

58. *Psyche and Soul*

THE three volumes of *Cleft Craft* have been involved with the basic science, surgical principles and detailed craftsmanship developed through centuries of experience and devoted to the transformation of a patient with a cleft into the ideal normal. After all this, what about each psyche and soul?

INDIVIDUAL REACTION TO DEFORMITY

How we are going to react to a deformity, or even to life itself, may already be determined in our genes, despite the influence of specific environmental factors. As Straith and I wrote in 1951:

Let us compare two children born in different families but both with harelip and cleft palate and both approximately 18 months of age. The mother of one brought her tiny daughter in for surgical treatment at the age of 2 years. She reported that several times she had found the little girl in front of the mirror with her fingers pushing the edges of her ununited lip together in an attempt to make them stick. This child was not only aware of her deformity but she was trying to do something constructive about it. It could be predicted that as soon as adequate surgery had been completed, this child would continue to make her adjustments quite normally.

The other child was a little boy who was kept hidden in the back of the house. Upon the approach of a stranger, he would grab the bedclothes and hold them up over the cleft in his face. One glance into the frightened, pathetic eyes peeking over the bedclothes revealed that this neglected little fellow was failing in his adaptation, and mere surgical closure might not completely heal the psychic trauma already inflicted. Thus, the best chance to avoid undesirable personality changes would seem to be complete surgical correction of the deformity at the earliest date feasible.

It has been pointed out by E. Meyer that the social and intrafamilial aspects of disfigurement, the cultural milieu (abhorrence of deformity) and reactions from family and peers ("scape-goating") are at least as productive of a sense of deformity and deviancy as the individual's own reaction to his defect.

In 1978, Lynn C. Reichman of the University of Iowa noted: Teachers rate the intellectual ability of cleft children with more noticeable facial disfigurement less accurately than cleft children with relatively normal facial appearance. Within the group of cleft children with more noticeable facial disfigurement, teachers underestimated the ability of brighter children and overestimated the ability of less bright children.

It is interesting how similar deformities can invoke such varied reaction patterns. Beethoven's pockmarked countenance probably was greatly responsible for his seeking refuge in solitude to compose a minuet rather than spending his energy at a social, dancing someone else's minuet. In contrast, George Bernard Shaw, who also allegedly had scars from smallpox, merely produced a huge growth of beard to cover them and scoffed at the world. Louis XIV decreed a new fashion in footwear to make his ungainly feet less obvious. Jimmy Durante, with the front brim of his hat turned up, seated at the piano, banging out "My Nose's Birthday," turned his head from side to side to present his huge nose in profile. Yet Cyrano de Bergerac points unhappily at his:

Tell me what hope of glory, what hope of any kind, this protuberance of mine could ever leave me.

William Shakespeare revealed an acute sensitivity to the burden of a cleft when he wrote:

So shall all the couples three
Ever true in loving be;
And the blots of Nature's hand
Shall not in their issue stand;
Never mole, harelip, nor scar,
Nor mark prodigious, such as are
Despised in Nativity.

CRIME

It has been a standing assumption that physical defects can be a strong contributing factor in antisocial behavior. As I wrote with Straith in 1951:

Any deformity that a child has not noticed himself or has not been called to his attention by siblings will certainly be brought to light in school. Children are quick to observe the unusual, and with no attempt to conceal curiosity or to refrain from ridicule, they will be frank in their discussions and opinions. They tend to shun a deformed playmate, or they "dub" him with a nickname which reflects his defect. The deformed child has the mental and physical faculty for self-expression possessed by other children, but because of his deformity, he is either restrained by others or avoids the personal contacts necessary for such expression. The handicapped child, feeling inferior and alone, craves popularity. Many times these children resort to petty pilfering in order to obtain money to attract friends. One boy with facial burns, nicknamed "scarface," stole money to buy candy to give to his playmates so they would no longer be afraid to hold his hand in games.

Childhood fairy stories pose the handsome prince and the beautiful princess against the ugly witch; comic books repeat this theme with Detective Tracy against such funny-looking characters as Flat-top and B-B Eyes; movies portray western white-hat heroes against black-mustached villains. Thus, through the early years of development, there is not only the constant identification of beauty with goodness and of ugliness with evil, but there is also the attempt to identify self with the good and the beautiful. But there comes a time in the life of every deformed child, when he realizes that he cannot take the part of his ideal hero. He is reminded of this over and over by thoughtless remarks from friends and second glances from strangers. It is easy to see how a handicapped child might become delinquent and, if merely punished, driven into crime. Rear Admiral E. R. G. R. Evans of the British Navy tells the story of a boy who was taunted and ridiculed because of his ugly, protruding teeth; he was given the nickname, "Barracuda." Gradually, he turned against not only those who ridiculed him but against all society and gathered together under his command the Scarlet Fleet. He became the most feared and ruthless buccaneer on the Seas and many of those who had laughed at him as a child at school walked the plank to their death. "Thus do the cruelties of youth make rogues."

The literature is replete with characters whose antisocial behavior is determined in large part by some physical defect. Lewin



noted two examples. Victor Hugo's Quasimodo, the hunchback of Notre Dame, is acutely aware of his own ugliness and seems to be propelled by his hatred of himself and repugnance of his own image into the protection of beauty. Shakespeare's Richard III is a villainous character whose awareness of his physical defects presents an insurmountable obstacle to normal social intercourse as it becomes the motivating factor in his life.

In his book *This Gun for Hire*, Graham Greene's protagonist, Raven, is a postoperative cleft lip who justifies his life of crime as a retaliation against society for its cruelties to him:

Murder didn't mean much to Raven. It was just a new job. . . . The cold wind cut his face in the wide Continental Street. It was a good excuse for turning the collar of his coat well up above his mouth. A harelip was a serious handicap in his profession. It had been badly sewn in infancy, so that now the upper lip was twisted and scarred. When you carried about you so easy an identification, you couldn't help becoming ruthless in your methods. It had always, from the start, been necessary for Raven to eliminate the evidence.

alan Ladd
played Raven
in the movie
but a deformed
upper extremity
was substituted
for a cleft
lip scar

Plastic surgery has been used in an attempt to rehabilitate adult penitentiary inmates. The results have been equivocal. In 1966 Spira, Chizen, Gerow and Hardy indicated that 17 percent of the inmates released from a Texas prison after receiving plastic surgery were returned during a five-year follow-up period, whereas the recidivism rate among that general prison population was 31.6 percent. In 1967 Velasco, Woolf and Broadbent reported 21.3 percent and 30 percent recidivism rates in inmates receiving and not receiving plastic surgery, respectively. Yet, also in 1967, Schuring and Dodge reported no significant difference between inmates receiving plastic surgery and non-operated controls (48 percent recidivism rate for both). As early as 1948, J. F. Pick noted:

Where criminality has become an established habit . . . resistant to rehabilitation, improvement in appearance of an adult incorrigible may change the standard of his criminal practices, upon release, from that of a common thief to that of a specialist of a higher order. It is, therefore, felt that where bodily defects or gross features exist in the youthful delinquent . . . such defects should be corrected and their trigger value removed before the boy delinquent becomes the man criminal.

It was thought that plastic surgery might be more effective in the rehabilitation of deformed delinquent adolescents. Knorr, Hoopes and Edgerton in 1968 reported:

Physical changes via cosmetic surgery are more easily integrated into the body image percept by the adolescent.

In 1973 Meyer, Hoopes, Jabaley and Allen studied 21 deformed adolescent delinquents, 14 of whom had plastic surgery (one of these had a secondary cleft lip deformity); 7 were unoperated. They determined:

There were no remarkable behavioral differences between those patients who had surgery and those who did not. Surgical intervention, as an added factor, was felt to be no more effective in achieving positive change, than psychological or social intervention alone.

The quality of the plastic surgery is a factor.

It was suggested:

Adolescents may already be relatively fixed in their body image concepts, so that surgical intervention is ineffective in accelerating progress.

Yet there are many encouraging examples in which surgical correction of major or minor cosmetic defects that were triggering a change of psychological reactions and leading the individual into chronic conflict with society suddenly enabled him to cope successfully with his life.

Michael L. Lewin wrote me in 1972:

My own attention was drawn to this problem years ago by a young man with an inadequately repaired bilateral cleft lip and palate who shot his friend for taunting him about his cleft palate speech. This late teen-ager was sentenced to Sing-Sing for murder. He was rehabilitated in three or four operations while in prison. He had a bone graft, revision of the lip and a pharyngeal flap. I have been in contact with him for over twenty years. He is a solid citizen, a good family man, a pillar of society.

It is important that these selected literary excerpts and comparative statistics do not mislead. Although fiction has occasionally coupled cleft lip and palate deformity with criminal personality, the fact remains that there are very few cleft individuals who have become involved in criminal activity.

SUICIDE

Medical opinion and teaching suggest that severe facial deformity renders an individual liable to depression, despondency, anger, resentment, frustration, hopelessness and possibly self-destruction. As recent statistics show, suicide is twelfth in frequency among the causes of death in the United States. Among older teenagers and young adults it ranks fourth. Numerous cleft lip and palate patients might be expected to appear in these statistics. In 1973 Jack Berger of Chicago, after having searched the literature, found a discrepancy; he reported only two cases in which a congenital cleft lip or palate could be considered a primary cause of a suicide attempt.

1. A 38-year-old male had been born with a bilateral cleft lip and palate. The lip had been repaired on two occasions with unsatisfactory results. The palate had never been operated. He lived a secluded life as a janitor, living in a small basement apartment with his mother. When his mother became seriously ill, he became threatened that he would lose her support which caused him to attempt suicide with a shotgun placed under his chin. Having chosen this method of suicide, the patient accomplished ablation of that deformed part of his body which he must have hated all his life. The present deformity, which was by no means an improvement over his previous deformity, at least could be explained as the result of an accident, not as a defect or deficiency with which he was born. Once healing was complete, he began to establish some social contacts.

2. A 19-year-old Caucasian female was born with Pierre Robin syndrome with a posterior hard and soft palate cleft and microgenia. She had closure of the velum at 3 years and was fitted with a dental prosthesis for the residual hole in the hard palate. Her speech developed slowly and poorly. Her father went to great expense to get her orthodontic and speech therapy and showed anger at her poor progress. The child, sensing rejection, developed a defense by becoming a chatterbox and the faster she talked the less intelligible she became. Her roommates "tuned her out" and forced her isolation, but she graduated from high school and entered college. Here her attempts to belong by excessive talking were unsuccessful. She was ignored by her classmates, became depressed, failed in her grades and finally attempted suicide by slashing her wrists. She was hospitalized on a psychiatric service where she began to understand what she had been doing to cause unsatisfactory relations and, with the improvement of her speech with a new aid and therapy, she re-entered college and chose a very suitable field—social service.

It is important to note that in both of these suicide attempts the corrective surgery had been inadequate and the results unsatisfactory.

In 1976 P. Arvez, J. Uriel and B. Vilar-Sancho of Madrid, Spain, studied 50 postoperative cleft lip and palate patients between the ages of 7 and 25 years, when non-adaptation and frustration are most intensely manifested. They concluded:

It is worthy of note that the axis of schizophrenia occupies a higher place both in males and females. . . . Depression appears in second place in the case of males, while for the females it occupies third place, with paranoia in second place. Also, social introversion was conspicuous in the females but not in the males.

Good aesthetic results in the males favoured a decrease of the pathological symptoms. However, this did not occur in the females.

SUCCESS STORIES

Most postoperative cleft lip and palate patients are not antisocial and have no interest in crime or suicide. They adapt to their environment and, depending on their surgical and orthodontic results, are more or less happy with themselves.

In 1972 Edward Clifford, with Eleanor Crocker and Barbara Pope, of Duke University made psychological studies of 98 cleft lip and palate patients treated surgically by Kenneth Pickrell 22 to 27 years before; 78 percent had received no speech therapy and 65 percent no orthodontia. In general, they presented relatively high self-satisfaction scores, with 77 of the group married. These findings supported L. D. Goodstein's statement:

Informal observational impression . . . is that the typical adult with cleft palate is happily married, gainfully employed, and a generally useful, contributing member of society.

A more detailed investigation by Clifford did reveal:

Despite these relatively high overall satisfaction scores, when various items of the body-satisfaction scale were ranked according to mean satisfaction levels, the body items associated with clefts rated relatively low. For example the item with the lowest satisfaction level was *teeth*, closely followed by *speech*. *Talking*, *nose*, and *lips* followed in ascending order of satisfaction.

Almost none of these items appear at such relatively low levels of satisfaction in normal adolescent population.

Also in 1972, Pickrell, Clifford, Quinn and Massengill, reviewing this same group of 100 cleft patients operated on over 20 years before, found interesting scholastic achievement:

Though 15 did not go beyond the 9th grade, an additional 58 achieved a 10th to 12th grade education, and 27 went on beyond high school [8 to trade school; 2 completed 2 years of college; 1 was a C.P.A., 1 a pharmacist, 1 a registered nurse; 8 completed college; 2 completed theological seminary; 4 obtained master's degrees in graduate school].

Edward Clifford, psychologist and co-director of the facial rehabilitation center at Duke University, admitted:

I must enjoy a psychological life as I married a psychologist.

At the Educational Foundation Symposium in 1973, Clifford explained how he responded to parents of a cleft lip and palate child when they asked whether he would grow up to be normal:

Our approach is to review with them some of the research findings with regard to the cleft palate population, that is, that they compare favorably with normal populations in terms of intellectual level, that one can find a widespread array of occupations ranging from those in the professions to unskilled laborers among cleft palate persons and that in our experience the cleft palate population is no more noted for the presence of emotional disturbance than any group. We often conclude by stating that our best guess about the baby's future can be made by looking at his family. The motivations, ambitions, abilities and value structure of the family will probably have the greatest influence on the cleft palate child, or any child.

As noted in 1971 by Charles Wirls, psychologist for the Lancaster Cleft Palate Clinic:

In spite of compelling theoretical basis for social and psychological maladjustment in children with cleft palate, the research results have been inconclusive. If the results tend in any direction, it is toward the absences rather than the existences of maladjustments.

In 1979 Kathy Kapp of the University of Illinois at the Medical Center, Chicago, investigated the relationship of the self-concept of children with cleft lip and/or palate to the self-concept of noncleft children. She reported:



Edward Clifford

Thirty-four cleft lip and/or palate children between the ages of 11 and 13 were individually matched with thirty-four noncleft school children. Each child was given the *Piers-Harris Children's Self Concept Scale*. Children with clefts, regardless of sex, reported a significantly greater dissatisfaction with *physical appearance*. A significant interaction effect between sex and presence or absence of cleft was found on three cluster scores with cleft girls reporting greater unhappiness and dissatisfaction, less success in school, and more anxiety. . . . It was suggested that girls may be more affected by the stigma of a physical disability because of the importance of physical attractiveness in our society.”

Among the cleft lip and palate individuals there are many who have achieved unusual success. Khoo Boo-Chai reported that the first such success story, during the Chin dynasty, involved a fourth-century Chinese lad, Wei Yang-Chi, who had his lip cleft closed and later became the governor general of six Chinese provinces.

Blair Rogers found three more success stories. In the tenth century a seaside town in Yorkshire, Scarborough, was founded by and named as the result of an invasion by a Scandinavian, Thorgils Skarhi (“harelip”). The eighteenth-century Thomas Robert Malthus, despite a cleft lip and speech impediment, preached as an Anglican minister until his bishop suggested he give up the priesthood. Thus, by default, Malthus turned to economics and was later appointed professor of modern history and political economy in the East India Company's College at Haileyburg. Twentieth-century Bruce Lowery, an American writer living in Paris, was awarded the Prix Rivarol in 1961 for writing, in French, a sensitive novel entitled *La Cicatrice*, which tells of the problems of a young boy affected with a cleft lip scar. Here is a review of his book in English:

This is a story of a boy with a scar, the relic of a harelip. Happy at home in his parents' love and the devoted affection of a younger brother, he suffers his first great shock at school in the stupidity, cruelty, and spiteful fun-making that is so prevalent in the thoughtless world of children. Disconcerted by the wickedness which his small infirmity provokes, he himself ends by driving to despair the few beings who have shown him any affection. Driven by some troubled impulse, by an extremely complex urge, he harms the one boy whom he really loves and who has done most to protect him from the others. The remorse that follows this act is conveyed in the most moving fashion, while the boy discovers, without being able to put it into

words, that physical afflictions are as nothing beside scars on the soul. His experience, the fruit of suffering, is complete at last, when a strange and beautiful gift from beyond the grave reveals to him the meaning of love.

Lowery's book was widely acclaimed in French literary circles, and the author, himself born with a complete unilateral cleft lip well closed by an American surgeon, subsequently translated his story into English, American vernacular, Spanish and German.

In 1976 Aarne Rintala of Helsinki, in *Plastic and Reconstructive Surgery*, presented the remarkable story and work of Thomas Ragawaldinpoika, the eighth child of a farmer of Tyrvää in the kingdom of Sweden-Finland, who had been born in 1774 with a unilateral cleft of the lip and palate. Although he suffered from poor health and had none of the advantages of higher education in that time, he became the most important Finnish lay psalmist of his time. Lay psalms were verses printed on loose sheets, corresponding in a way to modern newspapers. In the opening psalm of his first publication, he described himself, noting his cleft characteristics, abnormal appearance, speech difficulty and inability to suck.

1. Hail to God, Thou great Creator!
With Thy Counsel Thou hast
sought me
From my Life's start, Thou my
Spirit
Hast protected mercifully.
2. To this Vale of Tears Thou
broughtst me,
Marked with a Deformity;
Which I bear upon my Body,
On my Face for all to see.
3. But another flaw lies hidden
In the roofing of my Mouth,
Which confuses my Speech sadly,
Cuts me off from other Folk.
4. Thus my voice doth not sound
clearly
In the Ear of other Folk;
Nor come Words from my Lips
rightly,
Though my Meaning is right clear.
5. When I came into this poor World
Borne of Parents kind and good,
God gave them a heavy burden
They must bear with Fortitude.
6. They were caused a deal of trouble
On behalf of their poor Child;
For my Mother's milk I could not
Drink for my Deformity.
7. Other Nourishment they gave me
Such as animals provide,
While I lay there in my Cradle;
Cared for me as best they could.

In another lay psalm he described his preoperative fears and trials, the operation itself, the aftercare, and his own gratitude to Gerhard Odenadt, surgeon, of the Turku Royal Dragoon Guards regiment, and to God.

1. Work of God I sing to Thee
Who healed my Deformity,
Come with Psalms and Soul of Joy,
Pray and sing to Him on high.
2. But ah! poor thing that I am,
Nor do rightly understand,
How to do this skilfully,
Though I try most manfully.
3. For His mercy great, if aught,
Lies beyond the Power of Thought,
What in fact to me befell,
Herewithall I would fain tell.

4. For when born, in my poor Lip,
From the first there was a slip,
Which prevented me to talk,
Strangely seemed my Face at fault.
5. Oftentimes for my sad Flaw,
I did try to find a Cure,
But it was not yet the day,
When God's help was given to me.
6. For this thought I with me bore,
And it was a burden sore,
That the Pain I could not stand,
It would leave me quite unmann'd.
7. It was also in my mind,
When a cure I tried to find,
That God's Will it could not be,
Since at birth 'twas given to me.
8. Till at last God gave me strength,
Broke the bones of fear at length,
So that being afraid of Pain,
Seemed no surprise again.
9. In my Conscience I found Peace,
In my Heart a sweet Release,
For the Preacher of the Word,
Strengthened me to trust my Lord.
10. To a Doctor I did go,
My Deformity to show,
And he vowed to me he would,
Do for me all that he could.
11. And I did myself prepare,
Called to Jesus in my Prayer,
That He who had suffered so,
Might help me in my Trouble now.
12. At God's Mass, upon my knee,
Did I make my humble Plea,
And indeed I was assured,
Of help coming from the Lord.
13. In the month of April sweet
On the Sixteenth day of it,
Did the Doctor me attend,
My deformity to mend.
14. Put before me then a Chair,
And I sat me gladly there;
Held my Face and with knife-tip,
Cut into my deformed Lip.
15. Soon I held my Eyes closed tight,
And my Hands with all their
might,
On my Heart together pressed,
Fingers twisted in Distress.
16. Felt a sharp and dreadful Pain,
Felt the agony again,
So my Flesh shivers and shakes,
All my Body the pain takes.
17. But within with Jesu's strength
Helpen was my Mind at length,
So no sound from me was heard,
Not a cry nor yet a word.
18. Though the Blood from me did
pour,
From my Veins came more and
more,
I was in a sorry plight,
And I was a gory sight.
19. For my Shirt, my Clothes, my
Breast,
Every part of me was messed,
With the stream of warm red
Blood,
Running down me like a Flood.
20. But the good God's mercy too,
Helped me in my Plight anew,
And the hardest Pain He tempered,
His Son's suffering remembered.
21. And when my poor Gums were
cut,
Where the Doctor's knife was
put,
Then did I remember Jesus,
With His Wounds that came to
save us.
22. And when the Scissors cut away,
Skin from flesh of lip that day,
I remembered how He bore,
Many a harsh blow so sore.
23. When the needles sharply pricked,
And my lip together stitched,
I remembered then the Spear,
That did pierce our Lord so dear.
24. Pierced the side and through the
heart
Of our Saviour, Jesus Christ,
In these thoughts I did attain,
Sweet relief from all my pain.
25. Lo! See how God's mighty
strength,
Gave me comfort now at length,
So that my Head did not swoon,
Nor my Heart stop beating soon.
26. When I saw before me next,
How the Blood upon my Breast
In a kind of Jelly set,
Then with dreadful fear I sweat.
27. When the Doctor's work was
ceased,
From his task he was released,
Then at last I oped my Eyes,
And my hands did clean and dry.
28. Wiped the sweat off my brow,
That from pain did start and flow,
And my shirt too did I change,
Cleaned the blood from every
place.
29. 'Twas with weary toil that day,
From my chair I went away,
Went to lie upon my Bed,
On my Pillow laid my head.
30. Now I was a prisoner,
Bound up like a poor slave there,
Not a piece of bread to eat,
For two weeks no taste of meat.
31. The while the Doctor came to see
me,
Several times that he could see,
How my poor lips they did look;
At last from me the needles took.
32. The first he took upon the
Tuesday,
The second he removed on
Wednesday,
The third he took on Friday then,
Ah! I could really feel the pain,
33. For that they had rusted fast,
To the flesh had stuck at last,
So that I was changed in feature,
Pale I was, a sorry creature.
34. Yea, it was a dreadful thing,
How the needles they did sting,
When the Doctor pulled them out;
Then I suffered without doubt.
35. But all thanks to God I sing,
Who created Everything;
From the pain He me relieved,
And from my Deformity;
36. And a good Physician gave,
Doctor Odenadt the grave,
Blessings to his potent Salves,
To his Ointments and his Balms.
37. Thus the mercy of the Lord,
To man's work he doth afford,
Let us honour Him most high,
Who gives help to the needy.
38. So my suffering and sorrow,
Were relieved for the morrow,
Jesus, of Physicians best,
To Thee be my thanks addressed.

The success of the patient's adjustment after the surgery is impressive, as he soon married a bride 10 years younger than himself. When this marriage was broken because of her infidelity, he married again—producing a total of nine children.

Canadian John Stephenson, born with a cleft of the palate, studied medicine in Edinburgh and, after palate surgery by Roux in Paris in 1819, wrote his graduation thesis on his own operation. He then returned to Montreal, enjoying a successful career. Honorable Peter McGill gave Stephenson credit above all others for McGill Collège.

Other examples of postoperative cleft patients who have attained fame and fortune include renowned British surgeon Sir James Berry, innovative Newcastle anesthetist Philip Ayre, several notable American plastic surgeons and several British and American actors, including the Shakespearean actor Stacy Keach, star of television series "Caribe," who has a Blair-Mirault lip closure and was honored in 1976 with the American Cleft Palate Educational Foundation Award.

SUCCESS WITHOUT SURGERY

My favorite cleft lip story is *Precious Bane*, written by Mary Webb, recipient of the Femina Vie Heureuse Award for 1924–1925 for the best work of imagination in prose or verse descriptive of English life. The setting is the village of Sarn Mere in Shropshire, near the time of Waterloo. The heroine, Prudence Sarn, has an inner beauty in spite of her unoperated cleft lip deformity, but she is tortured by guilt, superstition, prejudice and constant comparison with the ideal of feminine beauty. Her sense of futility and suffering is expressed in these quotations:

"Could I help it if the hare crossed my path?"

"My poor hideous lip was, as it were, my sin, though a kind of innocent wickedness."

". . . And I'd begin to dream of being as beautiful as a fairy. . . ."

Her jealousy was understandable: "All in a minute her mouth was a rose, and I knew I couldn't abide her."

A villager could be heard to say of poor Prudence: "The woman with the hare-shotten lip. A very queer creature. But it makes 'em queer, you mind, to be born the like of that. Some say she's a bit of a witch."

Of her brother Gideon Prudence had said: "Gideon could have grown what they call a moustachio and looked very well and none need have known he'd got a hare-shotten lip."

When Gideon had said to Prudence, "Being as how things are, you'll never marry, Prue," her thoughts expressed her despair: "My heart beat soft and sad. It seemed such a terrible thing never to marry."

The cost of a cleft lip surgeon for these poor farm people was a formidable obstacle, as expressed by Prue herself: "and I knew it would take a deal of money to cure a hare-shotten lip."

Yet it had been promised: "Give her money up to fifty pound, when we've sold Sarn, to cure her lip."

The hero, Kester Woodseaves, a young weaver whom Prue admired from a distance, took a stand against the brutality of bull-baiting by dogs and, in order to stop the cruelty, offered to take the dogs on one at a time. He had no trouble as they were all his friends, except a new vicious one that went for his throat. Prue saved him with a knife she had carried for his protection, and then quietly left the scene, almost unnoticed and saying to herself, "Nay, Prue Sarn, you be nought but his angel, and a poor daggly sort of angel, too."

Then followed frantic toil and thrift to bring in a corn harvest that would give security to the Sarn family and an operation for Prudence's lip. Misfortune intervened, however: the corn crop was set on fire and all was lost. The village folk turned on Prue, and had begun to stone her to death when Kester Wookseaves rode up, cleared the crowd and, as he lifted her onto his horse, said: "Come here then, Prue Woodseaves!"

Prue cried in disbelief: "But no! Kester . . . you mun marry a girl like a lily. See, I be hare-shotten!"

But Kester would not listen. Looking down into her eyes, he said: "No more sad talk! I've chosen my bit of Paradise. 'Tis on your breast, my dear acquaintance!" And when he'd finished those words, he bent his comely head and kissed her full upon the mouth.

EXPORTING GOODWILL

As the defect of any cleft of the face and mouth is a handicap, it follows that effective correction of the deformity will benefit the individual in his social setting, whether his culture be sophisticated or primitive. The goodwill engendered, like a pebble dropped into a pond, will send out ripples far beyond the original tiny splash.

My first experience in this kind of diplomatic missionary work came in Korea with the First Marine Division. Many incidents of

that time have been related through these pages. At the end of hostilities, the purpose of the marines was to rehabilitate the country, and this population was totally untouched by plastic surgery. Every anomaly and deformity imaginable was roaming about, and I went to work. This was a little unorthodox because ordinarily, when the marines were not fighting, they were just as gung ho about relaxing, and this attitude pervaded the camp. In order to do cleft surgery, it was occasionally necessary to have an anesthetist. At first he was reasonably enthusiastic. As he was not quite as infatuated by clefts as I, it became necessary sometimes to assist him, almost by the scruff of his neck, to the operating room. A recent note from Bertram Bromberg probably tells it best. He wrote:

Ralph, my brother-in-law, Irv Weinberg, was an anesthetist serving in Korea during your tour of duty there many years ago. At any rate when he returned and was relating his experiences, the first thing he wanted to know from me was if I knew a screwball plastic surgeon by the name of Millard, who operated night and day on every cleft lip in Korea. I have been subsequently delighted through the years to explain to him your contributions which were in their early stage of development at that time and have pointed out that he also, in some small way, played a role.

In my editorial in the 1962 *Journal of the Florida Medical Association*, missionary surgery in underdeveloped countries was suggested as an important step plastic surgeons could take toward improving international relations.

In this *do-it-yourself* diplomacy, the plastic surgeon can be particularly effective. Ours is a specialty which, with its hint of magic, touch of drama and more than a dab of art, is mastered by so few yet respected by so many. There is also its great humanitarian appeal. What act can bring greater rejoicing in a family and a village than the transformation of an infant with a cleft in lip, expression, palate and speech to a happy, sucking baby? The infinite influence of this specialty lies in its power to render the deformed and mutilated suitable to take their place in society and serve as living monuments not only to our specialty but to our way of life.

Jamaican program

In 1959 Kenneth McNeill and I started a Jamaican plastic surgical program. This continued with only minor interruptions until the last few years. A Jamaican surgeon, Tony Jackson, has

completed a year in our plastic surgical residency program at the University of Miami, preparing to take over a unit in Jamaica. Residents from Miami make short rotation work trips to his unit and that of Sidney Williams, continuing the two-way goodwill relationship.

An American in Taiwan

Samuel Noordhoff, trained in plastic surgery in Grand Rapids, Michigan, is superintendent of the new Foundation 1,600-bed Chang Giang Memorial Hospital, Taipei, Taiwan, Republic of China. When asked how he got to Taipei, he wrote in 1977:

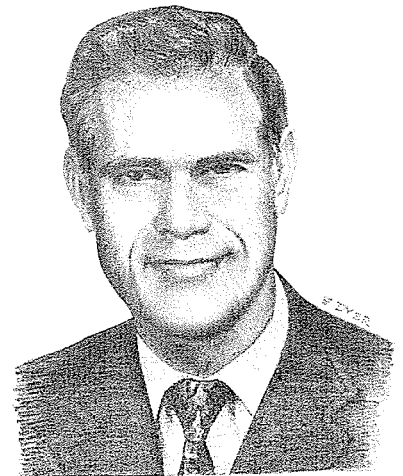
In 1959, I responded to a request for a surgeon of my church, the Reformed Church in America, feeling this is what God wanted me to do. I've stayed here because of the people and the challenges. Having talked Ralph Blocksma into starting a plastic surgery program, I was his first resident. I greatly appreciate his training as he was a superb teacher and surgeon with excellent concepts in lip and palate surgery. A most interesting aspect of this work has to do with abandoned babies that we've operated on and then have seen adopted into American homes. It's great to get a Christmas card with the note that our little girl or boy's the smartest one in their class. It's unbelievable what love and proper care can do for a child, and I guess that's what makes it fun to be a plastic surgeon.



Samuel Noordhoff

Roth in Korea

Robert F. Roth of Salem, Virginia, studied general surgery and plastic surgery at St. Luke's Hospital, New York, and Korean language at Yale University, after which he was commissioned a missionary of the United Methodist Church at Buck Hill Falls, Pennsylvania. From 1962 to 1972, he worked at the Wonju Union Christian Hospital in Korea, assisted Lew Jae Duk, trained by Kerwin Marcks, taught residents at the Yonsei-Severance Medical College in Seoul and, as consultant for the International Holt Adoption Program, operated on all of their cleft lip and palate cases. In 1966 he returned to the States to complete his plastic surgery training with Dick Stark and George Crikelair, and at the University of North Carolina. These are his reflections in 1977:



Robert Roth

In the mission field, the surgeon trained and gifted in plastic and reconstructive surgery has limitless, almost luxury options for service and fulfill-

ment. One soon appreciates that *all* surgery in the broadest terms is "plastic." Even the purely "cosmetic" is available as a "money crop" to support reconstructive surgery for indigent patients and for non-paying projects in Public Health, the bed rock of all mission medicine. At first, the realization that for one or two million people, you are the only qualified person to perform a cheilo- or palatoplasty can be an awesome challenge. Yet even someone with a minor blemish has trouble going to school, finding a job and getting married in Korea. Someone with an unrepaired or poorly repaired cleft lip or palate had best crawl into his grave as early as possible. So the answer, of course, is to close a cleft, teach one, over and over again. The sooner you make yourself dispensable, the finer your service.

While the vast majority of cleft lip patients in developed countries are corrected by three months, be prepared overseas for a patient from 6 hours to 60 years of age. Boys characteristically will be brought sooner for repair than girls. In some rural communities it is not until a girl reaches marriageable age that "it is time to repair the lip." The female palate may never have its time, since silence is considered a virtue in the Far East.

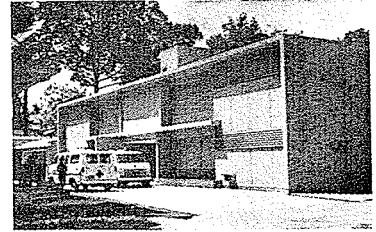
Be prepared too for some unexpected cultural factors. Multiple births are veiled in superstition as animalistic, if not cursed. Coupled with a very real handicap of no supermarket supply of milk, the new mother will give almost exclusive preference to the stronger of twins, especially a male newborn. Should one of the twins have a congenital malformation, particularly a cleft lip/palate, a cultural triage of infanticide by neglect is accepted practice. On one occasion, despite performing a cheiloplasty for a newborn twin, the emaciated, boil-studded body of the dead infant was returned to the hospital four weeks later, as if to prove it was his fate, surgery or none. A derisive, taunting, "onchungee-ya, onchungee-ya" (언창이아 인창이아, "Harelip" in Korean) is a severe condemnation for anyone with or without the anatomic blemish. Whenever possible, to pull a child out of that pit of despair is an eternal moment frequently under-appreciated in Western medicine.

Among surgeons, the plastic surgeon is tempted to sport a certain degree of hubris, since the techniques in his fingertips embody dramatic creative change. The missionary plastic surgeon is also tempted because his creative efforts are magnified by the unsophisticated eyes of nationals overseas and could lead to a delusional perception of self as the central figure in life's Sistine imagery, so familiar to us all. The temptation is there, but it is only a fool who takes a bite. To be truly effective as a missionary doctor, one must have a sense of call, a live faith and a right spirit.

Barsky Unit in Vietnam

The most famous foreign program was the National Center for Plastic and Reconstructive Surgery, which consisted of several

interconnected buildings on an acre of land in Saigon, Vietnam. This center was established by Arthur J. Barsky of New York and designated by the minister of health as the Barsky Unit. It began operation in July 1968 and continued until obliged to evacuate in April 1975. Plastic surgeons from all over the world volunteered to work and teach in this unit. During its six-year existence, 6,288 patients were admitted and another 21,842 were treated as outpatients. A total of 2,033 operations were carried out at this center: 593 cleft lip operations, 140 cleft palate and 1,300 cleft lip and palate. Speech therapy training was introduced in Vietnam for the first time.



Barsky and his unit

A Latin American program

Project Interplast (International Plastic Surgery Program) began in 1965 and has sent plastic surgery teams into backward Latin American countries as well as transporting patients from these countries to Stanford Medical School for surgery. Educator-surgeon-scholar Donald Laub, director of Project Interplast, recalls his first case:



Donald Laub

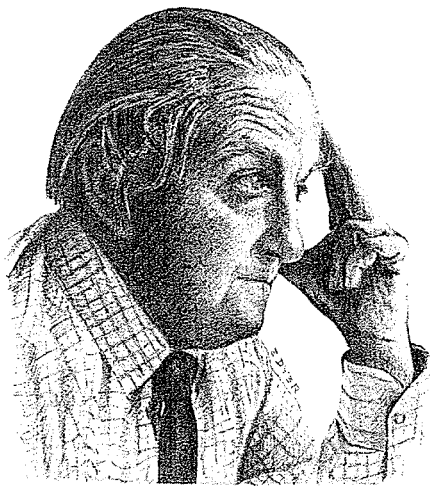
Nine years ago, Antonio Victoria, a fourteen year old boy from Mexicali, was brought to Stanford by the Latin American Mission Project. The child was grossly deformed by a congenital cleft lip and palate—defects that in this country would have been repaired between the ages of one and three.

Antonio's defects had made him a social outcast. His family thought they had committed a sin when they conceived him. When his deformity was corrected, he was able to return home and to lead a normal life.

East Africa Flying Doctors Service

Sir Archibald McIndoe, Michael Wood and Thomas Rees were in on the conception of this great program. Other plastic surgeons have served. One of them, David W. Furnas of the University of California, wrote in 1977:

My most consuming interest, outside of plastic surgery, is doing plastic surgery in developing countries where needs are great, many cases are unique challenges, the setting is romantic, and each day is an adventure. (These qualifications apply in considerable degree to Southern California, particularly if you drive any distance on the freeway). The paperwork is almost non-existent (Southern California loses!). One of the greatest joys of my life was working as a surgeon for the East Africa Flying Doctors Service in



Michael Wood

1972-73 under Director General Michael A. Wood. It was here, under Mr. Wood's tutelage, that I saw plastic surgery in its pure form—surgery of the skin and its contents! On one's schedule one might have to repair some cleft lips, place a Küntschner nail in a femur, do a prostatectomy, take out an eight-pound ovarian cyst, repair a vesicovaginal fistula, do a cartilage graft for a collapsed leprous nose, and perhaps repair a hyena bite, a lion clawing, or a corneal tear from a thorn tree.

A high point each year now is returning to Kenya to continue this work (although I now stick to more conventional plastic surgery and leave the forays into the abdominal cavity to Mr. Wood)—nonetheless, the spectrum of pathology and challenge is always monumental.

THE EPITOME OF GOODWILL

Mammituppu is a very primitive island in the 350 San Blas island string that fringes the northern coast of Panama in the Caribbean Sea. Many of the Kuna Indians inhabiting this island were massacred by Spaniards 400 years ago, and since then they have distrusted foreigners, allowing no visitors. In 1958 missionary Roland Icke gained admittance to the island and spotted a young boy with a cleft lip. The boy, being the grandson of the chief, had been spared the usual practice of killing cleft infants by withholding food and fluids. Icke decided to use this cleft as a wedge to bring the Christian gospel to the island and invited Ralph Blocksma, who had been involved in missionary medicine since 1949 in Pakistan, to stop off on his way to Quito, Ecuador.

A visit to the island gained permission for the operation from the boy's father, but both grandfathers, who were medicine men, strongly opposed it. They said they had given the boy's mother the best possible prenatal care with their native herbs, medicine baths and chants—and in spite of this the child had been born with the deformity; therefore, nothing could be done. After much pleading by the boy's father, consent was granted. Under endotracheal anesthesia, the lip cleft was closed successfully, and as soon as the sutures had been removed the child was returned to Mammituppu. The entire village marveled at the miracle, and the patient's grandparents, the medicine men, stated that Dr. Blocksma must be a god, for certainly no man could have mended the boy in that manner. He was given the name of Rafael after the surgeon and brought six eggs as a token of his

appreciation. Thus the closure of a cleft lip finally opened the San Blas island Mammituppu to the teaching of Christian missionaries.

Extension in Panama

Daniel Gruver, born into a Kansas City Baptist missionary family serving in Alaska and Costa Rica, earned an A.O.A. key at Southwestern Medical School in Dallas and completed a residency at Gorgas Hospital in Panama. He then became the first doctor in the partially finished Marvel Iglesias Hospital in Ailigardi, San Blas, Panama, and for years was the only doctor and dentist for 30,000 Indians. In addition, he flies an ambulance plane; started a 100-acre farm, set up the first water supply system in San Blas, runs the town's light system, created feeding centers to prevent kwashiorkor, and gives daily devotions in the Kuna language. As he wrote in 1977:



Daniel Gruver

The Kuna Indians have an extremely high rate of congenital anomalies and the highest incidence of albinism in the world. The Kuna Indians' high incidence of cleft lip, several times greater than anywhere else in the world (2% of births), causes the major part of my plastic surgery to be the closure of clefts. Although I have had no formal training in plastic surgery other than the several days in Jamaica in 1969 when I scrubbed with you, I have been able to make these babies acceptable to their families and have adopted a severe bilateral cleft which has had a preliminary adhesion. A baby born with a cleft here will be destroyed if not operated before discharge. I do not see clefts in adults. Since *Cleft Craft I*, the results of my surgery have greatly improved. I have a leave of absence during which time I hope to take one year of rotating general surgery and two years of plastic surgery in Miami.

While in training in plastic surgery in Miami in mid-1979, he told me:

In 1968 a drum of oil delivered to San Blas cost five dollars, but today costs 60 dollars. Therefore my first priority when I return is to get a windmill working to provide electrical energy for the hospital operating room, refrigerators, x-ray, lighting, centrifuge and autoclave.

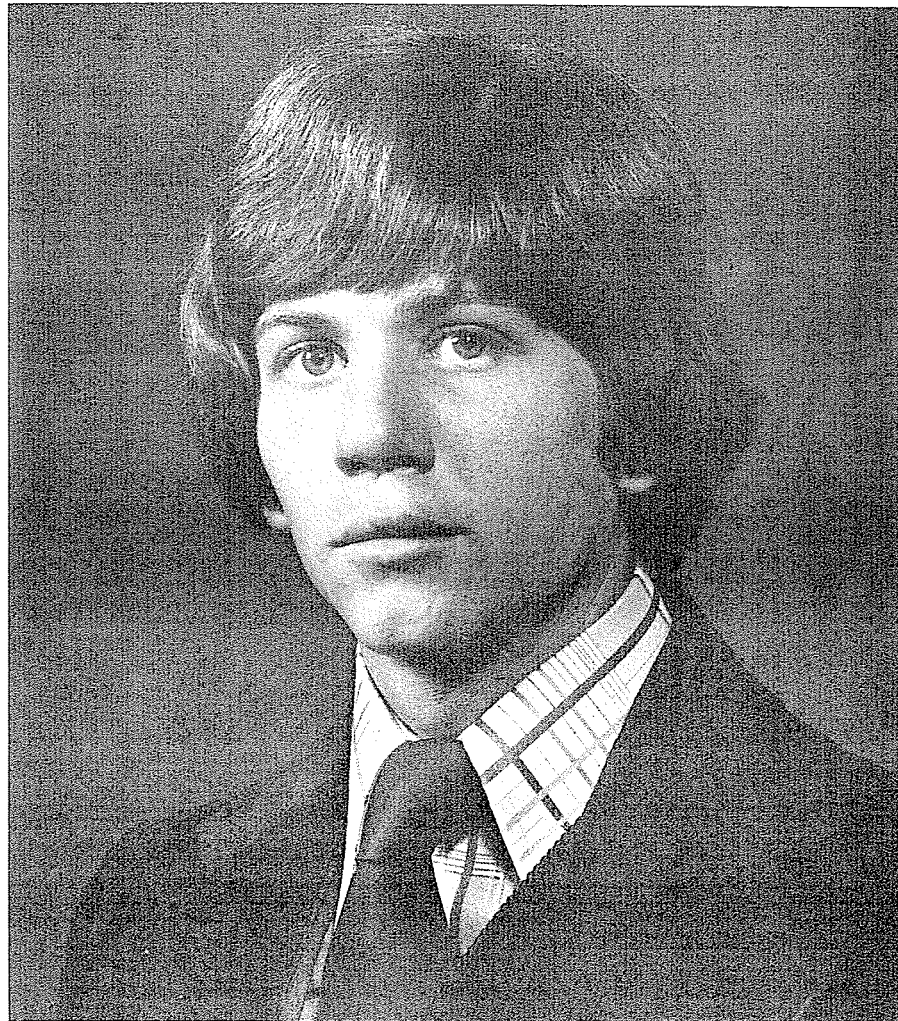
AND SO . . .

The story told in *Cleft Craft* can be summed up in the cover boy who appears in detail on page 350 of Volume I, but whose spirit

lingers throughout Volumes II and III. He may be a twentieth-century American 4-year-old, but he stands for a child with a cleft of any country in any century. The genes he has inherited for brains and temperament will exert the greatest influence. The family, friends, socioeconomic situation and specific point in time and space with which he is presented will determine his treatment.



Here he is after surgery with his hair combed in front, obviously arranged only under parental duress, specifically for a visit to the doctor. His lip scar is no more noticeable than the scratch on the side of his nose from a scrap with the kid down the block. Thanks to centuries of surgeons, the evolution of this craft has made it possible to camouflage his cleft so that at the age of 19 he can take his rightful place among men, free to become whatever his abilities will allow—plumber, piccolo player, pilot, pediatrician or president.



At age 19 years he hopes to become a pilot.