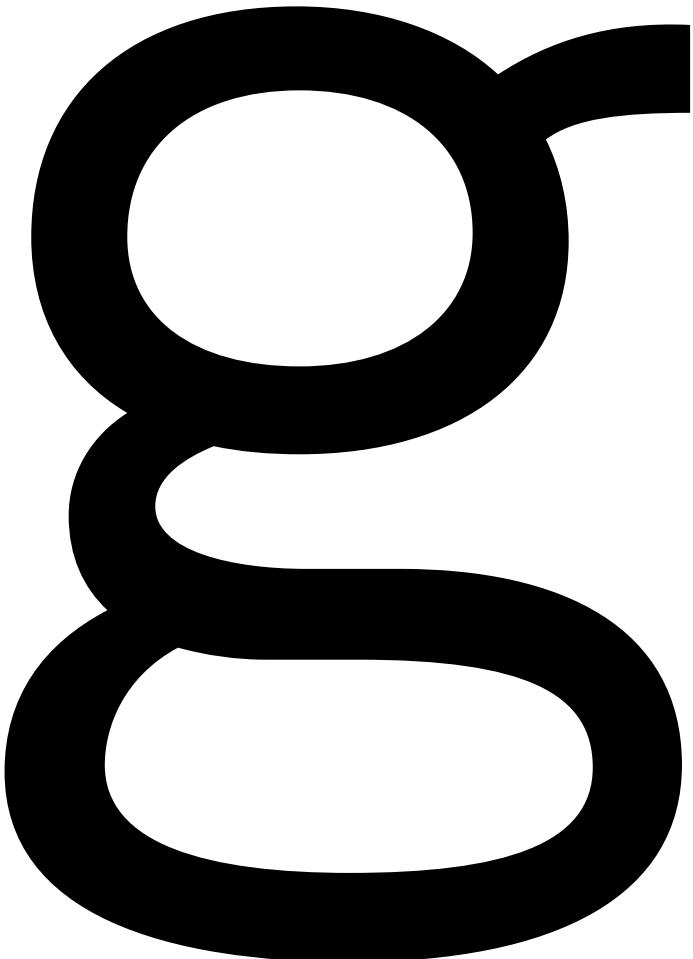
# **Chough**

*an original type family by*

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**Type West 2024  
San Francisco**

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1. <i>process</i>	4
2. <i>specimen</i>	22
3. <i>examples</i>	48



**pro-**  
**cess**

# Term 2

Chough began with few goals and an open mind. I wanted to create a typeface that was usable on screen, which suggests large x-height and simple letterforms that are readable at small sizes. I also wanted to concentrate on making a sans face, since I had just gotten done reviving a serif typeface (Kennerley Old Style) for Type West Term 1.

I began by sketching out a number of TypeCooker-generated ideas (fig. 1) and keeping the ones I found compelling. I felt like I was getting somewhere once I started sketching with the prompt “no stress, rounded ends, italic construction.” The sketch “Outfleck” below is the first one where I felt like the idea had legs. Anna Khorash had just led the class in a workshop on drawing italics and got me thinking about doing an upright italic, which I drew in the “nuclears” sketch and immediately took a liking to. The original concept for Chough grew from that — mostly monolinear, with italic features like tails on the letters and a serif here and there to give the letters character. I then experimented with a true cursive upright italic with joined letter forms (“prodigy”) and adding serifs to the design (“ruckling”), as well as two takes on a possible rounded bold construction (“rhombus” and “tamrin”).

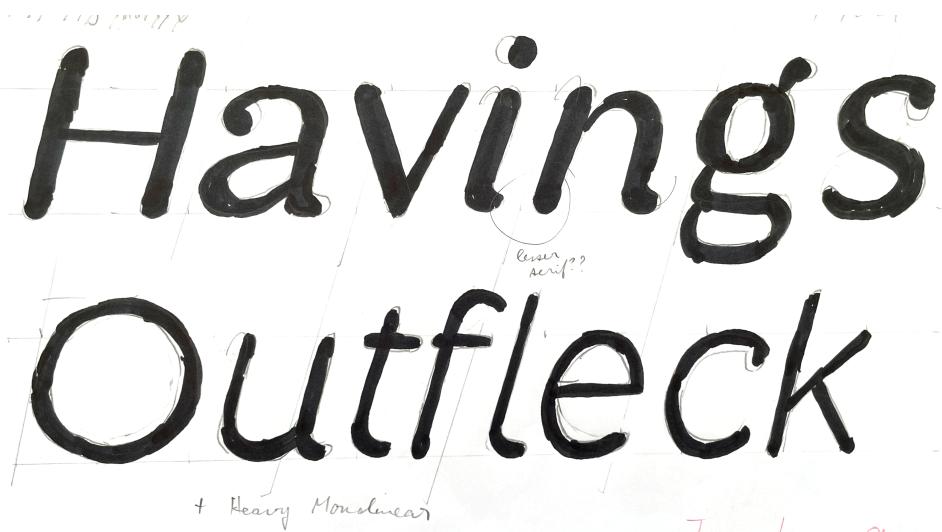


fig. 1: initial sketches for Chough (6/14)

blier

Rhombus

6/10/2024

rhombus

רְהֹמְבָּס

tamrin

nuclears

prodigy

ruckling

I set to digitizing the “nuclears” sketch in Glyphs and extending it to the whole lowercase alphabet (fig. 2), to get a better idea of how it would look with larger bodies of text. I immediately saw that there were some inconsistencies in the alphabet, like the terminals on ‘r’, ‘a’, ‘c’, and ‘s’, so I normalized the last three (fig. 3) — ‘r’ would take some time to figure out. I also experimentded with a second master that places serifs on the tops of all the terminals, but didn’t find it very compelling (fig. 4).

abcdefghijklmnopqrstuvwxyz

*fig. 2: extension of sketches to lowercase alphabet (6/22)*

graciously  
graciously

*fig. 3: normalizing serifs on ‘a’, ‘c’, ‘s’ (6/22 above, 6/28 below)*

I wanted to make sure I kept the possibility of a bold variant in mind throughout the design, so I drew a black version of the face by thickening all of the strokes, blowing up all of the rounded terminals, and making adjustments where the thick strokes don't all fit in the required vertical interval (fig. 5). For example, I shortened the stem of the 'i' and 'j' to make room for the dot, and thinned the interior strokes of 'a', 'g', 'e', and 's'. I decided this was going to be the logic of the back version: any thin strokes would be the ones on the interior of the letter, as opposed to the horizontal strokes in a normal typeface with contrast. I also made sure along the way that the regular and bold could be interpolated and that the interpolated result looked OK.

# graciously

*fig. 4: experiment with serifs on all strokes (6/28)*

abcdefghijkl  
mnopqrstuvwxyz  
wxyz

agesij

*fig. 5: initial version of bold, with detail on unusual letters (6/29)*

I wasn't satisfied with any of the capitals I was drawing for the regular weight (they all looked very mechanical) so I decided to draw the black capitals first instead (fig. 6). I had some crazy ideas for 'E', 'Q', and 'A' that didn't make it into the final product but they still look fun, especially when rounded. I also added a small entry stroke to letters that met the upper left hand corner of their bounds, as a sort of mirror to the exit stroke of the lowercase letters.

Around this time I had the realization that the regular weight was looking suspiciously like one of the weights of my previous project, "Gnawbone," that I designed for ILT Academy's "Introduction to Latin Type Design" course in 2022 (fig. 7). I felt like I was a musician who had written a song that turned out to be the same as one on a previous album.

Due in part to that and in part to Masha's urging me to try ditching the roundness of the font, I drew a squared-off version of the black weight where all of the round terminals were replaced with square ends (fig. 8). The effect was surprising — I felt like I was putting on my glasses and the details (and flaws) of the letterforms became much clearer.



*fig. 6: initial version of bold uppercase, with detail on unusual letters (7/8)*

hamburgefonts  
hamburgefonts

*fig. 7: Chough from 6/22 (top), Gnawbone from ILT Academy 2022  
(bottom)*

**A B C E F G H I J K L M**  
**N O P Q R S T U V W X**  
**Y Z a b c d e f g h i k l m**  
**n o p q r s t u v w x y z**

*fig. 8: black weight of squared-off Chough (7/13)*

After some more feedback and critiques it became apparent that there was too much going on in the uppercase and it had to be simplified. I eliminated all the entry strokes and changed the 'A' and 'Q' to more conventional forms. I also simplified the small 'r' and introduced curves to more letters in the lowercase (fig. 9).

At this point I was satisfied with how the black was looking so I redrew the regular to try and capture the same feeling. This meant introducing more curves to characters with diagonal strokes like 'v', 'w', 'y', and 'k', and generally making the face wider and more monolinear (fig. 10). I also drew figures and punctuation.

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

*fig. 9: revised black weight (7/20)*

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

*fig. 10: revision of light weight to match black, and completion of capital characters (7/21)*

The last major push for Term 2 came from testing the font in use in a web browser to look for inconsistencies in color or problems at small sizes. I found quickly that the spacing was too tight and the overall color was too light, so I loosened the spacing and changed the “regular” weight to be 10% of the way from the light master to the black master instead of 0% (fig. 11).

By this time she had found her way into a tidy little room with a table in the window, and on it (as she had hoped) a fan and two or three pairs of tiny white kid gloves: she took up the fan and a pair of the gloves, and was just going to leave the room, when her eye fell upon a little bottle that stood near the looking-glass. There was no label this time with the words "DRINK ME," but nevertheless she uncorked it and put it to her

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*fig. 11: testing Chough spacing and color. Top left: Chough on 7/21. Top right: Chough after loosening spacing a bit too much. Bottom left: Final spacing for Chough at end of term 2. Bottom right: Final weight for Chough Regular at end of term 2.*

# Term 3

One aspect of the font that drew the most criticism during the final presentations of Term 2 was the 'g' — I was in love with the shape (so much so that I chose a font name that featured it!) but Kel Troughton described it as "loud." The break between terms gave me a little perspective and I came to agree with him, so I redrew the 'g' to a more traditional (for sans faces, anyway) single-story g.

Changing the 'g' made me realize that I should tone down some of the other idiosyncrasies in the black. Over time I abandoned the idea that internal strokes should be thinner than the others; this affected the letters 'a', 'e', 'g', and 's' the most. I also made the 'i' more normal by giving it a round dot and allowing it to poke up over the ascender instead of shortening the stem (fig. 12).



The image displays three identical words, "diagnose", stacked vertically. Each word is rendered in a bold, black sans-serif font. The top word is the original Chough Black font. The middle word shows a intermediate stage where the internal strokes have been thickened. The bottom word shows the final stage where the internal strokes are now as thick as the main stems. This visual comparison illustrates the process of "evening the thickness of strokes in the black".

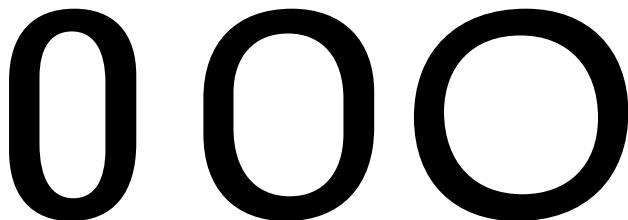
*fig. 12: redrawing the 'g' and evening the thickness of strokes in the black. From top to bottom: Chough Black on 8/15, 8/16, and 11/2*

I also spent some time seeing if it would be feasible to add a width axis to the font. The initial experiments were promising (fig. 13), but in letters with large rounds like 'o', 'd', 'b', etc. I found that I couldn't get a satisfactory shape for the 'o' with just four nodes at the extrema because the result felt a bit too egg-shaped. By placing two nodes on each side I could give the 'o' sides that have a straight up-and-down segment and a more natural pill-shape for the narrow width.

However, in order to be able to interpolate with the regular weight, I needed to add a second node to the sides of the regular 'o' too. This caused the interpolated version between the narrow and regular widths to have straight sides (fig. 14), which felt out of character with the design overall. It also made later adjustments to the regular weight fiddly because I could no longer change the "slope" of those nodes. Because of these problems, I decided to stop work on the narrow variant in favor of other features.



*fig. 13: narrow light version of Chough (8/16)*



*fig. 14: narrow, interpolated, and wide versions of 'o' (8/16)*

I decided to move onto italics next, something I had been looking forward to. At the end of Term 2 I drew a set of italics with fairly pronounced curved tails on the letters (fig. 15; inspired in part by OHno's Vulf Mono) but after coming back to it in Term 3 I decided that it was a little out there and settled on drawing an italic with a more traditional oblique basis.

My first attempt at italics in earnest consisted of slanting the roman forms by 12°, fixing up irregularities in the curves, and adding entry strokes (fig. 16). I wasn't satisfied with how similar it looked to the roman, especially in context — it was hard to tell from a distance whether a word was in italics or not. After some experimentation, I settled on the following process for creating my italic letters: take the roman letter, scale it by 94% horizontally, then shear it by 12°, and then fix up any resulting irregularities. I decided to make the junction between the arch and the stem smooth. I also gave the 'e' a more rounded form, and drew a more traditional 'a' by chopping the stem off the 'd'. (fig. 17)

The italic was beginning to gain its own voice but I started to realize that the issue was not that the italic looked too much like the roman but that the roman looked too much like an upright italic.



abcdefghijklmnopqrstuvwxyz

fig. 15: prototype italics from end of Term 2

*abcdefghijklmnopqrstuvwxyz*

*fig. 16: initial draft of light italic (8/20)*

*abcdefghijklmnopqrstuvwxyz*

*fig. 17: final light italic*

One stretch goal I had for the project was to add Cyrillic support — given that Maria and Irina were both there to give me advice and I had had some experience with the language in the past, I felt that the circumstances was right. Cyrillic and Latin have many letter forms in common, and a lot of the other letters are fairly geometric, so it wasn't too much work to knock together an initial version (fig. 18). I quickly found that I couldn't put tails on the lowercase cyrillic letters the same way I could on the Latin letters, primarily because of 'л' already having a tail on the left side. The tails make 'п' look like 'л' and 'л' look like some weird double-tail 'л'. It just didn't make sense, so I removed them (fig. 19).

авбгдеёжзуйклмноп  
рстуфхцчшщъыъюя  
АВБГДЕЁЖЗУЙКЛМНОП  
РСТУФХЦЧШЩЪЫЪЮЯ

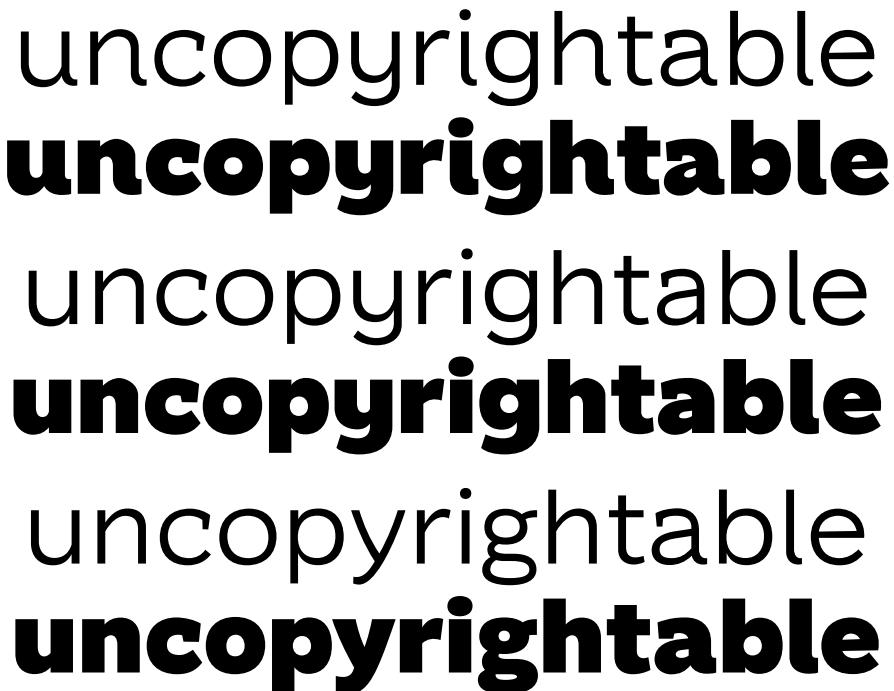
*fig. 18: initial version of light Cyrillic (10/28)*

липа  
липа

*fig. 19: before and after removal of tails on lowercase Cyrillic letters (10/28)*

This motivated the removal of the tails from the Latin lowercase letters as well, something that Maria and Miguel had been persistently advocating for. I was very reluctant to remove the tails because I felt that they were what distinguished this typeface from similar ones like Montserrat and Verdana, but they suggested that the font would retain sufficient character even after I removed them. I gave it a shot and had to say that I liked the result (fig. 20, top and middle). This also meant that there was more to distinguish the roman from the italic since only the latter has tails on the letters.

The final major change I made to the lowercase Latin was to revisit the 'g' and 'y'. I felt that the round one-story 'g' was a bit of a cop-out and I wanted to see if I could make a two-story 'g' work again. After some pushing nodes around I settled on one inspired by the 'g' from Franklin Gothic, with an ear on the right side whose vertical terminal fit well with adjacent vertical characters (fig. 20, bottom). I kept the round versions of 'g' and 'y' as a stylistic alternate, accessible with the Open-Type feature 'ss01'.



uncopyrightable  
**uncopyrightable**  
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**uncopyrightable**  
uncopyrightable  
**uncopyrightable**

*fig. 20: before (top; 8/20) and after (middle; 11/18) removal of tails on lowercase Latin letters, and final (bottom) version with redrawn 'g' and 'y'*

Drawing the Cyrillic italic was quite a bit harder, as I didn't have an intuitive sense for what made a good Russian italic, and sources varied on what the correct italic form of letters like б, д, т were, but I eventually arrived at something I was happy with (fig. 21).

The difference between where Chough started and where it ended up is quite striking, especially in the black. I started with a lot of ideas about how I could make a unique typeface, and one by one they were pared away until a relatively plain face remains that still somehow retains the character of the original (fig. 22).

авбгдеёжзуйклмноп  
рстуфхцчищъыъэюя  
АВБГДЕЁЖЗУЙКЛМНОПРСТ  
УФХЦЧШЩЪЫЪЭЮЯ

**авбгдеёжзуйклмноп  
рстуфхцчищъыъэюя  
АВБГДЕЁЖЗУЙКЛМНОПР  
СТУФХЦЧШЩЪЫЪЭЮЯ**

fig. 21: final Cyrillic italics

**The choughs have black plumage and brightly coloured legs, feet and bills and are resident in the mountains and rocky sea-cliffs of southern Eurasia and North Africa.**

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*fig. 22: Chough Black on 7/8 (top), 8/5 (middle) and final (bottom).*



**spec-**  
**imen**

The Chough  
type family  
consists of  
the following  
typefaces:

Light,  
*Light Italic*,  
Regular,  
*Italic*,  
**Bold**,  
***Bold Italic***,  
**Semiblack**,  
***Semiblack Italic***,  
**Black**, and  
***Black Italic*.**

Chough Light

# <sup>72</sup> The sto- ry of our

<sup>48</sup> world is a sto-  
ry that is still  
very imper-

<sup>36</sup> fectly known. A  
couple of hundred  
years ago men  
possessed the

<sup>24</sup> history of little more than  
the last three thousand  
years. What happened be-  
fore that time was a matter

- 18 of legend and speculation. Over a large part of the civilized world it was believed and taught that the world had been created suddenly in 4004 B.C., though authorities differed as to whether this had occurred in the spring or autumn of that year. This fantastically precise misconception
- 14 was based upon a too literal interpretation of the Hebrew Bible, and upon rather arbitrary theological assumptions connected therewith. Such ideas have long since been abandoned by religious teachers, and it is universally recognized that the universe in which we live has to all appearances existed for an enormous period of time and possibly for endless time. Of course there may be deception in these appearances,
- 12 as a room may be made to seem endless by putting mirrors facing each other at either end. But that the universe in which we live has existed only for six or seven thousand years may be regarded as an altogether exploded idea. ¶ The earth, as everybody knows nowadays, is a spheroid, a sphere slightly compressed, orange fashion, with a diameter of nearly 8,000 miles. Its spherical shape has been known at least to a limited
- 10 number of intelligent people for nearly 2,500 years, but before that time it was supposed to be flat, and various ideas which now seem fantastic were entertained about its relations to the sky and the stars and planets. We know now that it rotates upon its axis (which is about 24 miles shorter than its equatorial diameter) every twenty-four hours, and that this is the cause of the alternations of day and night, that it circles about the sun in a slightly distorted and slowly variable oval path in a year. Its distance from the sun varies between ninety-one and a half millions at its nearest and ninety-four and a half million miles. ¶ About the earth circles a smaller sphere, the moon, at an average distance of 239,000 miles. Earth and moon are not the only bod-
- 8

## Chough Light Italic

<sup>72</sup> *In the  
last fifty*

<sup>48</sup> *years there  
has been  
much very*

<sup>36</sup> *fine and interesting  
speculation on the  
part of scientific  
men upon the age*

<sup>24</sup> *and origin of our earth. Here  
we cannot pretend to give  
even a summary of such  
speculations because they*

- 18 involve the most subtle mathematical and physical considerations. The truth is that the physical and astronomical sciences are still too undeveloped as yet to make anything of the sort more than an illustrative guesswork. The general tendency has been to make the estimated age of our globe longer and
- 14 longer. It now seems probable that the earth has had an independent existence as a spinning planet flying round and round the sun for a longer period than 2,000,000,000 years. It may have been much longer than that. This is a length of time that absolutely overpowers the imagination. ¶ Before that vast period of separate existence, the sun and earth and the other planets that circulate round the sun may have been a great swirl of diffused
- 12 matter in space. The telescope reveals to us in various parts of the heavens luminous spiral clouds of matter, the spiral nebulæ, which appear to be in rotation about a centre. It is supposed by many astronomers that the sun and its planets were once such a spiral, and that their matter has undergone concentration into its present form. Through majestic æons that concentration went on until in that vast remoteness of the past for which we have given fig-
- 10 ures, the world and its moon were distinguishable. They were spinning then much faster than they are spinning now; they were at a lesser distance from the sun; they travelled round it very much faster, and they were probably incandescent or molten at the surface. The sun itself was a much greater blaze in the heavens. ¶ If we could go back through that infinitude of time and see the earth in this earlier stage of its history, we should behold a scene more like the interior of a blast furnace or the surface of a lava flow before it cools and cakes over than any other contemporary scene. No water would be visible because all the water there was would still be superheated steam in a stormy atmosphere of sulphurous and metallic vapours. Beneath this would swirl and boil an ocean of

Chough Regular

<sup>72</sup> As every-body

<sup>48</sup> knows nowa-days, the knowledge

<sup>36</sup> we possess of life before the beginnings of human memory and tra-

<sup>24</sup> dition is derived from the markings and fossils of living things in the stratified rocks. We find preserved in

- 18 shale and slate, limestone, and sand-stone, bones, shells, fibres, stems, fruits, footmarks, scratchings and the like, side by side with the ripple marks of the earliest tides and the pittings of the earliest rain-falls. It is by the sedulous examination of this Record of the Rocks that the past
- 14 history of the earth's life has been pieced together. That much nearly everybody knows to-day. The sedimentary rocks do not lie neatly stratum above stratum; they have been crumpled, bent, thrust about, distorted and mixed together like the leaves of a library that has been repeatedly looted and burnt, and it is only as a result of many devoted lifetimes of work that the record has been put into order and
- 12 read. The whole compass of time represented by the record of the rocks is now estimated as 1,600,000,000 years. ¶ The earliest rocks in the record are called by geologists the Azoic rocks, because they show no traces of life. Great areas of these Azoic rocks lie uncovered in North America, and they are of such a thickness that geologists consider that they represent a period of at least half of the 1,600,000,000 which they assign to the
- 10 whole geological record. Let me repeat this profoundly significant fact. Half the great interval of time since land and sea were first distinguishable on earth has left us no traces of life. There are ripples and rain marks still to be found in these rocks, but no marks nor vestiges of any living thing. ¶ Then, as we come up the record, signs of past life appear and increase. The age of the world's history in which we find these past traces is called by geologists the Lower Palæozoic age. The first indications that life was astir are vestiges of comparatively simple and lowly things: the shells of small shell-fish, the stems and flowerlike heads of zoophytes, seaweeds and the tracks and remains of sea worms and crustacea. Very early appear
- 8

## Chough Italic

<sup>72</sup> *In the days*

<sup>48</sup> *when the world was supposed to*

<sup>36</sup> *have endured for only a few thousand years, it was supposed that the*

<sup>24</sup> *different species of plants and animals were fixed and final; they had all been created exactly as they are to-*

- 18 day, each species by itself. But as men began to discover and study the Record of the Rocks this belief gave place to the suspicion that many species had changed and developed slowly through the course of ages, and this again expanded into a belief in what is called Organic Evolution, a belief that all species of life upon earth, animal and vegetable alike, are descended by slow continuous processes of change from some very simple ancestral form of life, some almost structureless living substance, far back in the so-called Azoic seas. ¶ This question of Organic Evolution, like the question of the age of the earth, has in the past been the subject of much bitter controversy. There was a time when a belief in organic evolution was
- 14 12 for rather obscure reasons supposed to be incompatible with sound Christian, Jewish and Moslem doctrine. That time has passed, and the men of the most orthodox Catholic, Protestant, Jewish and Mohammedan belief are now free to accept this newer and broader view of a common origin of all living things. No life seems to have happened suddenly upon earth. Life grew and grows. Age by age through gulfs of time at which imagination reels, life has been growing
- 10 8 from a mere stirring in the intertidal slime towards freedom, power and consciousness. ¶ Life consists of individuals. These individuals are definite things, they are not like the lumps and masses, nor even the limitless and motionless crystals, of non-living matter, and they have two characteristics no dead matter possesses. They can assimilate other matter into themselves and make it part of themselves, and they can reproduce themselves. They eat and they breed. They can give rise to other individuals, for the most part like themselves, but always also a little different from themselves. There is a specific and family resemblance between an individual and its offspring, and there is an individual difference between every parent and every offspring it produces, and this is true in

Chough Bold

# <sup>72</sup> The land during

<sup>48</sup> this Age of  
Fishes was  
apparently  
<sup>36</sup> quite lifeless.  
Crags and up-  
lands of barren  
rock lay under the  
<sup>24</sup> sun and rain. There was no  
real soil—for as yet there  
were no earthworms which  
help to make a soil, and no

- 18 sun and rain. There was no real soil —for as yet there were no earth-worms which help to make a soil, and no plants to break up the rock particles into mould; there was no trace of moss or lichen. Life was still only in the sea. ¶ Over this world of barren rock played great changes of
- 14 climate. The causes of these changes of climate were very complex and they have still to be properly estimated. The changing shape of the earth's orbit, the gradual shifting of the poles of rotation, changes in the shapes of the continents, probably even fluctuations in the warmth of the sun, now conspired to plunge great areas of the earth's surface into long periods of cold and ice and now again for millions
- 12 of years spread a warm or equitable climate over this planet. There seem to have been phases of great internal activity in the world's history, when in the course of a few million years accumulated up-thrusts would break out in lines of volcanic eruption and upheaval and rearrange the mountain and continental outlines of the globe, increasing the depth of the sea and the height of the mountains and exaggerating the extremes of
- 10 climate. And these would be followed by vast ages of comparative quiescence, when frost, rain and river would wear down the mountain heights and carry great masses of silt to fill and raise the sea bottoms and spread the seas, ever shallower and wider, over more and more of the land. There have been "high and deep" ages in the world's history and "low and level" ages. The reader must dismiss from his mind any idea that the surface of the earth has been growing steadily cooler since its crust grew solid. After that much cooling had been achieved, the internal temperature ceased to affect surface conditions. There are traces of periods of superabundant ice and snow, of "Glacial Ages," that is, even in the Azoic period. ¶ It was only
- 8

Chough Bold Italic

<sup>72</sup> ***In a few  
para-***

<sup>48</sup> ***graphs a pic-  
ture of the  
lush vegeta-***

<sup>36</sup> ***tion and swarming  
reptiles of that  
first great summer  
of life, the Meso-***

<sup>24</sup> ***zoic period, has been  
sketched. But while the Di-  
nosaurus lorded it over the  
hot selvas and marshy***

- 18 *plains and the Pterodactyls filled the forests with their flutterings and possibly with shrieks and croakings as they pursued the humming insect life of the still flowerless shrubs and trees, some less conspicuous and less abundant forms upon the margins of this abounding life were acquiring*
- 14 *certain powers and learning certain lessons of endurance, that were to be of the utmost value to their race when at last the smiling generosity of sun and earth began to fade.* ¶ *A group of tribes and genera of hopping reptiles, small creatures of the dinosaur type, seem to have been pushed by competition and the pursuit of their enemies towards the alternatives of extinction or adaptation to colder conditions in the higher hills*
- 12 *or by the sea. Among these distressed tribes there was developed a new type of scale—scales that were elongated into quill-like forms and that presently branched into the crude beginnings of feathers. These quill-like scales lay over one another and formed a heat-retaining covering more efficient than any reptilian covering that had hitherto existed. So they permitted an invasion of colder regions that were otherwise uninhabited. Perhaps si-*
- 10 *multaneously with these changes there arose in these creatures a greater solicitude for their eggs. Most reptiles are apparently quite careless about their eggs, which are left for sun and season to hatch. But some of the varieties upon this new branch of the tree of life were acquiring a habit of guarding their eggs and keeping them warm with the warmth of their bodies.* ¶ *With these adaptations to cold other internal modifications were going on that made these creatures, the primitive birds, warm-blooded and independent of basking. The very earliest birds seem to have been seabirds living upon fish, and their fore limbs were not wings but paddles rather after the penguin type. That peculiarly primitive bird, the New Zealand Ki-Wi, has feathers of a very*
- 8

Chough Semiblack

<sup>72</sup> **The  
opening  
of the next  
great period  
in the life of**

<sup>48</sup> **the earth, the  
Cainozoic period,  
was a period of  
upheaval and ex-**

<sup>36</sup> **treme volcanic activity.  
Now it was that the vast  
masses of the Alps and  
Himalayas and the moun-**

- 18 **tain backbone of the Rockies and Andes were thrust up, and that the rude outlines of our present oceans and continents appeared. The map of the world begins to display a first dim resemblance to the map of to-day. It is estimated now that between forty and eighty million years**
- 14 **have elapsed from the beginnings of the Cainozoic period to the present time. ¶ At the outset of the Cainozoic period the climate of the world was austere. It grew generally warmer until a fresh phase of great abundance was reached, after which conditions grew hard again and the earth passed into a series of extremely cold cycles, the Glacial Ages, from which apparently it is now slowly emerging. ¶ But we do not**
- 12 **know sufficient of the causes of climatic change at present to forecast the possible fluctuations of climatic conditions that lie before us. We may be moving towards increasing sunshine or lapsing towards another glacial age; volcanic activity and the upheaval of mountain masses may be increasing or diminishing; we do not know; we lack sufficient science. ¶ With the opening of this period the grasses appear; for the**
- 10 **first time there is pasture in the world; and with the full development of the once obscure mammalian type, appear a number of interesting grazing animals and of carnivorous types which prey upon these. ¶ At first these early mammals seem to differ only in a few characters from the great herbivorous and carnivorous reptiles that ages before had flourished and then vanished from the earth. A careless observer might suppose that in this second long age of warmth and plenty that was now beginning, nature was merely repeating the first, with herbivorous and carnivorous mammals to parallel the herbivorous and carnivorous dinosaurs, with birds replacing pterodactyls and so on. But this would be an altogether superficial**
- 8

Chough Semiblack Italic

<sup>72</sup>

# **Naturalists di-**

<sup>48</sup>

**vide the class  
Mammalia  
into a number**

<sup>36</sup>

**of orders. At the  
head of these is  
the order Pri-  
mates, which in-**

<sup>24</sup>

**cludes the lemurs, the mon-  
keys, apes and man. Their  
classification was based  
originally upon anatomical**

- 18 **resemblances and took no account of any mental qualities. ¶ Now the past history of the Primates is one very difficult to decipher in the geological record. They are for the most part animals which live in forests like the lemurs and monkeys or in bare rocky places like the baboons. They are**
- 14 **rarely drowned and covered up by sediment, nor are most of them very numerous species, and so they do not figure so largely among the fossils as the ancestors of the horses, camels and so forth do. But we know that quite early in the Cainozoic period, that is to say some forty million years ago or so, primitive monkeys and lemuroid creatures had appeared, poorer in brain and not so specialized as their later successors.** ¶ **The great world summer of the middle Cainozoic period drew at last to an end. It was to follow those other two great summers in the history of life, the summer of the Coal Swamps and the vast summer of the Age of Reptiles. Once more the earth spun towards an ice age. The world chilled, grew milder for a time and chilled again. In the warm past hippopotami had wallowed through a lush subtropical vegetation, and a**
- 10 **tremendous tiger with fangs like sabres, the sabre-toothed tiger, had hunted its prey where now the journalists of Fleet Street go to and fro. Now came a bleaker age and still bleaker ages. A great weeding and extinction of species occurred. A woolly rhinoceros, adapted to a cold climate, and the mammoth, a big woolly cousin of the elephants, the Arctic musk ox and the reindeer passed across the scene. Then century by century the Arctic ice cap, the wintry death of the great Ice Age, crept southward. In England it came almost down to the Thames, in America it reached Ohio. There would be warmer spells of a few thousand years and relapses towards a bitterer cold. ¶ Geologists talk of these wintry phases as the First, Second,**
- 8

Chough Black

<sup>72</sup>

# About fifty or

<sup>48</sup>

sixty thou-  
sand years  
ago, before

<sup>36</sup>

the climax of the  
Fourth Glacial  
Age, there lived a  
creature on earth

<sup>24</sup>

so like a man that until a  
few years ago its remains  
were considered to be al-  
together human. We have

- 18 **skulls and bones of it and a great accumulation of the large implements it made and used. It made fires. It sheltered in caves from the cold. It probably dressed skins roughly and wore them. It was right-handed as men are. ¶ Yet now the ethnologists tell us these creatures were not true men. They were of a different species of the same genus. They had heavy protruding jaws and great brow ridges above the eyes and very low foreheads. Their thumbs were not opposable to the fingers as men's are; their necks were so poised that they could not turn back their heads and look up to the sky. They probably slouched along, head down and forward. Their chinless jaw-**
- 14 **bones resemble the Heidelberg jaw-bone and are markedly unlike human jaw-bones. And there were great differences from the human pattern in their teeth. Their cheek teeth were more complicated in structure than ours, more complicated and not less so; they had not the long fangs of our cheek teeth; and also these quasi-men had not the marked canines (dog teeth) of an ordinary human being. The capacity of their skulls**
- 10 **was quite human, but the brain was bigger behind and lower in front than the human brain. Their intellectual faculties were differently arranged. They were not ancestral to the human line. Mentally and physically they were upon a different line**
- 8 **was quite human, but the brain was bigger behind and lower in front than the human brain. Their intellectual faculties were differently arranged. They were not ancestral to the human line. Mentally and physically they were upon a different line from the human line. ¶ Skulls and bones of this extinct species of man were found at Neanderthal among other places, and from that place these strange proto-men have been christened Neanderthal Men, or Neanderthalers.**

Chough Black Italic

<sup>72</sup>

# **The earliest signs and traces at present**

<sup>36</sup>

**known to science,  
of a humanity  
which is indis-  
putably kindred**

<sup>24</sup>

**with ourselves, have been  
found in western Europe  
and particularly in France  
and Spain. Bones, weapons,**

- 18 **scratchings upon bone and rock, carved fragments of bone, and paintings in caves and upon rock surfaces dating. it is supposed. from 30,000 years ago or more, have been discovered in both these countries.**
- Spain is at present the richest country in the world in these first relics**
- 14 **of our real human ancestors. ¶ Of course our present collections of these things are the merest beginnings of the accumulations we may hope for in the future, when there are searchers enough to make a thorough examination of all possible sources and when other countries in the world, now inaccessible to archæologists, have been explored in some detail. The greater part of Africa and Asia has**
- 12 **never even been traversed yet by a trained observer interested in these matters and free to explore, and we must be very careful therefore not to conclude that the early true men were distinctively inhabitants of western Europe or that they first appeared in that region. ¶ In Asia or Africa or submerged beneath the sea of to-day there may be richer and much earlier deposits of real human remains than anything that has yet**
- 10 **come to light. I write in Asia or Africa, and I do not mention America because so far there have been no finds at all of any of the higher Primates, either of great apes, sub-men, Neanderthalers nor early true men. This development of life seems to have been an exclusively old world development, and it was only apparently at the end of the Old Stone Age that human beings first made their way across the land connexion that is now cut by Behring Straits, into the American continent. ¶ These first real human beings we know of in Europe appear already to have belonged to one or other of at least two very distinct races. One of these races was of a very high type indeed; it was tall and big brained. One of the women's skulls found exceeds in**
- 8

# Glyph Set

*Uppercase Latin* ABCDEFGHIJKLMNOP  
OPQRSTUVWXYZ

*Lowercase Latin* abcdefghijklmn  
opqrstuvwxyz

# Figures 1234567890

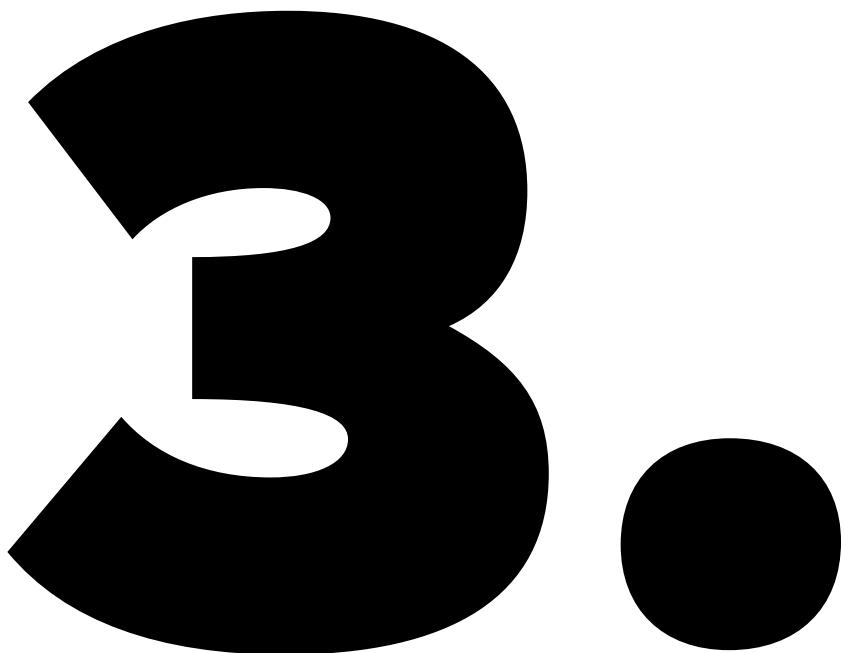
Symbols @ & ¶ © ® ™ °

*Currency* \$¢€£¥

## *Uppercase Latin Extended*

## Lowercase Latin Extended

*Round  
Alternates  
(ss01)* bracingly → bracingly



**exam-  
ples**

# **Red-billed chough**

From Wikipedia, the free encyclopedia.

The **red-billed chough**, **Cornish chough** or simply **chough** (*Pyrrhocorax pyrrhocorax*), is a bird in the crow family, one of only two species in the genus *Pyrrhocorax*. Its eight sub-species breed on mountains and coastal cliffs from the western coasts of Ireland and Britain east through southern Europe and North Africa to Central Asia, India and China.

This bird has glossy black plumage, a long curved red bill, red legs, and a loud, ringing call. It has a buoyant acrobatic flight with widely spread primaries. The red-billed chough pairs for life and displays fidelity to its breeding site, which is usually a cave or crevice in a cliff face. It builds a wool-lined stick nest and lays three eggs. It feeds, often in flocks, on short grazed grassland, taking mainly invertebrate prey.

Although it is subject to predation and parasitism, the main threat to this species is changes in agricultural practices, which have led to population decline, some local extinction and range fragmentation in Europe; however, it is not threatened globally. The red-billed chough, which derived its common name 'chough' from the jackdaw, was formerly associated with fire-raising, and has links with Saint Thomas Becket and Cornwall.

## **Taxonomy**

The red-billed chough was first described by Carl Linnaeus in his 1758 10th edition of *Systema Naturae* as *Upupa pyrrhocorax*. It was moved to its current genus, *Pyrrhocorax*, by Marmaduke Tunstall in his 1771 *Ornithologia Britannica*. The genus name is derived from Greek *pyrrhos*, "flame-coloured", and *korax*, "raven". The only other member of the genus is the Alpine chough *Pyrrhocorax graculus*; hy-

# Клушица

Материал из Википедии — свободной энциклопедии

**Клушица**, красноклювая альпийская ворона, красноносая альпийская галка (лат. *Pyrrhocorax pyrrhocorax*) — птица семейства врановых. Распространена в горах, на возвышенностях и морских побережьях Евразии и Северной Африки, на востоке ареала образует устойчивые городские поселения. Является близкой родственницей альпийской галки (*Pyrrhocorax graculus*), вместе с которой образует род *Pyrrhocorax*. Обладает чёрным блестящим оперением, часто с металлическим отливом синего или зелёного цвета, красным серповидным клювом и красными ногами. Вне сезона размножения образует большие стаи, насчитывающие сотни птиц.

Пары долговечные, одно и то же место для гнезда использует из года в год. Гнездится на скалистых уступах, речных обрывах, в расщелинах, охотно использует схожие по строению обитаемые и заброшенные постройки. Сроки размножения с апреля по июнь, в кладке от трёх до шести яиц. Питается летом беспозвоночными, зимой сочными плодами и семенами растений. Продолжительность жизни около 7 лет.

## Систематика

Основатель биноминальной номенклатуры Карл Линней составил первое научное описание клушицы в 1758 году. Обозначив её как *Iurira pyrrhocorax*, учёный поместил вид в один ряд с такими разными птицами, как удод и лесной ибис, обосновав это схожим строением клюва. Современное научное название утвердилось в 1771 году, когда английский орнитолог Мармадюк Танстелл в работе «*Ornithologia Britannica*» ввёл в

# **Choughs breed in Kent for first time in 200 years**

Unexpected fledging is result of long-term restoration project to bring red-billed birds back to Kent coastline

*Patrick Barkham, The Guardian — Fri 2 Aug 2024*

The chough, a charismatic cliff-dwelling corvid, has bred in Kent for the first time in two centuries.

A young pair among eight birds released last year defied expectations to successfully breed this summer, making a nest on Dover Castle and rearing one chick, which fledged in June.

The milestone is an unexpectedly early success for the long-term project to bring the red-billed birds back to the Kent coastline.

According to Kentish legend, the chough (pronounced “chuff”) obtained its bright red beak and legs by wading in the blood of Thomas Becket, the archbishop murdered in Canterbury cathedral by four knights from Henry II’s household.

The species vanished from England, mostly because of changing farming practices, until three birds took up residence on the Lizard peninsula in Cornwall in 2001. Since then, concerted efforts to restore suitable beetle-rich habitat has helped numbers rise to 200 birds in Cornwall, with a record 113 chicks fledging in 2023. Choughs have also been successfully restored to Jersey.

Their reintroduction to Kent involves major habitat restoration – with Kent Wildlife Trust bringing back swaths of chalk grassland – as well as a breed-and-release programme masterminded by Wildwood Trust.

Chicks bred by Wildwood Trust and Paradise Park in Cornwall are

hand-reared in mixed groups so that they learn from each other and will stick together in the wild. When still very young, the chicks are raised in an aviary at their release site, on farmland close to Dover.

Before they can fly, young birds are taken for "walkies" out of the aviary each day, so they learn to probe the grassland for beetles, worms and other sources of food.

Of eight birds released last summer, seven survived the winter and two choughs began building a nest on Dover Castle. Photograph: Wildwood Trust

The birds are given expert veterinary care but also recall training, so that once the birds are released into the wild they will return to the open-roofed aviary when they require protection – from predators or extreme weather – as well as extra food.

Of eight birds released last summer, seven survived the winter and, despite not being quite sexually mature, two choughs began building a nest on Dover Castle.

This was well chosen: surrounding jackdaw nests gave the choughs protection from other avian predators, such as the resurgent peregrine falcon, which made off with one chough released this year.

Liz Corry, chough release supervisor for Wildwood Trust, said: "We expected the released birds to play with sticks. What we didn't expect so early on was that they built a nest, laid eggs and incubated them, with one chick surviving."

The chick fledged successfully in June but the first weeks out of the nest are always challenging for choughs and the bird went missing during gales, and has not been seen since early July.

"It's nature, it's what we expected," said Corry, "but it was amazing that they bred so soon, and we have a good group of choughs flying around Dover, and they're being joined by new cohorts from further releases this year."

The project is based on 40 years of chalk grassland restoration by Kent Wildlife Trust, with feasibility studies identifying Dover, positioned at the end of a network of chalk valleys, as possessing a critical mass of suitable chough habitat.

Paul Hadaway, the director of conservation for Kent Wildlife Trust, said: "Creating and connecting habitats at scale has been the starting point for the red-billed chough's journey back. Grazed chalk grassland can contain as many as 40 species per sq metre and supports hundreds of species of invertebrates. It is an incredibly important habitat, and conservation grazing management by animals is crucial to maintaining its diversity."

The project aims to have 15 pairs breeding in the wild in a decade, but the big task is to ensure that there is enough wild food for the species. Studies have revealed the disappearance of huge numbers of dung beetles, a loss linked to anti-worming and anti-parasite drugs given to livestock. The chough is

**toca** /'tOka/ *f* burrow

**tocal-discos** /toka'dZiskus/ *m* invar record player; **~-fitas** *m*  
invar tape player

**tocaia** /to'kaja/ *f* ambush

**tocante** /to'kātSi/ *a* (enternecedor) moving

**tocar** /to'kar/ *vt* touch; play <piano, música, disco etc>; ring  
<cAMPAINHA> • *vi* touch; <pianista, música, disco etc> play;  
<cAMPAINHA, telefone, sino> ring; **~-se** *vpr* touch; (*mancar-se*) take the hint; ~ **a** (dizer respeito) concern; ~ **em** touch;  
touch on <assunto>

**tocha** /'tOSa/ *f* torch

**toco** /'toku/ *m* (de árvore) stump; (de cigarro) butt

**toda** /'toda/ *f* **a** ~ at full speed

**todavia** /toda'via/ *conj* however

**todo** /'todu/ *a* all; (cada) every; *pl* all; ~ **o dinheiro** all the  
money; ~ **dia**, ~**s os dias** every day; ~**s os alunos** all the  
pupils; **o dia** ~ all day; **em ~ lugar** everywhere; ~ **mundo**, ~**s**  
everyone; ~**s nós** all of us; **ao** ~ in all; **~-poderoso** a  
almighty

**tofe** /'tOfi/ *m* toffee

# **Шри-Ланкá** *f* (нескл.)

Sri Lanka

## **шрифт** *m (-a)*

**font** (set of characters), **fount**, **print** (type of letters),

**script** (system), **typeface**

**ширифт** *m* без засéчек (*print.*) sans serif

**ширифт Брайля** Braille

**ширифт для слепых** Braille

**готический шрифт** *m* Gothic script

**жирный шрифт** bold type/face

**размéр шрифта** font size

**печатный шрифт** block capitals, block letters

**мелкий шрифт** fine print

**латинский шрифт** Roman alphabet, Latin alphabet

## **штаб** *m (-a)*

**team, military headquarters, staff** (officers)

**генерáльный штаб** general staff

**начáльник штáба** (*mil.*) Chief of Staff

# MetaFilter

*community weblog*

**The Struggle Continues!**. Young Hae-Chang's flash classics include **Samsung**, the frenzied **Royal Crown Super Salon**, the languid **Jongno**, and two amusing masterpieces: **Samsung Means To Come**, and **Hallf Breed Apache**. More at her site.

*posted by hama7 (22 comments total) [add to favorites] [flag this post]*

I know this site is not so new, and I am not that big a jazz fan, but some of these are so interesting like: **All Fall Down**, I thought it was worth repeating.

*posted by hama7 at 1:47 AM on August 17, 2002*

True, not new, but worth remembering. Been a while since I saw these. Thanks.

*posted by stavrosthewonderchicken at 2:59 AM on August 17, 2002*

Afterthought : It's perhaps worth noting that there is very little (and even less in English) of anything approaching a counterculture here in Korea, which is either a capitalist nightmare or a consumer wonderland, depending on which way you approach it. As recent as democracy is here, there is little tradition of resistance to the massmind that is not expressed through violence and/or mass demonstrations. I'd be very interested to know if anyone is aware of other Korean artists working this kind of vein...

*posted by stavrosthewonderchicken at 3:03 AM on August 17, 2002*

I would too. Young-Hae Chang has made some interesting **statements**, and interviews **here** and **here**. There's also mention of an award from the **San Francisco Museum of Modern Art**

*posted by hama7 at 3:35 AM on August 17, 2002*

Stavros, I am sure you are familiar with him, but **Cho Se-Hyon** does a pretty good job as a one-man counterculture organization. But I have to ask: What about Young Hae-Chang is "counterculture" though?

*posted by hama7 at 3:41 AM on August 17, 2002*

Are you tired?  
Tell us why.

# Thanks and Acknowledgments

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Thank you to the TAs, Camille Gwise, Jerome Lousick, and Josh Yule, and the administrative staff, Priscilla Zaccalini and Rob Saunders, for keeping the show rolling.

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Proof text taken from *A Short History of the World* by H. G. Wells (Macmillan & Co., 1922).

