

The offices of two Toronto physicians reflect differences in images and mood.

YOUR PRACTICE

Interior design as healing agent

ELIZABETH KIMBALL

The human being in the patient — internationally renowned architect Eberhard Zeidler made this the starting point of his design for McMaster's Health Sciences Centre in Hamilton and for the University of Alberta's new Walter C. Mackenzie Hospital. He saw increasingly complex hospital technology and scientific approach threatening to turn that vulnerable human into a faceless case.

It is not mere coincidence that, in the wider world, the word in office design today is "humanize". Heads of industry and commerce are paying interior designers big bucks to create warmer, more personal backgrounds to client meetings; and those on smaller budgets are making stringent sacrifices, sometimes of their own time and labour, to emphasize the face-to-face aspect of their client dealings. They are doing

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this not in defiance of economic constraint but to combat it.

Foreign though these two worlds may appear, there is a message in both developments for the physician, especially the private practitioner.

Interior design is image maker, controller of mood and aid to efficiency. The design of a physician's office should be a complex of images: professional; in some cases, that of a particular hospital, clinic, medical facility or other institution; the physician's type of practice; and that person's individual image.

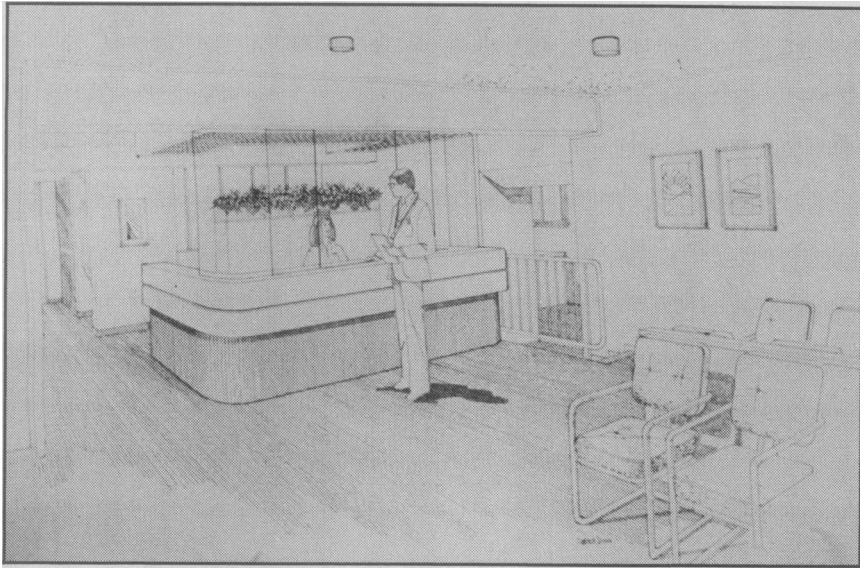
Professional image is built into institutions and commercial medical buildings so it need not be stressed. The physician who has his office in his own residence, or in a renovated former residential building will almost certainly wish to establish that it is a medical domain.

Surprisingly, according to the evidence in several Canadian cities, the suites within many institutions and medical buildings seem to say some pretty unpleasant things about physicians. Does a boring, uncomfortably furnished waiting room truly express healing? Do outdated reading matter and inappropriate light-

ing accord with medicine's questing spirit? How close to a physician would a patient feel were she to discover, as a salesman to a large American city building did, that the art reproduction on his wall was exactly the same as in all the other offices? Unless a participant is fortunate (or influential) enough to have been in on the plans, he will rarely have anything to say about the physical layout and decor of his workspace. At best he can arrange his furniture and hang art to suit himself.

In commercial rental buildings choice of suite layout is usually limited to two or three sets of boxes-within-boxes. If the tenant leases before construction is completed, or later, depending upon the landlord, he can sometimes rearrange space by adding or removing partitions. When cosmetic surgeon Dr. Harold Silver rented one side of a wing in Toronto's Royal York Hotel he had the lessor gut the space and rebuild it to his specifications.

For most commercial space tenants, the big advantage is freedom to decorate as they wish. And the physician whose office is in a private



Ottawa designer Thomas Nater's proposal . . .

ship/Architects, created a clubroom for the nervous teenagers, complete with juke box and coke machine.

"Design starts with route", Zeidler and Jacobs agree. "No two doctors work alike." Input to the designer is very important. What is the physician's work pattern? The size and nature of his staff? Does he prefer a separate examination room, or simply a curtained-off space? Does he confer with the next patient while waiting for the first to dress, or use this time to prepare his diagnosis? The designer must integrate solutions to these problems into the total design.

Staff members are the best judges of the kind and arrangement of furniture which best suits their work. But if this area is observable by the public, these considerations and staff's personal aesthetic preferences must be reconciled with the interests of the patients. If possible, staff area should not be expected to include other functions; storage of garments, back files and literature, should be in a separate area.

A comparison of two Toronto physicians' work environments demonstrates successful integration of image, mood control and work efficiency. Both physicians were their own designers.

Were it not for a discreet wall slit

(or former) residence (an increasingly popular option, and for more reasons than the comparatively low rent) benefits by the built-in personality of such a building.

Where this control is possible, the office interior should cue the visitor in on the special nature of the practice. A cheery, homey atmosphere is congenial to an obstetrician's waiting room, whereas the higher proportion of seriously ill among a gerontologist's patients suggest less attention-demanding colours, and perhaps an exit which

does not expose them again to the scrutiny of other patients.

The private pediatrician might borrow ideas from two hospital clinics. At the McMaster Health Sciences Centre Zeidler built see-throughs into a playroom for young children; the shy ones could ease out before they cut themselves loose from their mothers and they, in turn, can keep an eye on their offspring. And in a New York hospital plastic surgery clinic some years ago, Robert Jacobs, Associate Partner in Zeidler Roberts Partner-



. . . bring's light from the back of the building to the front waiting room.

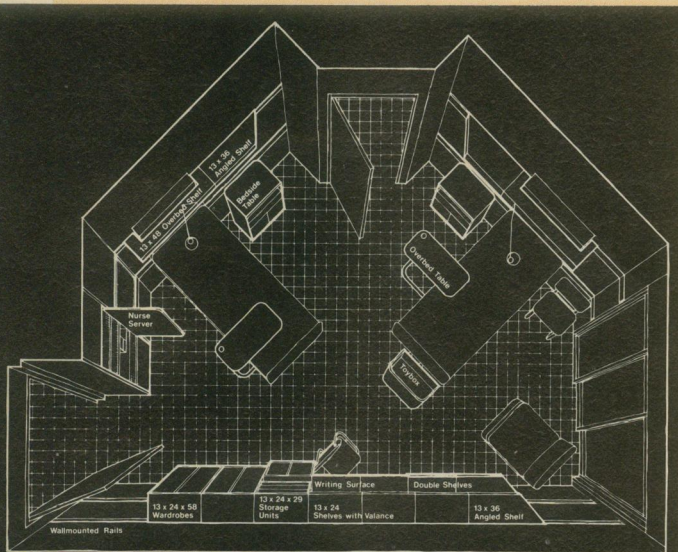
into his secretary's office, the waiting room of Dr. Silver could be the living room in the residence of any upper-income traditionalist of taste. Velvety carpet, grasscloth and mirrored walls, deeply comfortable chintz-covered sofas and chairs, softly harmonizing earthtones lifted with delicate apricot and blue tones express a sophisticated sensitivity.

Two large paintings of females — the first of faceless, rosy-fleshed bodies, the other of three "spirituelle" ladies whose limbs are provocatively half-revealed beneath gauzy draperies — zone in on a preoccupation with physical human beauty. Beyond this room, leading from a smoky mirrored wall are, in perfect workflow order: nurse's and secretary's of-

ices, two consulting rooms, Dr. Silver's private office, lavatories, small staff kitchen, scrub room, surgery and recovery room. The subtle colour harmonies and luxurious fabrics carry through to the surgery areas, where, instead of the usual white, walls are painted an elegant grey.

Dr. Silver does not interview patients in his private office. Reserved

Award-winning interior for Alberta's children's hospital



Patient Room

This is a room that would tickle any kid pink: a worktable that is just the right height; handy, modular shelves and cabinets; grab slots on doors and drawers instead of handles; child-height clothes hanger hooks; private bathroom; big swathes of bold primary and secondary colours — the kind children like for their own artwork — instead of pastels whose subtleties are lost on a child's still-developing colour awareness.

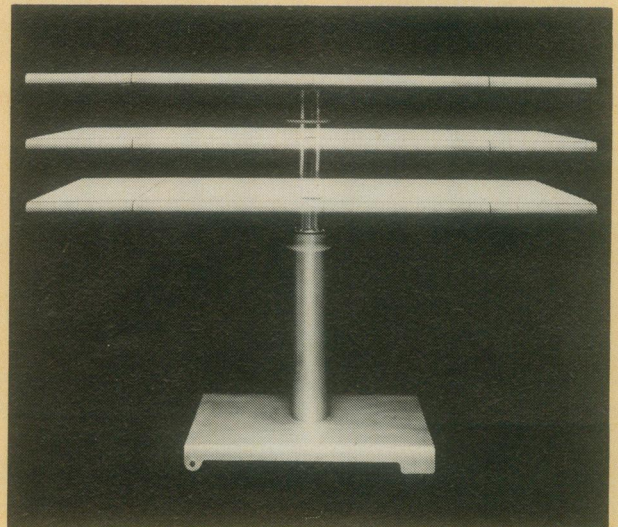
This is the Alberta Children's Provincial General Hospital in Calgary. Toronto designer Keith Muller won a Design Canada Award for its interior and furniture.

Muller, who with economist Early Berger wrote the Ontario Government's 1981 "Market Study of Health Care Furnishings in Canada", designed a comprehensive system of furniture which can be adapted to the ages and special needs of the hospital's young patients, and to different uses within other areas of the hospital. That approach in itself was a big step forward in improving health care for both the patient and those who minister to them. However,

the special significance of Muller's contribution is in what Julian Zuckerbrot, editor of *Canada's Contract Magazine*, described as "the blurring of distinctions between design disciplines". The award for industrial design could as easily have been for interior design, the editor pointed out, for Muller's furnishings helped define the hospital's spatial arrangements: Eleven clusters of 12-bed octagons, each opening on an indoor courtyard, make up the 28 000 sq m new wing. Each octagon is further divided into two- or four-bed rooms. "The cluster arrangement saves steps for staff and enables nurses to keep in closer contact with the youngsters", says Dr. Robert Innes, executive director of the hospital. "And day nursing has gained flexibility."

Muller, interior designer Anne Carlyle and their team brought this design feature to full flower with his furniture and its arrangement, and with the fabrics and colours they chose for decorating. For example, beds were placed at right angles to each other, giving occupants a 45° angle of vision to the opposite wall, a much less confining view than the perpendicular one.

The hospital's emphasis on socializing is an important part of an emerging new philosophy of health care which is central to Muller's designs. "My objective was to help the child to live as nearly as possible a happy, normal life", Muller says. Thanks to his instant-change modules it is no big deal for two congenial youngsters to be moved into the same room, or to isolate patients in the early stages of



for private study and nonpatient meetings, it offers uninhibited expression of the occupant's personal tastes: silky brown moire walls and drapes, a fine antique desk and chairs, a plushy broadloom, two abstract paintings in deep high-stimulant colours. It is a room, the doctor confesses, in which visitors like to linger. For this reason he sees

patients in separate room, just a little more than large enough for each to accommodate two chrome and leather chairs and little else. "This arrangement allows me to terminate the interview at my discretion", Dr. Silver points out. It also demonstrates Zeidler's theory on control of private space. The dimensions of the consulting room

prescribe a comfortable distance between doctor and patient.

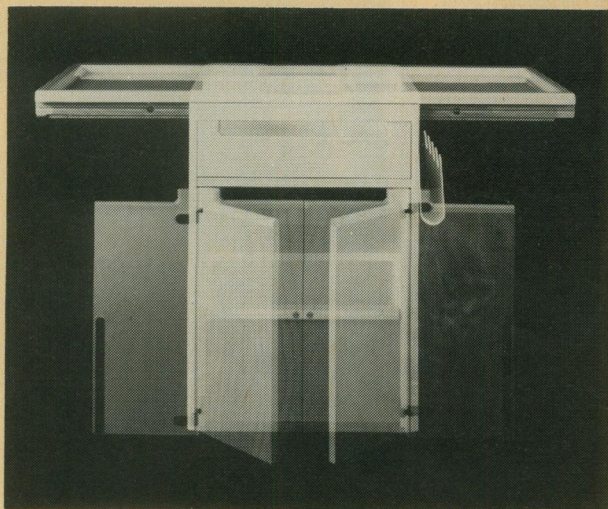
General practitioner Dr. Nicholas Mittler has followed a quite different route. His rooms in a commercial medical building are warm, relaxing and hearteningly personal; they work as smoothly for himself and staff as his schedule appears, if one can judge by the refreshingly

recovery after treatment. The few long-term patients can change furniture according to their growing needs and interests. The cluster arrangement of rooms makes it easy for buddies to fraternize. As well, the central courtyard is often the scene of shared activities which contribute to the normalcy of life.

In patients' rooms the decor is warm. Bright coloured carpet contrasts with pale wheat-painted walls, while other walls are covered with Acravan, a self-healing tacking surface for displaying the child's own pictures and cards. Wood is used generously for its reassuring association with home and its warm look and feel. Incandescent showcase lights, behind valances, reflect a warm, healthy glow to human countenances.

Muller's bedside table meets the needs of patient and staff: it's stable and can be easily moved; a dish-shaped surface contains spillage; the fixed table top can be extended without disturbing articles in use on the central section; it can be pushed or pulled away to allow access to the top drawer; slot handles protect users from bruises, and a magazine rack is attached to the side.

The most revolutionary aspect of Muller's design, however, is his comprehensive system of modules which takes the designer's earlier system a giant leap forward. Muller's modules (shelving, free-standing storage units, tables and benches which can be moved from one area to another) replace conventional built-in units which deface walls and require carpenters to move.



One adjustable table eliminates the conventional two or three; and by using a single manufacturer (instead of several, as is normal practice) the hospital cuts costs and simplifies delivery. Too, the smaller number of types of furniture simplifies hospital inventory taking. Mass production saves initial and replacement costs.

In these designs, and in other similar furnishing systems, Muller recognizes that rapid advances in health care techniques and research coupled with the increased number of test procedures required make



furnishings obsolete before they leave the factory. New discoveries in treatment, mercifully frequent today, demand new types of environment.

"One of the few fixed points in today's health care is change", Muller stresses. "Change in furnishings is costly and time-consuming. Design must keep in stride with medical advances." The designer's contributions to the Alberta Children's Provincial General Hospital meet this requirement splendidly. ■

Intermediate Prescribing Information

Apresoline® tablets

(hydralazine hydrochloride)

Antihypertensive Agent

Actions

Hydralazine hydrochloride exerts its hypotensive action by reducing vascular resistance through direct relaxation of vascular smooth muscle.

Indications

APRESOLINE Oral: Essential hypertension.

APRESOLINE is used in conjunction with a diuretic and/or other antihypertensive drugs but may be used as the initial agent in those patients in whom, in the judgment of the physician, treatment should be started with a vasodilator.

APRESOLINE Parenteral: Severe hypertension when the drug cannot be given orally or when there is an urgent need to lower blood pressure (e.g. toxemia of pregnancy or acute glomerulonephritis). It should be used with caution in patients with cerebral vascular accidents.

Contraindications

Hypersensitivity to hydralazine, coronary artery disease, mitral valvular rheumatic heart disease, and acute dissecting aneurysm of the aorta.

Warnings

Hydralazine may produce in a few patients a clinical picture simulating systemic lupus erythematosus, in such cases treatment should be discontinued immediately. Long-term treatment with adrenocorticosteroids may be necessary. Complete blood counts, L.E. cell preparations, and antinuclear antibody titer determinations are indicated before and periodically during prolonged therapy with hydralazine and if patient develops arthralgia, fever, chest pain, continued malaise or other unexplained signs or symptoms. If the results of these tests are abnormal, treatment should be discontinued.

Usage in Pregnancy

Animal studies indicate that high doses of hydralazine are teratogenic. Although there is no positive evidence of adverse effects on the human fetus, hydralazine should be used during pregnancy only if the benefit clearly justifies the potential risk to the fetus.

Precautions

Caution is advised in patients with suspected coronary artery disease, as it may precipitate angina pectoris or congestive heart failure, and it has been implicated in the production of myocardial infarction.

The "hyperdynamic" circulation caused by APRESOLINE may accentuate specific cardiovascular inadequacies, e.g. may increase pulmonary artery pressure in patients with mitral valvular disease.

May reduce the pressor responses to epinephrine.

Postural hypotension may result.

Use with caution in patients with cerebral vascular accidents and in patients with advanced renal damage.

Peripheral neuritis has been observed and published evidence suggests an antipyridoxine effect and the addition of pyridoxine to the regimen if symptoms develop.

Blood dyscrasias consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis and purpura have been reported. In such cases the drug should be withdrawn. Periodic blood counts are advised during therapy. MAO inhibitors should be used with caution in patients receiving hydralazine.

Slow acetylators should probably receive no more than 200 mg of APRESOLINE per day. When a higher dose is contemplated, and, whenever possible, it may be advisable to determine the patient's acetylation phenotype.

Adverse Reactions

Within the first day or two: headache, palpitations, tachycardia, anorexia, nausea, vomiting, diarrhea, and angina pectoris. They are usually reversible when dosage is reduced or can be prevented or minimized by administering reserpine or a beta-blocker together with hydralazine.

Less frequent: nasal congestion; flushing; lacrimation; conjunctivitis; peripheral neuritis, evidenced by paresthesias, numbness, and tingling; edema; dizziness; tremors; muscle cramps; psychotic reactions characterized by depression, disorientation, or anxiety; hypersensitivity (including rash, urticaria, pruritus, fever, chills, arthralgia, eosinophilia, and, rarely, hepatitis); constipation; difficulty in micturition; dyspnea; paralytic ileus; lymphadenopathy; splenomegaly; blood dyscrasias, consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis, thrombocytopenia with or without purpura; hypotension; paradoxical pressor response.

Late Adverse Reactions: Long-term administration at relatively high doses may produce an acute rheumatoid state. When fully developed a syndrome resembling disseminated lupus erythematosus occurs. The frequency of these untoward effects increases with dosage and duration of exposure to the drug and is higher in slow than in fast acetylators. Antinuclear antibody and positive L.E.-cell tests occur.

Symptoms and Treatment of Overdosage

Symptoms: hypotension, tachycardia, headache, generalized skin flushing, myocardial ischemia and cardiac

arrhythmia can develop. Profound shock can occur in severe overdosage.

Treatment: No known specific antidote. Evacuate gastric content, taking adequate precautions against aspiration and for protection of the airway; if general conditions permit, activated charcoal slurry is instilled. These procedures may have to be omitted or carried out after cardiovascular status has been stabilized, since they might precipitate cardiac arrhythmias or increase the depth of shock.

Support of the cardiovascular system is of primary importance. Shock should be treated with volume expanders without resorting to use of vasopressors, if possible. If a vasopressor is required, a type that is least likely to precipitate or aggravate cardiac arrhythmia should be used, and the E.C.G. should be monitored while they are being administered.

Digitalization may be necessary. Renal function must be monitored and supported as required.

No experience has been reported with extracorporeal or peritoneal dialysis.

Dosage and Administration

Adjust dosage according to individual blood pressure response.

Orally: Initial: 10 mg 4 times daily for the first 2 to 4 days, 25 mg 4 times daily for the remainder of the first week, 50 mg 4 times daily for the second and subsequent weeks of treatment.

Maintenance: adjust dosage to lowest effective levels. Following titration, some patients may be maintained on a twice daily schedule.

Usual maximum daily dose is 200 mg, up to 300 mg daily may be required in some patients. In such cases a lower dosage of APRESOLINE combined with a thiazide, reserpine or both, or with a beta-adrenergic blocking agent may be considered. When combining therapy, individual titration is essential to ensure that the lowest possible therapeutic dose of each drug is administered.

Parenterally: patients should be hospitalized. Usual dose is 20-40 mg I.M. or by slow I.V. injection or I.V. drip, repeated as necessary. Patients with marked renal damage may require a lower dosage.

For I.V. drip, the ampoule(s) should be added to 5% sorbitol solution, physiological saline or Ringer solution; glucose solution is not suitable for this purpose.

Blood pressure levels should be monitored. It may begin to fall within a few minutes after injection, with an average maximal decrease occurring in 10 to 80 minutes. In cases with a previously existing increased intracranial pressure, lowering the blood pressure may increase cerebral ischemia.

Most patients can be transferred to oral APRESOLINE within 24 to 48 hours.

Availability

Tablets of 10 mg: yellow, uncoated, biconvex, scored, and imprinted "FA" on one side and "CIBA" on the other. Bottles of 100 and 500.

Tablets of 25 mg: blue, coated, printed "GF" on one side and "CIBA" on the other. Bottles of 100 and 500.

Tablets of 50 mg: pink, coated, printed "HG" on one side and "CIBA" on the other. Bottles of 100 and 500.

Ampoules: 1 ml, each containing 20 mg hydralazine hydrochloride, 103.6 mg propylene glycol, 0.65 mg of methyl-p-hydroxybenzoate and 0.35 mg of propyl-p-hydroxybenzoate in water for injection. Boxes of 10.

Complete Prescribing Information available on request.

Reference:

1. The Pharmacological Basis of Therapeutics, Sixth Edition, page 799-801 - Goodman's and Gilman's. 1980.

short waiting period an individual spends before consultation. Comfortably upholstered benches at right angles along two walls, a mirrored wall, and a glass partition between secretary/nurse and patients make a small space seem larger. Heavy-textured covering on the benches, which have hinged tops to provide storage space, in autumnal shades spikes up cream walls and offers a preview of Dr. Mittler's private office; a colourful tapestry hangs above his secretary's desk and is reflected in the mirrored wall. The original lighting was replaced to provide a more comfortable reading level. The glass partition reassures those waiting that they are in touch with the secretary, and sifts out louder sounds from that area.

Dr. Mittler's office/consultation room is as personal as an Old Country salon. A handsome dark walnut refectory table, his desk, matches in spirit an ornately carved credenza and sideboard imported from Spain. Cream coloured walls set off their dark tones and rich carving. There is an original still life in deep muted ochres and reds by French artist Marthe Rakine. A Turkish rug, in deep jewel tones of crimson, blue and amber lends the small rooms warmth. Accessories are homey and



Mirrors add a new dimension.

C I B A

Mississauga, Ontario
L5N 2W5

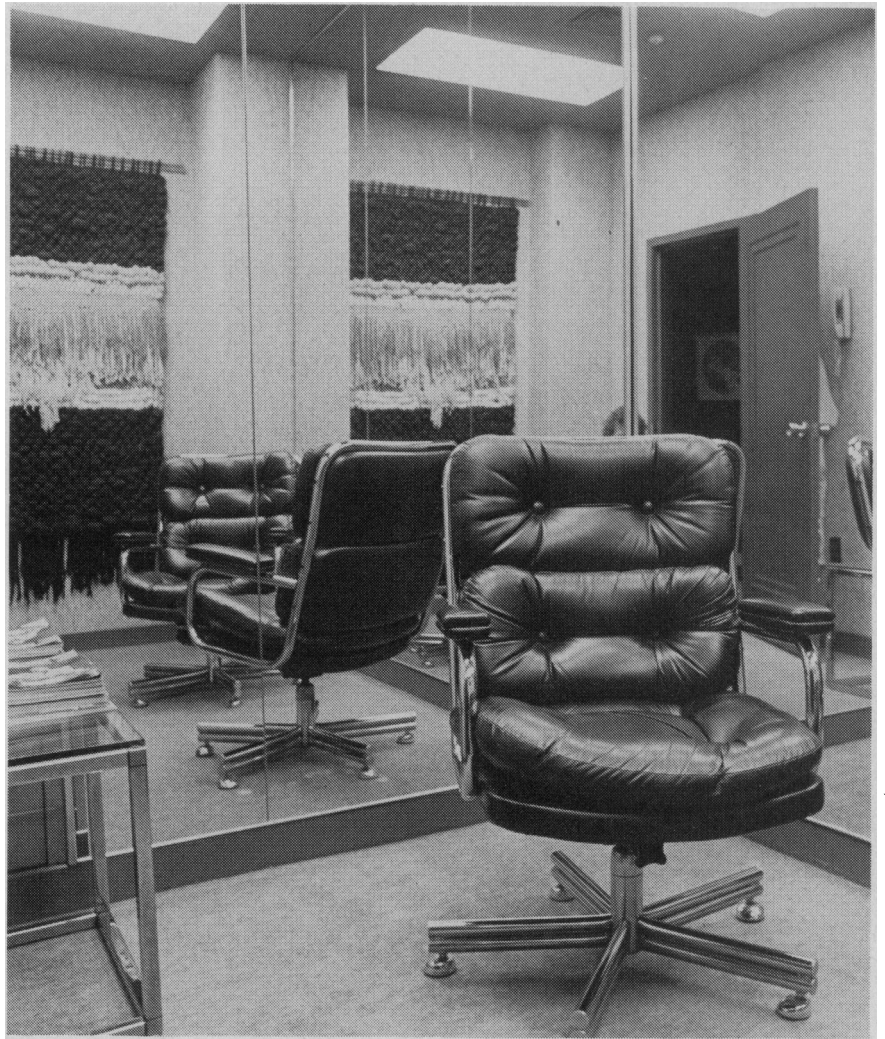
personal: a squat clay jug from Oaxca, a pretty little antique clock, and a row of hand-painted Spanish tiles, the gift of his artist friend, the late George Freyer.

This room, originally larger, has been divided to create a separate examination room, thus allowing the physician to use the original examining room as an occasional recovery or extra change room. Its cabinets also provide extra storage space for back files and supplies.

In the staff area, low custom-designed cabinets and chests and two matching kneehole desks (for paperwork and reception) are arranged in a U to maximize space. Shelves have been built into a coat closet for back files.

Colour, light, line, form, space, texture and pattern are the elements from which the designer composes his "statement".

Colour is the most obviously potent element. Colour influences human mood, and by extension, efficiency. After 40 years of study and acting as colour consultant to industrial, educational and science clients (he has authored 20 books on colour) Faber Birren concluded that "color affects judgment, muscular tension . . . brain waves, heart rate, respiration and other functions of the autonomic nervous system".



The sparse patient interview room: controlling your space



Dr. Silver's waiting room: it could be the living room of any upper-income traditionalist of taste.



Nater's design includes a skylight . . .



. . . and bright, well-ordered office space.

might use to avoid an impression of ostentation. He can shrink space by choosing dark colours, heavy furniture, large patterns. The more usual problem of expanding space visually can be solved by employing a light, low contrast colour scheme, open-style furniture in light woods or metals, small patterns and a clean, orderly arrangement of furnishings.

Boring dimensions can be transformed: lengthen a cube-like room by emphasizing the horizontals of one or opposite walls (add contrast-colour mouldings, hang a set of prints in a long row); heighten a claustrophobically low ceiling by painting it white and hanging a long narrow wall hanging vertically; emphasize a room's length by giving it a dark end wall.

In low-contrast colour schemes suitable to most small offices interesting effects can be achieved by playing different textures against each other. Consider marble-topped end tables offsetting tweedy upholstery and rug; a shaggy wool wall hanging in a room featuring furnishings of metal, glass and shiny plastics; a polished metal sculpture on a pine stand.

Pattern cleverly emphasizes style, alters dimensions, and adds personality to a room. Striped wallpaper can make a room look loftier, diminutive floral fabric or wall covering can suggest femininity and tradition, and large bold graphics can make the beholder forget boring lines, and lend refreshing zing.

To deploy these elements of design successfully requires a sophisticated sense of balance and rhythm . . . usually that of a professional interior designer. Yet the young physician who is starting out on a shoestring budget, or one whose operating budget has been severely taxed recently, can achieve heartening results without spending a bundle. It needs only a few hours studying home and decor magazines (the principles are the same for domestic as for work places), a thoughtful analysis of their work patterns and their patients' special needs, a bit of scouting in discount furniture marts and flea markets, and, if a professional decorator strains the budget too severely, a bit of their own time and sweat. ■

Others eminent in the field agree that extroverted types prefer bright, warm colors; introverts respond to the cools; that red, yellow and orange, for instance, stimulate muscular activity, that the cooler blues and greens encourage intellectual activity. Almost all interior designers and behaviourists agree that red excites, blue and green soothe and relax.

Sharon Bower, interior designer associated with Zeidler Roberts, pointed out that the general taboo against red and other exciting colours in a medical environment does not hold for practices devoted to young children or the very old. In the first case, subtle colours are lost

on incompletely developed colour awareness; in the latter, failing vision blurs intensities. In most medical offices she likes peach tones.

Windows being at a premium in most medical offices, the physician should make the most of those areas which do enjoy natural light. Exploit its special quality and quantity. Make the most of brief, meagre light with white or another highly reflective colour; decide which is most relevant, the east's warm morning light, or its paler late-day powers.

Fortunate indeed is the doctor whose problem is making his quarters appear smaller — an effect he