## On Facial Balance and Harmony\*

EDMUND H. WUERPEL

St. Louis, Missouri

The human races may be divided into broad groups which are distinguishable one from another by certain positive, though not always constant, factors. The deviations from these constants are due to various causes, the most important and powerful factor being the mingling of one or more types of different divisions. Where different races have intermarried, the offspring may take on the characteristics of either parent or there may be a mingling of both, and the consequent resultant becomes a conglomerate type which it is not always easy to classify.

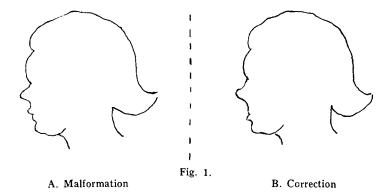
Any scientist who, however remotely, has to do with changing the relative proportions and positions of the features of a human being, should pause and study well the type to which this face belongs and should use every possible means to retain that type. He should picture to himself what the patient would have looked like had not Nature been thwarted. Nature in the vast majority of cases, has made a pretty good job of its types. It is only when something interferes with her plans that a bad job results. It is the obligation of the operator to bear this constantly in mind and employ no hasty or conventional methods in the treatment of cases presented for correction. There can be no universality of treatment. It would be against the laws of nature and art—and art does have something to do with the question. The final objective, aside from the restoration of normal occlusion, should be to restore the face to its very best appearance.

To effect this we must consider the design of the face. Design means pattern and pattern has preeminently to do with proportion. If proportion is further distorted rather than restored, there is a defect in the reasoning employed which will affect the result. Is it ethical to become accessory to faults that have been in operation before the patient presents himself for treatment? To think of reducing all countenances to a common treatment is beyond belief. This would seem to be an easy and noncommital escape from a serious responsibility. If you cannot face this problem then you are unworthy of the trust imposed upon you by a confiding public. It is because they have faith in you that they seek your help. You must go far beyond

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the purely mechanical process of moving the teeth or jaws. An adjustment of teeth is amazingly important. People who come to you to have such adjustments made very rarely look beyond the immediate process. The results obtained by such adjustments are all that interests them. They reason that when the teeth are once restored to normal occlusion the patient's face will automatically become normal in its aspect. In the majority of cases this may happen if the operator knows what he is doing. If he does not think clearly, logically, and purposefully before he begins his work, he is more than likely to make a blunder which cannot be corrected without serious trouble, if at all.

I can never forget the pride with which Dr. Angle once showed me two photographs of a patient of his taken before and after treatment. I believe these were used as illustrations in the earlier editions of his book. He pointed with pride to the successful and rapid restoration of normal occlusion. That process had been admirably accomplished. So far as a layman could affirm, the mechanics used were perfect and the objective admirably attained. But at what cost! When I asked him if he was satisfied with the patient's face. whether he thought that he had improved her appearance, he looked at me rather blankly, somewhat hurt, and said, "Just what do you mean?" I asked him if, had he met the young woman casually, he would have considered her good looking. He looked at the "restoration" carefully, without speaking. A change came over his face and a bewildered expression clouded his usually frank open eyes. Then all he said was "Gosh." After a while he said to me, "Tell me about it. What should I have done?" I asked him quite simply whether he noticed how much longer the upper lip appeared after treatment than before. I said that I did not know whether it would have been possible so to operate that this might have been avoided. He was silent a long time before replying, "I am not sure, but I believe it could have been avoided. But how in thunder was I to know that I should have considered this? I thought that the restoration of the normal position of the teeth was my problem and that nothing else mattered. How was I to know about this?" I pointed out to him, as I do now to you, that the young woman had a turned up nose and that the lengthening of the upper lip had irrevocably emphasized this characteristic, (Fig. 1). I showed him by drawings that a retrousse nose was not necessarily a defect but that an emphasis of this condition was most undesirable. In profile it became almost a caricature; in full face it looked aggressive and menacing and almost rivaled a bull dog in its ferocity. He recognized my contention and in his eager comprehending way he said, almost to himself, "Then there is more to be thought of than mere occlusion."



Yes, there is much more to be thought of. It may not always be possible to get better results so far as appearance is concerned, but there is no need of exaggerating a normal or abnormal departure from the average type. To evaluate nature's original intention requires some very vital and fundamental thinking. The first step in this process should be to establish a premise: What are we going to do? What is our objective? The next step is, what method are we going to use to achieve the result we are after?

To accomplish the first of these steps successfully it will become necessary to do some research work outside the immediate realm of your profession. It is really not at all outside your training but it is possible that you have not recognized its potentialities. You may not have considered it at all. You should study not only the anatomy of the head but its design, its proportions, and its forms. Design implies the nice adjustment of all the parts to the whole; it implies an understanding of balance. To acquire this understanding further implies a reverent respect for the philosophy and the history of art development, which in turn really means an appreciation of the beautiful. Appreciation, mind you, does not mean liking. There are many things, be they physical, spiritual, or ethical, that we need not like but which an understanding will enable us to appreciate and this appreciation may perchance lead to final liking. But remember always: appreciation means understanding and not necessarily liking.

In design we recognize motives exactly as we recognize motives in a musical composition. If we could translate music into terms of color, design, composition and movement as we know these things in painting and sculpture, we might be astonished at the closeness of their relation. I make this statement with the purpose of telling you that if music or sculpture have a greater appeal for you, if you know them more intimately than you know painting, then through these media you can approach the understanding

of appreciation as easily as through painting. It implies the earnest and purposeful employment of the mind. If you have no mind you cannot expect to accomplish any goal you may have set yourself. Many people have minds, but do not use them. Like a fine chisel that is neglected and not used, the mind becomes rusty and will not operate effectively. Constant demand upon the mind strengthens and broadens it and makes it more and more serviceable. To study outside of the particular field which occupies you may at the outset be difficult, but it is very important that you should not confine yourself altogether to the narrow field of your specialty. You should study the face under all possible conditions; you should do it with some system, some order, some purpose.

Taking it for granted that you have acquired the technical skill necessary to produce at least the approximation of the result you may desire, it then behooves you to understand clearly what type of face you have to operate upon. Whether it be Greek, Roman, Greco-Roman, Semitic or Mongolian, (Fig. 2). What are the characteristics of these divisions? How can you best correct the deformity so as to avoid distorting the type? That is your problem.

You have, it is true, only the mouth to work upon. But the dominance of the mouth in all divisions of the human race is of rare importance. To treat all human countenances according to a fixed rule would become an absurdity. It would mean the same as reducing all music to one kind or style. Imagine hearing only sonatas, or only marches, or only waltzes, or only symphonies. How terribly music would bore us in the end. We would cease to have any desire to hear it. It would perhaps drive us insane. Much the same would be the result if all human beings looked alike. It was a wise provision of Providence that so many types and so many variations within the types were created. That is what you must ever bear in mind. That is what is offered you. If you had but one fixed idea of what an ideal face should be you might as well have been a baker and turn out great quantities of biscuits, or cakes, or loaves, one exactly like the other. There is very little spiritual inspiration to be derived from one or from a hundred loaves of bread.

Are there any set rules that can be observed that will guide you in the determination of the type and the consequent treatment of the individual; any rules that will insure you against error? No, there are none. However, there are certain fundamental principles which should serve to form a scaffolding from which your major observations should be constructed. Let us examine them and endeavor so to understand them that they shall become a part of ourselves.

To begin with there are certain patterns or designs which have special reactions upon our senses. Thus a parallelogram impresses us differently from a circle. An oval creates an impression different from that of a triangle. They affect the mind, psychologically, almost in unvarying directions. Anyone sensitive to environment must be aware of this. Granting this premise, we find that the human countenance evokes in us certain reactions peculiar

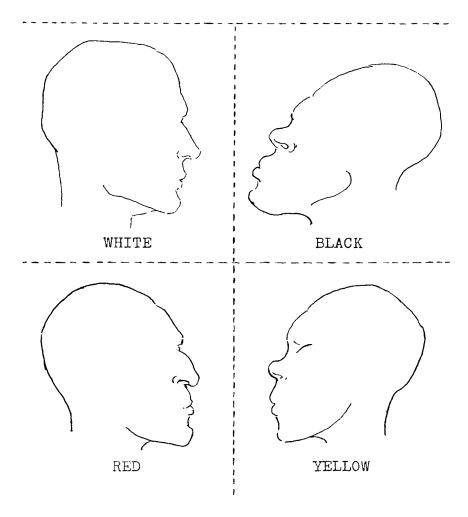


Fig. 2.
Racial Characteristics.

to the design of its make-up. We are accustomed to say to one another, "What is the matter with A, he looks down and out?" Do you suppose that he really has changed, that his face has grown longer, his eyes more

## DESIGN

## Motives.

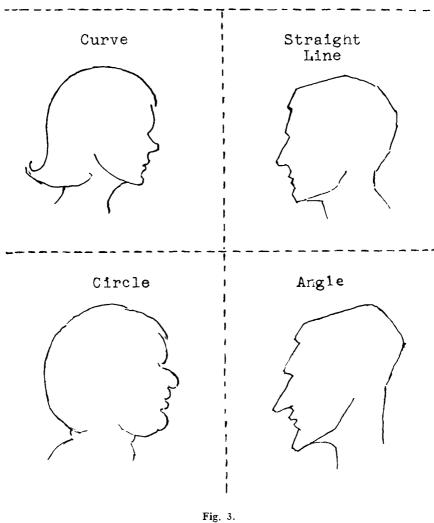


Fig. 3. Design.

deeply set, his mouth more drooping? Perhaps by actual measurement we would find that the head had not changed in size, but it was the relaxation of the mandible that gave it that appearance. Actually the orbit of the eye has not grown deeper, but the eye itself has been allowed to sink back further into the orbit for definite reasons that have primarily to do with nerves. The lips, too, lose their firmness and this relaxing causes changes in the appearance of the mouth, changing entirely the design or pattern and its consequent effect upon the observer.

Now, if mere nervous reactions can cause such noticeable changes, then how easy it is to conceive that an arbitrary change of relations, brought about by mechanical means, would materially and permanently alter the character and expression of the face. In certain types the horizontal dimensions dominate over the vertical: the width between the eyes, the malar bones, the mental eminence, the temporal bones. To do anything to destroy this unity will result in the changing or distortion of the face. On the other hand if the face is narrow, the frontal bone high, the upper maxillary and nasal bones long, the mental eminence narrow and pendant, then to change these relations will likewise change the character of the face. There are many faces that are abnormal in the relation of lengths and widths. It should be the duty, in so far as it is possible, through careful analysis and much logical thinking, to restore a more harmonious relation between the different forms of the face, to restore a balance which has been thwarted, and to give better design or pattern to a given space. I am quite well aware that this is asking of you a difficult, often impossible undertaking. But it is not asking too much of you to abstain from increasing this unbalanced condition and thus to further distort an established type. How ridiculous it is to see a fat man wearing a hat five sizes too small for him; how absurd a boy looks wearing his father's trousers; how inartistic a doorway appears that is too small or large, as the case may be, for the adjacent wall spaces. How pitifully weak a gatepost looks that is crowned by a tiny, insignificant cap.

Again, an equilateral triangle because of its resemblance to a mountain, let us say, may be the symbol of eternity. But if it is inverted and bears upon its horizontal edge a rectangle relatively too large, or too small, for its size, then the sense of eternity or security is gone and uneasiness results. But do you not see that this inverted triangle and the rectangle superimposed upon it form the major motif in the design of a human countenance? You can vary the proportions and the relations of either the triangle or the rectangle but it does not matter, the elementary forms remain the same. Only the relative proportions change, and these changing proportions constitute the type and character of the head.

If the triangle is long the rectangle becomes narrow and high. If the triangle is broad, the rectangle becomes wide and low. This is not an iron-clad rule, but such is apt to be the arrangement of these major masses. Into these masses are introduced the features of the face, especially are they arranged as a pattern in the inverted triangle.

Bear these simple facts in mind and look first at the contour of the face. See what its form is, as a pattern. Do not do anything, if you can possibly prevent it, to disturb the symmetry of this pattern. Do not disarrange the balance that should exist. Balance means that you must not over emphasize one part of the pattern at the expense of the other. Do not create a large unit where a small one should be, or vice-versa. The mouth is a very important unit in the pattern of the face. Be most careful of what you do to it.

Next look at the profile. It is composed of lines and related spaces. Here, too, nothing should be done to destroy the harmony which should exist between the proportions of the features or in the general direction of their lines.

These general directions depart more or less from very primitive standards, the standards of Pithecanthropus erectus. As man progressed towards the higher type of the Neanderthal man the lines of the profile became very markedly more vertical. The nose was no longer a small hump below the frontal bone, but it became a distinct line and the shape of that line and its alignment became the most noticeable improvement towards the final evolution of homo sapiens. The line might be a straight or a broken one; it might be more or less inclined towards a vertical; it might depart from the line of the frontal bone with no, or very little, divergence or it might come away abruptly from the plane of the forehead. That did not matter. Those variations constituted the type—Greek, Roman, Semitic, Mongolian, etc. But the placement of the nasal line was of vast importance in the appearance of the individual. This importance should never be overlooked. The length and the direction of the line forming the upper lip, from the end of the nose to the beginning of the lip, must be most seriously considered for, if in no other direction, you have it in your power to control both the length and the direction of this line. See, in the sense of design, what the line should be and where it should be. Should it be a line immediately vertical from the brows, should it be farther forward? There may be instances, though these are rare, when this line should be back of the line dropped vertically from the frontal eminence. When this is the case it would be an error to make a change in the position of the dentures and thus turn a possible caricature into a positive one.

If it were not for the sake of the health and comfort of the patient, I can see many instances where the change in the appearance of the patient would be a serious blunder. When such a case is presented to you, do your uttermost to retain, as much as is possible, the facial design with which the patient has been endowed.

I cannot refrain from closing this admonition with saying that whatever training you may or may not have had in the fine arts, you have already at your command the one redeeming quality which it is your privilege to use, namely, common sense. Do not fly away on tangents. Use the brains with which nature has endowed you and use them first for the good of the patient, second, for the common good of the race and *finally* for your own good.

If you will always bear in mind your responsibility in the profession which you have chosen to enter, you cannot ever go far astray.

Washington University,
School of Fine Arts,
St. Louis, Missouri