Special Speaker Issue

Major Breakthrough in Judging Speakers

Do the New Omnidirectional Speakers Help or Hurt Stereo?

How to Set Up Outdoor Speakers

Tests of $10, $70, $600, and $1,800 Speaker Systems
tuning. (Remote control AutoScan is included in the price of the 450-T.) It has an AM section. (One that we’re extremely proud of, incorporating sophisticated circuitry to cut out interference and whistles, and highly selective ceramic filters.)

But it’s overall performance that really counts. And the 450-T won’t disappoint anybody.

It has the same clean sound as the Fisher 500-TX, with only marginally less power.

**Now, about IC’s.**

Other receivers claim to have more IC’s than Fishers.

That’s fine with us.

Sure, we use IC’s, FET’s, MOSFET’s and space-age circuitry in our receivers. And in many applications they’re a definite asset.

Many, but not all.

We’ve found that the mere inclusion of these devices does not result in superior performance.

Careful judgment and discretion is required to make the most out of IC’s, and the rest.

For example. Our engineers discovered one particular application (in one of the audio preamplifier stages) where none of the available IC’s on the market could match the noise and overload performance of our special low noise silicon transistors.

And that’s not an isolated example.

Another new IC that many manufacturers were using and advertising was tested by Fisher, and found to have subtle performance flaws. Rather than incorporate it in our equipment simply to “keep up” with our competitors, our engineers worked with the IC manufacturer and were able to improve on its signal-to-noise ratio, distortion and dynamic range. As a result, the 450-T and other new Fisher receivers use this improved IC. And no Fisher receivers were built with the inferior version of this IC.

**tuning incorporated into the 250-TX will allow you to preset your five favorite FM stations, and then tune instantly to any one by pushing the corresponding button.**

(Tune-O-Matic is another form of diode tuning, and it works electronically, without any moving parts.)

Tuning can also be accomplished manually, of course. And with an FM sensitivity of 2.0 μV, you’ll be able to listen to stations that you didn’t even know existed.

Two sets of speaker systems can be hooked up and controlled with the 250-TX. And 120 watts is enough power for nearly any purpose you can imagine.

**Go ahead, boost the bass and treble.**

Baxandall tone controls (a feature of every Fisher receiver) allow you to increase the very low bass and the upper treble without affecting the mid-range. That means no boomy, or harsh side effects at higher bass and treble boost levels.

The overall performance of the 250-TX is up to Fisher’s usual high standards. It shares these important specs with the 500-TX:

- **FM signal-to-noise ratio**, 65 dB.
- **FM stereo separation (at 1 kHz)**, 38 dB.
- **Harmonic distortion**, 0.5%.
- **Hum and Noise**, —90 dB.

---

**The 110-watt Fisher 210-T, your best buy at $299.95**

This is the only low-priced AM/FM-stereo receiver we know of with real power.

The 210-T will drive inefficient, acoustic suspension speaker systems in any room.

The tuner section of the 210-T will bring in more stations than many higher priced receivers—sensitivity is 2.0 μV.

And, like the other more expensive Fisher receivers, you can hook up and control two sets of speaker systems with the 210-T.

Tuning is manual only.

(At this price something had to give. And it wasn’t Fisher quality.)

---

**The Fisher**

OVERSEAS AND CANADIAN RESIDENTS PLEASE WRITE TO FISHER RADIO INTERNATIONAL, LONG ISLAND, N.Y. 11101. PRICES SLIGHTLY HIGHER IN THE FAR WEST

---

**The 120-watt Fisher 250-TX, your best buy at $349.95**

Most receivers are in this price range. But the new AM/FM-stereo Fisher 250-TX is more powerful, more versatile, and will bring in more clear FM stations than any of the rest.

The Tune-O-Matic push-button memory...
The 200-watt Fisher 500-TX, your best buy at $499.95

We've explained the various tuning advancements incorporated in the Fisher 500-TX. And we claimed that Fisher AutoScan would bring in far-off stations automatically, that other good receivers couldn't even manually. (Even other receivers that can match the 500-TX's remarkable 1.7 µV sensitivity.) We can back up that claim.

Crystal filters are great—maybe.

Most good receivers today incorporate crystal filters. These filters permit a high degree of selectivity so that strong, local stations don't over-ride far-off, hard to receive stations. Crystal filters also do away with periodic alignment—you align them once and they're permanently aligned. Or misaligned!

Fisher discovered that by tuning a crystal filter to "average" operating conditions before installing it (as is the industry custom) there's a good chance that the completed receiver will be permanently misaligned, to some degree.

By using a 4-pole crystal filter (others use a 2-pole filter) and by tuning it after the receiver is wired, we've been able to achieve up to six times better selectivity in production-line receivers than competitive models we've tested.

This holds true for our least expensive receiver, and all the way up through the 500-TX. Count stations, and you'll discover that Fisher receivers bring in dramatically more stations.

As for the amplifier section of the 500-TX, it's everything you could ask for.

Power? Power!

With 200 watts of clean power you'll be able to drive a remote pair of speaker systems, as well as a big, power-hungry main stereo system, complete with a third, center channel speaker.

Again, we quote Audio: "Always we sensed that here was an amplifier section with great power reserve that could handle just about anything we fed to it at very loud levels in large listening rooms. "...all the wonderful tuning convenience cannot obscure the fact that it's a powerhouse of an amplifier that is capable of excellent transient response...and truly 'big,' 'clean' sound."

There are many reasons why the Fisher 500-TX sounds as clean as it does, including a more discretionary use of IC's than is common industry practice these days. More about that later, when we tell you about the new 450-T.

Summing up, in the words of Audio: "The Fisher 500-TX is a top-grade receiver whose performance might easily challenge that of even some of the better separate tuners and amplifiers."

In the words of High Fidelity magazine: "The 500-TX is, at this writing, the top-of-the-line receiver from Fisher. It certainly strikes us as a top unit for any line."

The 180-watt Fisher 450-T, your best buy at $399.95

You can tell just by looking at the 450-T that it's a lot of receiver for the money. It has AutoScan in addition to conventional flywheel...
The Fisher 500-TX has made its own tuning knob obsolete.
Push-button electronic tuning without moving parts is more convenient, more accurate, and more foolproof than tuning by hand.  
(No matter how many meters or scopes you use!)

If you saw *Audio* magazine's review of the Fisher 500-TX 200-watt AM/FM-stereo receiver, you may have been surprised, and maybe a bit confused, by a statement that was made about our AutoScan® electronic tuning.

We quote *Audio*: "AutoScan is probably more accurate in tuning to center of desired channel than can be accomplished manually."

At this point in history, when other receivers are offering two and three tuning meters, oscilloscopes, words that light up, and various other devices to help you tune in stations more accurately, we thought you might like to know why we at Fisher are putting simplified push-button tuning into all our best receivers. And how our push-button tuning is more accurate than anybody's manual tuning, including our own.

**For the moment, disregard its convenience.**

**Diode tuning is dead-accurate, instantly.**

AutoScan (as well as our Tune-O-Matic push-button memory tuning) is a purely electronic tuning system. There are no moving parts. Instead, devices called varactor diodes are used to lock in stations at their most powerful, most distortion-free tuning point.

We again quote *Audio*:

"Station lock-in is flawless. That is, when the AutoScan stops on a station it stops on the exact 'center' of that channel.

"The photograph shows the detector 'S' curve obtained using the AutoScan and letting it 'home in' on our signal. Note that it locked in on the precise center of the curve. This test, by the way, is far more severe than would be encountered in normal station selection because of the extremes of modulation we employed."

Now comes the question of how important this degree of tuning accuracy is to you. Can you hear it?

We believe you can. There's a subtle distortion that creeps into complex orchestral material, at every volume level, when an FM station isn't precisely tuned. If you've ever tried to listen to an FM concert, and felt somewhat unsatisfied with the sound as compared to records or tape, it could be a tuning problem. No tuner or receiver can be manually tuned as accurately as the Fisher 500-TX (as well as the Fisher 450-T) with AutoScan. Our engineers estimate that tuning accuracy is at least ten times greater with AutoScan than with manual tuning.

Also, AutoScan accuracy requires no warm-up. Stations can be locked in instantly, as soon as the receiver is switched on. That's important, because even some of the best manual tuning systems can't be tuned with reasonable accuracy until the circuits are stabilized, after the tuner has been on for twenty minutes or so.

**AutoScan is so automatic—does it take the fun out of tuning?**

Everyone who has ever used the AutoScan mechanism has found it to be a more enjoyable way to tune than any other they've tried.

Here's how AutoScan tuning is accomplished: Press one of the AutoScan buttons and you automatically bring in the next station, right or left, on the dial. (Even far-off stations that are marginal or completely impossible to tune in manually on other good receivers, are brought in loud and clear, automatically, by AutoScan.) Keep your finger on the button and the AutoScan will scan the entire FM band, station by station. There's nothing further for you to do but enjoy the parade of perfectly tuned-in stations filing before you. Stop when you hear what you like.

For added convenience, a remote control option is available. You can work the AutoScan from your favorite chair.

Of course, for the psychological benefit of those who still want to tune manually, the Fisher 500-TX also has ultra-smooth flywheel tuning, complete with an accurate tuning meter. And, in addition to AutoScan automatic tuning, and manual tuning, the 500-TX has still another tuning convenience called Tune-O-Matic®.

**A button for each of your favorite FM stations.**

Tune-O-Matic is another form of diode tuning. It has no moving parts, and works completely electronically, just like AutoScan. However, Tune-O-Matic is actually a simple computer with a memory. You program each of the Tune-O-Matic push buttons with the frequency of a favorite FM station. After that, you just push the button that corresponds to the station you want to hear, and that station will be locked in immediately. Perfectly tuned to center-of-channel of course.

Tune-O-Matic push-buttons can be re-programmed (set for a different station) anytime, in a matter of seconds.

Tune-O-Matic is also available in a lower-cost Fisher receiver, the new Fisher 250-TX.

**Fisher receivers pull in more stations than equally sensitive, competitive receivers.**

**Why?**

Open the flap for more information about all the new Fisher receivers.
A lot of people don't know that a cartridge that's great for one high fidelity system could be disastrous for another.

That's why Pickering has done something fantastically simple.

We've developed Dynamic Coupling Factor—henceforth known as DCF.

All it is is a complicated name for an uncomplicated way to select the best cartridge for your system. It is your guide to the selection of that cartridge based on its intended application in playback equipment—just as horsepower is the guide to the proper engine for a vehicle.

It works like this. You own an XYZ model record changer. What cartridge do you pick? Not the $29.95 model because it isn't designed for the capability of your XYZ player. Not the $60.00 cartridge either, for its quality cannot be realized in that unit.

Our chart—available to you free—reveals that you need our model XV-15 with a DCF rating of 400 for optimum performance. This means that you will get 100% of the music from your records. Not 50% or 75% but all of the music capable of being obtained from your particular playback unit.

Technically, what we've done is taken virtually every high fidelity record player and pre-analyzed the vital variables for you; those affecting cartridge design and those related to the engineering features of the various turntables and changers.

So now all you need to be well informed on cartridges is to send for our DCF application guide containing our recommendations for what cartridge you use with which record player.

And next time you walk into a high fidelity salon, tell the man: "I'd like a Pickering XV-15 with a DCF of 400." Or whatever.

Pickering cartridges are priced from $29.95 to $60.00. For your free DCF chart, write DCF, Pickering & Co., 101 Sunnyside Blvd., Plainview, N.Y. 11803.
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TOO HOT TO HANDLE
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recordings
FEATURE REVIEWS
CLASSICAL REVIEWS
IN BRIEF
Peter G. Davis REPEAT PERFORMANCE
R. D. Darrell THE TAPE DECK
POP REVIEWS
JAZZ REVIEWS

etc.
LETTERS TO THE EDITOR
PRODUCT INFORMATION
ADVERTISING INDEX

4 A letter from the Editor
 Bernstein leads video-cassette Verdi Requiem...
 New Yorkers record Scarlatti in Germany
 An experienced hermit's desert-island discs
 How to rate your musical preferences scientifically
 Should we push drugs?
 HF answers your more incisive questions
 New subassemblies for old... New omni speakers
 The latest in audio gear
 Lab tests now can correlate with what you hear
 Do they help or hurt stereo?
 How to install outdoor speakers
 Shostakovich's banned Babi Yar Symphony
 Two sopranos: Victoria de los Angeles and Erzsébet Házy
 Landowska—as harpsichordist and pianist
 All-star Trovatore... Janet Baker as Berlioz' Dido
 Capsule wrap-ups of new releases
 Sutherland's Norma... The Bjoerling Pagliacci
 Open-reel sonic spectaculars
 The prime of Joni Mitchell... Ruth Brown is beautiful
 The Compleat Bud Freeman... Dixieland Rhythm Kings

8 Future of opera... More parodies
19 An "at home" shopping service
108
DEAR READER:

Columbia University’s Major Armstrong Awards “for excellence and originality in FM broadcasting” fall into two categories: commercial and noncommercial stations. This year’s First Prizes for music went to WFMT in Chicago for a program by the Fine Arts String Quartet and to WFCR in Amherst, Massachusetts for an interview-with-recordings of guitarist Carlos Montoya; runners-up were WEFT in Chicago for an interview-with-recordings of avant-garde composer/conductor Pierre Boulez and KXLU in Los Angeles for “Broadway Songbook.” Now get this: the string quartet and Boulez shows were the commercial programs. The noncommercial stations’ best were a flamenco show and a show show.

You will also note that the classical winners are both in Chicago.

Our mail service in New York was never better than during the recent Post Office strike. Not only were we spared our daily deluge of “junk” mail, but reviewers’ copy from as far away as California and England took less than a day to reach us. Morgan Ames sent her pop reviews via composer Quincy Jones, who was flying in from Hollywood; George Movshon sent his Fedora review and Edward Greenfield his “Behind the Scenes” report via commentator Alistair Cooke, who was flying in from London. Fifty years ago, local mail in New York took less than a day for delivery. After half a century, for at least a few days, we could finally sense some progress.

Speaking of progress, about two years ago our circulation department became the proud possessor of a bank of the latest computers. The first result was that the Boston Symphony Orchestra stopped receiving its copies of HIGH FIDELITY/MUSICAL AMERICA and instead was threatened with dire legal consequences if it didn’t immediately forward us a check which we had already cashed. As I tried to straighten out this mess, word came that our obviously coup-minded computerized colonels had begun to mount an attack on the New York Public Library. During the next eighteen months, a subscriber in Ohio would find an unexpected MA section in his copy; a subscriber to the combined HF/MA in Germany would stop receiving anything; a newsstand browser in Pennsylvania would buy what the cover proclaimed was HF/MA only to find no MA inside.

Last September, at a very swank affair in Switzerland, I was introduced to conductor Nikolaus Harnoncourt, who was just about to receive a coveted record award. “Leonard Marcus?” he exclaimed. “Of HIGH FIDELITY? I’ve been looking forward to meeting you.”

“Oh?” I replied, trying to blush modestly.

“Yes,” the maestro continued. “Your subscription department . . .”

He later offered a poignant suggestion: “Why don’t you throw your computers into the lake and instead hire a nice old lady with a typewriter?” Well, we didn’t dump the computers, but we did hire some real human beings to undo the automated autocrats’ more mischievous shenanigans. Result? We are finally on the way back to normal. Progress!

A final bit of progress: Next month we will tell you about NEW GADGETS TO CHANGE THE ACOUSTICAL SHAPE OF YOUR ROOM. Our critical discography will be on BEETHOVEN’S ORCHESTRAL MUSIC, excluding the symphonies, which will be handled in a later issue. There will also be an article on FLAGSTAD AND MELCHIOR—THE Duet of the Century, and for those of you who like to fool around with your tape recorders, the July issue will let you know HOW THE WINNERS WON HIGH FIDELITY’S ELECTRONIC MUSIC CONTEST.

Leonard Marcus

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Have you really read what the critics are saying about the BOSE 901?

Norman Eisenberg — High Fidelity

"... Add to these virtues the utterly clean wide-range response of a 901, its neutral, well-balanced, transparent quality on all program material, and you feel you've made some sort of stereo discovery."

Julian Hirsch — Stereo Review

"... I have never heard a speaker system in my own home which could surpass or even equal, the BOSE 901 for overall 'realism' of sound."

Bert Whyte — Audio

"the illusion of an orchestra spread across the wall is uncanny ... There is no doubt that the much-abused term, 'breakthrough,' applies to the BOSE 901 and its bold new concepts."

Stereo & Hi-Fi Times

"... What a lovely sound these speakers produce! ... Listen to Columbia's Carmina Burana on this speaker and hear what a chorus should sound like! ... these speakers provide a quality that is not to be matched."

Hi-Fi Buyers Guide

"... its over-all sound quality so clean that the listener is almost unaware of the electronics between him and the instruments ... The sound? The 901 is very possibly the only speaker to date to pour forth in true concert hall fashion."

Elementary Electronics

"Conclusion ... creating the illusion of being in a concert hall, with a uniformity of frequency response and freedom from distortion that is unbelievable ... It is our opinion that this is the speaker system to own, regardless of price, if one wants the ultimate in listening pleasure."

Larry Zide — American Record Guide

"... I urge that you listen for yourself. I think you will have to agree that Bose has, in a single giant step, produced one of the finest speaker systems ever made."

Your inquiry will bring you complete reprints of these unprecedented reviews and a list of franchised BOSE dealers in your area. Ask your dealer for an A-B comparison of the BOSE 901 with the best conventional speakers, regardless of their size or price. Then, go back to your present speakers — if you can. BOSE 901 DIRECT/REFLECTING™ Speaker System. Stereo Pair, including Active Equalizer, $476.

Pedestal base extra.
Slightly higher south and west.

You can hear the difference now.

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CIRCLE 8 ON READER-SERVICE CARD
Acoustic Research has measured the response of more than a million high-fidelity speakers.

Here are some things we have learned about testing.

Fidelity Means Accuracy

Accuracy distinguishes high-fidelity speaker systems from the speakers in simple radios and phonographs. It is therefore reasonable that evidence of accuracy should take precedence over descriptions of a speaker system's size, shape or theory of design. Acoustic Research offers exact measurement data for all AR speaker systems to all who ask for it: music listeners, audio enthusiasts, science teachers, even competitors.

The accuracy of a speaker system can be evaluated by listening tests or by measurement. Both methods give the same information in different ways.

Testing for Accuracy

To perform a listening test, an extremely accurate recording must be made and played back alongside the original source of sound. Amplifier and speaker system controls are adjusted to obtain as close a match as possible, and the speaker system judged by the degree of similarity. Acoustic Research has presented public concerts at which the Fine Arts Quartet and other musicians could be compared to recordings played back through AR speaker systems; even seasoned critics were deceived. Obviously, listening tests cannot be made with commercial recordings of music since the listener has no way of knowing which adjustment is most accurately reproducing the recording.

Objective Measurements

While it is not always convenient to carry out scientifically controlled listening tests, properly conducted measurements can give the same information in permanent, quantitative form. AR knows something about this, having already tested the response of well over a million speakers — every one that we have ever made, and many made by competitors. Our findings are that the most important measurements required to assess the accuracy of a speaker system are (1) frequency response on-axis, (2) frequency response off-axis, (3) integrated power output.

Graph (1) is the frequency response of a midrange driver unit of an AR-3a, on axis. This corresponds to what one would hear outdoors, listening directly in front of the speaker. (2) shows what happens when a listener moves over to one side of the speaker in 15° increments. (3) is the integrated power output of the AR-3a above 1000 Hz, measured in a special reverberant chamber. Reflection from the walls of the chamber mixes together all of the sound emitted by the speaker system in all directions, an effect much more like that of a listening room than the anechoic chamber used for (1) and (2). A speaker system which measured well in both types of chamber would be accurate under almost all listening conditions.

The graphs are made by connecting the speaker system to an oscillator which slowly changes frequency. In the chamber is a microphone connected to a motor-driven pen writing on a moving strip of paper. If the speaker gets louder or softer, the pen moves to one side or another on the paper. Since the oscillator connected to the speaker does not change level as it changes frequency, movements of the pen indicate errors in the accuracy of the speaker system, an ideal speaker, that is, one with no errors, would produce a straight horizontal line.

CIRCLE 2 ON READER-SERVICE CARD
Integrated power output curves.

Integrated power output of the AR-3a and AR-5 above 1,000 Hz. The source used in this case was a test oscillator. This curve corresponds to performance of a complete system, with AR-3a or AR-5 speaker systems, when the program source is a properly operating F-M tuner or receiver.

AR-3a and AR-5 with high-priced magnetic cartridge. It is interesting to see that the cartridge introduces somewhat more degradation of the signal than the speaker system, at least in the frequency range observed. Nevertheless, a small adjustment of the amplifier treble control could restore uniformity of response.

AR-2a' with moderately-priced magnetic cartridge. Although not as accurate as the AR-5 or AR-3a, the AR-2a' displays the same kind of performance, that is, its integrated power output curve is relatively level. Because its dispersion, especially in the lower midrange, is less uniform, the AR-2a' is more dependent on optimum placement than the others.

A very expensive speaker system and $75 cartridge. Even if an equalizer were used to remove the 4,000 Hz "valley" in this system, its roughness would exceed that of the AR-2a'. The uneven response is caused by mechanical resonances in the loudspeakers used in this system. They are severe enough to be heard from any listening position in a typical room.

A "multi-directional" system and $75 cartridge. Such systems are designed to take advantage of room reflections to smooth response and create spatial effects.

Acoustic Research Inc.
24 Thorndike Street, Cambridge, Mass. 02141

June 1970
letters

The Future of Opera

Is Conrad L. Osborne's article "Does Opera Have a Future?" [March 1970] to be taken at its face value, or is it a modern-day example of Swiftian redutio ad absurdum?

What is this traditional commodity—opera—that he speaks of, this thing that is not basically a musical form? Moreover, what is this new do-it-yourself product that must be packaged quickly enough to save humanity from itself and God? Well, whatever it is, bring it forth and make it another community project, and make it Relevant, and make sure that it can be Respected, and be certain that it Communicates to the Now generation and washes its hands of anything that reeks of history and past centuries. And by all means make it strong enough to impress upon the obsolete subscribers and standees the degree of mortal sin they've been living in these many years. And, to be sure, divest it of melody! Yes, bring it forth and let it Save the World—only don't rename it opera. Too many people loved opera as it was before it died.

John Brown
Chicago, Ill.

Conrad L. Osborne makes clear the need for opera of the future, but I disagree with his definition of art—i.e., "a means of symbolization for the purpose of understanding." Art, rather, has to do with beauty—not with usefulness. Many useful techniques and systems have passed away, but beauty endures, and so will opera.

Many of Mr. Osborne's proposals would help to develop opera, but their greatest usefulness would be to prepare a fertile field for the flowering of new Verdi.

John F. Austin-Brown
Quebec, Canada

Conrad L. Osborne is correct in pointing to the use of voice as the essential feature in opera. But there is more to it than that: the voice must be used to express emotion. This is why contemporary music is not adding much to the operatic tradition. With few exceptions, the mainstream of modern music has abandoned specific emotion as a subject, and hence has no contribution to make to operatic literature.

The lyric theater, Mr. Osborne suggests, could be used as a vehicle not only for traditional opera, but also for works from different traditions. My own candidates would include Leonard Bernstein's Candide and such Kurt Weill works as Die Dreigroschenoper, Mahagonny, and Lost in the Stars. Further, while one doesn't yet exist, I think that very adequate operas could be created from the rock idiom. It is inherently earthy and dramatic and shares a distinction with opera in that both are highly mixed or "impure" art forms. Opera could make use of rock's technical innovations, not so much in microphony, but in use of lights rather than expensive sets, and the use of paint for costumes and makeup.

George Gregory
Palo Alto, Calif.

The first rock opera, Tommy, is performed by a group called The Who on Decca DXSW 7205 (reviewed in September 1969).

More Parodies

I am delighted with the article on musical parody by William Zakariasen ["The Siegfried Waltz?" March 1970]. It is always a thrill to discover a kindred soul.

Several years ago I ran a series on the local Pacifica station devoted to musical humor and called Eine grosse Nachtmusik. Mr. Zakariasen's article mentions some of the things I played, but it is amazing what is lying around waiting to be dredged up. Examples: the Sextet from Lucia sung variously by Shirley Temple, Jack Oakie, Clara Chuk (the buxom henh Disney created to kid Alma Gluck), or performed by Paul Specht and the Hotel Astor Orchestra with yokapuk banjo; the first movement of Villa Lobos' Bachianas Brasileiras No. 5 crooned by Johnny Mathis (which Mercury unaccountably split into three separate bands on the disc); La ci darem la mano sung by Kathryr Grayson and Frank Sinatra; and one of my all-time favorites—Over There sung in English and French by Caruso. As for the orchestral repertoire, there are always masterpieces such as the 1812 Overture performed by Lawrence Welk: Liberase playing the Grieg Concerto in six minutes; and Fred Waring's travesty on the Nutcracker Suite. Et cetera ad nauseam.

Garry Margolis
Los Angeles, Calif.

There are some significant omissions from Mr. Zakariasen's enjoyable survey of musical parodies and humor, notably the fox trot in Ravel's L'Enfant et les sortilèges; Milhaud's spicy Le Bœuf sur le toit; Nielsen's embittered caricature of modish modernism in his Sinfonia semplice (paralleling Bartók's derisive laughter at Shostakovich's Seventh Symphony in the Concerto for Orchestra); and, wittiest of all, Walton's Fugue, parodying everything in sight. Erik Satie is strangely absent, as is the "English Satie," Lord Berners, whose Triumph of Neptune is both satirical and musically enchanting.

I disagree over Spike Jones. He was mildly funny, but also crude and obvious in the cornball idiom still espoused by

Continued on page 12

HIGH FIDELITY MAGAZINE CIRCLE 101 ON READER-SERVICE CARD

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a most significant breakthrough
in home stereo reproduction . . .

The WHARFEDALE Model W80
VARIFLEX Speaker System

This new concept completely eliminates the usual limitations involving speaker placement!

- The VARIFLEX requires no special spacing apart, or from a wall or above a floor.
- It can be used in pairs, anywhere in the room.
- Or, two W80 speakers can be used to form a single 56" console.
- VARIFLEX brings balanced stereo sound to the listener.
- Stereo perception is preserved, rather than splattered promiscuously by uncontrolled room acoustics or speaker elements.
- No need to disturb existing high fidelity systems. Does not require electronic equalizer.
- Exclusive sand-filled construction, to eliminate undesirable enclosure resonances and coloration.
- Modest in size (only 17" x 17 1/4" x 29"), the W80 is truly fine furniture, attractively styled to enhance rooms of virtually any decor.

Wharfedale . . . a pioneer in reflected and indirect sound techniques, as evidenced by a number of such speaker designs introduced over the years. Unstained from introducing the W80 until the VARIFLEX technique could be refined in a carefully executed, easily utilized speaker system that not only would satisfy the acoustic objectives, but would retain the uncompromised quality of the reproduced sound. The W80 achieves both objectives successfully.

What is VARIFLEX?

Ordinary reflective and “omni” speaker systems have one thing in common: Sound dispersal is promiscuous and therefore subject to acoustical phase distortions caused by the shape and furnishings of the room. Splattered sound, whether solely against a wall or through a conical reflector in the speaker enclosure, is uncontrolled sound. Hence, in the case of some types of systems, “optimum” spacing is recommended from a wall or above the floor. In other instances, sound is projected over a wide area, equally, from both speakers of a stereo pair. But, in this case it should be obvious that the levels at which sounds of different frequencies arrive from both channels to a given point in the room are unequal and therefore unbalanced. In both instances, room conditions play further havoc because the distribution pattern of sound is fixed and therefore unable to accommodate the multitude of differences which exist between rooms and the general listening areas.

The Wharfedale VARIFLEX employs a variable device which bends sound waves in a definite and controllable manner so as to form the particular sound distribution pattern required by room conditions and for the listening and decor needs of the user. It is capable of directing sound waves both in the vertical or horizontal planes, or any combination of these angles.

VARIFLEX | The Need for Controlled Sound

There are differing schools of thought among acoustics engineers on how live sound reaches the listener in a concert hall. The loudspeaker engineer must also keep in mind the differences in operating conditions of a room in the typical home, as compared with the environment of the concert hall. There are, nonetheless, several significant considerations which must be taken into account, if any design of loudspeaker system may be said to have reproduced the original sound with reasonable fidelity.

Briefly, it must be recognized that the acoustics of a large concert hall, with its great expanses, high ceilings and generally hard surfaces are in sharp contrast to the shape, dimensions and furnishings of a typical room in a home. To emulate in the home the sound propagation characteristics of the concert hall too closely can, in fact, compound those characteristics into a distortion of the original sound. The program source, be it a disc, tape or broadcast, has already interpreted the conglomeration of actual sounds and reflections, as seen by the microphones which are the originating pick-up device. Similarly, even in studio recordings, the careful separation and balancing of sounds achieved by the recording director and engineers must remain unviolated by the playback reproducing system.

Consider, too, that the propaedeutic qualities of different musical instruments are quite dissimilar, so that where an entire orchestra is concerned, the direct vs. indirect distribution of sound is not only a function of the concert hall’s acoustics but also, and very prominently, a function of the individual instruments and their respective positions on stage. In studio recording, where close pick-up techniques and soundproofed rooms are frequently employed, the distribution pattern of the various musical instruments again takes on a tonal quality that can be quite different from that of an open concert hall.

Clearly then, whether the source of the live program is the concert hall stage or the recording studio, the sole purpose of the loudspeaker system is to bring to the listener the sound as originally experienced.

Therefore, a speaker system which uses a predetermined ratio of direct to indirect sound distribution, and applies reflected sound that cannot be adjusted, is obviously adding an aural effect that is not in the original program . . . and that effect will vary uncontrollably with room acoustics and furnishings. Similarly, a speaker system which attempts to simulate the effect of wide-angle propagation of sound (usually through use of an inverted reflecting cone or by an array of speakers in a circle or several quadrants of a cabinet) merely creates a splashing or scattering effect that is also fixed, and equally affected by room acoustics. The basic thought that needs to be borne in mind is that the listener to any live performance is almost never surrounded by the program source, unless perhaps he is one of the musicians! The totality of the sound comes from a particular direction, and depending upon the nature of the sound (voice vs. small combo vs. full symphony orchestra, etc.) it is either a confined point in space or over a broad dimension. True "stereo" then, is the listener’s ability to distinguish the direction of the total sound and the individual components of the sound. If this requirement of "stereo" is compromised, then all that really results is a room full of sounds unbalanced and unrelated to the acoustical and musical composition of the original. If one wishes merely for that, it can easily be accomplished using mono programs on speaker systems of the fixed reflector and "omni" Inverted cone types. This is, in fact, exactly what was often done in the earlier days before stereo, to enhance the spatial effect of mono programs.
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LETTERS

Continued from page 8

the tedious Homer and Jethro. The true "Furtwängler of musical humor" is Stan Freberg, sadly overlooked in the article. Of Freberg's many musical barbs, the sharpest is surely Banana Boat, with its heavily aspirated "Highly deadly black tarantula" ranking among the consume malt strokes in the history of parody.

David Wilton
Carmel, Calif.

More on Mahler

Robert C. Marsh misrepresents me by a wide margin in your April "Letters" column. Mr. Marsh notwithstanding, a pre-elimination to apply to Mahler's scores the naively conviction of "a fundamentalist minister" that "first thoughts are always good and revisions are always bad" is not "an unfortunate aspect of the alliance between Mahler's admirers and the Bruckner Society of America."

None of that is so, because I never said such a thing, and neither did the Bruckner Society. On the contrary: in the Society's Chord and Discord journal for 1958 (page 91), I lamented the fact that many of "the absolutely authentic Mahler revisions" had not yet been printed. And in the admittedly quite different case of Bruckner's symphonies, I still said that there is frequently room for doubt as to "which of several possible versions represents his truest wishes."

Where's the "simple rule of thumb?"

I'm afraid Mr. Marsh's predilection is still for seeing extremes lurking wherever there are simple disagreements with him—even disagreements of emphasis. In the context of the letter he was supposed to be answering, it is clear I was not advocating Urtext as a Way of Life. Rather, I commended Bernard Jacobson's remark about being able to look to Mahler's First "in the form in which the composer originally conceived it" on a purely utilitarian basis.

My point was that, with a five-movement recording of this work at hand, you can hear it either that way to the other way, as fancy dictates, simply by including or omitting the extra movement.

I applaud Mr. Marsh's expression of interest in "attempting to secure clear ideas of Mahler's performance practices" by asking those who can still remember them. Unfortunately, another unhelpful predilection he projects is to mistake assumptions for facts. Speaking of the Symphony's first-movement repeat, for instance, he writes that "after the 1896 Berlin performance, Mahler had second thoughts about the necessity of this repeat," as if this were something he positively knew. The fact is that the first published edition of 1899 has a repeat (as does the second of 1908), while the unpublished 1933 version, whether Mr. Marsh is aware of it or not, has no repeat. What evidence is there, then, that Mahler used a repeat in Berlin or earlier, or that the idea of a repeat had so much

Continued on page 14
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LETTERS

Continued from page 12

as occurred to him before he prepared the orchestrally expanded 1899 version? I know of none. The documentary evidence suggests that the composer did have a second thought after Berlin all right, but that it was to put in a repeat, not take one out—in which case the Urtext man on this point (horror!).

Mr. Marsh.

Jack Diederich

New York, N.Y.

Three-Speaker Systems

Mr. Movshon’s circuitry (“How I Hooked Up My Center-Channel Speaker,” March 1970) is beyond criticism. But a major purpose of the “bridged center speaker” (to use terminology of J. C. Steinberg and W. B. Snow) is to bring central stage events into focus, to render a soloist, for example, in proper geometry and tonality. If Mr. Movshon would try a full-range speaker in the center instead of a woofer, I think he would be pleasantly surprised. This applies to all three-speaker systems, and constitutes an adverse criticism of center-bass with treble flanks.

O. G. Hartz

New York, N.Y.

Mr. Movshon’s hookup, and explanation of same, was not intended as a prescription for every (or even necessarily for the best possible) center-speaker system. Rather it was designed only to beef up the bass in an otherwise excellent, normal stereo-spread-with-no-hole-in-the-middle system.

Historic Material

If the Furtwängler Society circulating any of those recordings from the Furtwängler “underground” mentioned in David Hamilton’s review (March 1970), we’ll of course be grateful. In the meantime, though, there’s a very considerable Furtwängler “aboveground” that ought to be restored to the U.S. market—I mean recordings formerly available in American catalogues, but now unobtainable except in a few cases, rechanneled imports.

Some of these vanished discs are more urgently needed than either of the Society’s first two releases. The Brahms Second Concerto is welcome of course, but what about the First and Second Symphonies and the Violin Concerto? The Berlin Eroica, good as it may be, seems unnecessary: after all, we do have the Vienna performance, but we don’t have the Fourth, and Sixth, or the Emperor Concerto with Fischer. We’re also lacking the Mendelssohn and Bartók violin concertos, the Bruckner Seventh and Eighth Symphonies, the Franck D minor, the Haydn Surprise, the Mozart G minor, both performances of the Unfinished, and the Tchaikovsky Fourth and Sixth. (Nobody thinks twice about reprinting, say, a Toscanini performance even if it’s only lightweight pop-concert material.) These are

Continued on page 18

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Beethoven in Perspective

Jan Meyerowitz "Do We Overestimate Beethoven?" [January 1970] contained much incisive and thought-provoking criticism. However, I must take Mr. Meyerowitz to task for the way in which he answered the question. Bach, Mozart, and Beethoven are all deserving of praise, but to single out one and deny him is unjust, even to Beethoven. Furthermore, Mr. Meyerowitz must be teasing us if he labels his assessment as "objective."

The chief failure of his criticism is that it lacks specific historical references. Beethoven's musical language differs because he responded to a different historical situation. Bach had his religious tradition and his music cannot be evaluated without mentioning that religious center Mozart portrayed the ebullient Viennese society. Beethoven's dramatic painting of the inner soul cannot be understood except by referring to the history of the early nineteenth century. Depending on our highly subjective sense of values, we will honor one of the three more than the others.

In a word, Mr. Meyerowitz has succumbed to vague Spenglerian melodrama. It would be refreshing if he were to combine his keen powers of generalization with reverence for facts.

Hector Mendez
New York, N.Y.

Stand Up for Scherchen and Kraus

In his analysis of Beethoven's choral music [February 1970], H. C. Robbins Landon makes the following astonishing statement: "Scherchen was a very erratic conductor and seldom achieved performances of comparable quality on recordings." While Mr. Robbins Landon is entitled to his opinion, this statement is clearly not opinion but rather a prejudiced generalization.

As one who owns well over 250 Scherchen-led performances on discs, I would like to know what handful of these Mr. Robbins Landon accepts as worthy, since he does use the qualifier "seldom." I would have thought that such items as Handel's Messiah (both versions); the symphonies of Beethoven, Brahms, and Haydn, the Bach choral works; the Requiems of Berlioz and Mozart; Beethoven's overtures, Egmont music, and Grosse Fuge; the various potboilers of Liszt; contemporary masterworks by Orff, Berg, and Schoenberg; all the Beethoven orchestral overtures, tone poems, etc.; and the concertos grosso of Gemini and Handel would represent a portion of the Scherchen performances that are thought to be first-rate. It would be most interesting to see which of these Mr. Robbins Landon would deem to accept.

Mark Koldys
Dearborn, Mich.

How in the name of musical justice can H. C. Robbins Landon recommend Thomas Schippers' recording of the Beethoven Joseph Cantata, sung in a Latin translation, over the admittedly dated Kraus version in the original German? There seems to be no logic in Schippers' choice of language for his recording. Certainly the scholarly Robbins Landon has a clearer concept of musical correctness than exhibited here. He implies that he has studied the score to this work, but even then elects not to mention the language difference in his evaluation. In a case such as this, textual correctness should take precedence over sonic considerations. And, judging from the scope of his article, I do not feel that Mr. Robbins Landon was so pressed for space that mention of this factor could not have been made.

Theodore Albrecht
Denton, Texas

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So they specified a 10-inch woofer, a 3-inch tweeter, a choke, a capacitor and a volume control. They put these into a 23" by 12" by 101/2" cabinet and fussed and fussed. Without any preconceived notions as to how good or bad such an austere design should sound. They stopped only when they could no longer improve the performance.

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Rectilinear XI

CIRCLE 46 ON READER-SERVICE CARD

June 1970
LONDON

First Video-Cassette Recording: Bernstein Leads Verdi's Requiem

Leonard Bernstein ascended an improvised podium in the great circular arena of the Royal Albert Hall. With the seriousness of an evangelical preacher, he faced the London Symphony and quietly began his address: "We are gathered together... hopefully to make the 'In gentissimo..." Bernstein's doubtfulness was wholly understandable, for CBS/Verdi Requiem project struck serious tenor troubles when Franco Corelli bowed out at the last minute. For the live performance, which Bernstein gave in this same hall, Robert Tear was brought in, but for all his artistry he is not the right man for a big Italian role. In the nick of time CBS came to an arrangement with RCA to borrow their prize recording property, Placido Domingo. After the tenor was located, he was flown rapidly to London and on to the Albert Hall for an intensive four days of sessions plus a television taping of the same work in St. Paul's Cathedral, the most holy site available.

Domingo, looking a little worried, sipped coffee from a plastic cup. He stepped forward for his solo and startled everyone with the superb projection of his voice. Bernstein's tempo was achingly slow, making one feel breathless in sympathy with the tenor. After many finely modulated phrases (and not a single intrusive 'h' in "Quis Mariam"), Domingo's breath finally let him down in the most taxing phrase of all. He shook his head and rubbed his cheeks. Bernstein was understanding, yet during the following forty-five minutes it took to complete the solo, he refused to be indulgent. Except for conceding a slight stringendo to help lighten the burden of one phrase, he refused to compromise on his chosen, measured tempo, and instead of making sympathetic noises to the tenor, he deliberately challenged him. When Domingo accidentally sang "Tamquam" instead of "Tamquam," Bernstein was at him like a shot. "Quam!" he snapped, and though the manner was sharp one could see an avuncular hand at work.

Domingo is almost too good to be true—the possessor not only of a superlative voice, but of a kindly, modest temperament that stands correction without fuss. One can just imagine how some tenors might have reacted to Bernstein's demands, which included top B flats one after another during the retakes ("I could do this all day," said Bernstein, laughing). "Try it with a feeling of hesitancy," suggested Bernstein as he helped to mold Domingo's interpretation, and another suggestion resulted in an ecstatic half-tone on "perce Deus."

Then with the "Ingenioso" completed, they progressed to a number equally full of pitfalls: the trio for mezzo, tenor, and bass, "Lux aeterna." Balancing the three voices was the first problem, and during the course of this rehearsal Domingo made a remark which must be unique from the mouth of an Italian-style tenor: "Wasn't I soft enough?" Bless you, Mr. Domingo! Even after Bernstein paid several visits to the control room to check the balance ("The microphone loves your voice," he commented to Domingo), the results were not quite right. On a suggestion from Tom Sheppard, the CBS recording manager in charge, the microphones were moved. But when it was found that someone had bungled the job, Bernstein, like George C. Scott as General Patton directing traffic, climbed down and did it himself. As a result the balance was at last perfect. "The greatest microphone fixer in the business," commented the engineer. Bob Auger, back in the control room.

Technically, as well as musically, this was an interesting session, for it was the first large-scale recording project to be undertaken in the Albert Hall for many years. A month earlier there was the Philips recording of Gerhard's Fourth Symphony, but the Verdi Requiem, as well as covering much larger forces, involves eight-channel "surround" stereo, to be distilled into two or four channels. The hall itself proved far more helpful than anyone had expected. The great plastic saucers that had been hung in the dome effectively eliminate the notorious echo, both in live concert performances and for recording. Tom Sheppard confessed that he was more than satisfied with the results—he was thrilled. And he noted how readily the acoustic could be adjusted between chorus and orchestra, with one given more reverberation than the other.

Certainly the project excited the widest interest among CBS' competitors. When I arrived at the beginning of the session, I found to my astonishment that there, peering through the glass doors into the great circular auditorium, were two of the best-known engineers in London, each from a different company, and neither need I say it—from CBS. They seemed startled to see me, but who can blame them for wanting to know where Bob Auger had been placing his microphones on this occasion? No question here of industrial espionage: the CBS people were only too delighted that competitors were so keenly interested. After all, the recording world in London is friendly rather than cut-throat.

The LSO Chorus appears in the Verdi with the London Symphony and the quartet of soloists—besides Domingo—includes Martina Arroyo, Josephine Veasey, and Ruggero Raimondi (who coincidently recorded the bass part in EMI's Verdi Requiem with Barbieri only last autumn).

The following day, at St. Paul's, Bernstein made audio-video history with his three-hour TV production: it was the first session, to my knowledge, held ex-

Continued on page 25

CIRCLE 27 ON READER-SERVICE CARD
For years, audio experts have been most generous in their praise of the "Citation Sound". But interestingly enough, Citation has virtually no sound. When you listen to our new Citation Twelve Power Amplifier, all you are ever aware of is the music. In between each note, there is nothing but absolute quiet. It's as if you were listening through the electronics clear back to the original performance. The sound is spacious, transparent and lifelike. The finer nuances of tonal shading stand out clearly. You can almost feel the concert hall and the depth and breadth of the orchestra. The instruments have the same balance and perspective as at a live performance.

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CIRCLE 23 ON READER-SERVICE CARD
reminded me of a session of Haussmusik—casual clothes, a relaxed, serious, but not deadly serious atmosphere, with everybody assembled primarily for the pleasure of the music and not for any kind of external show.

Until DGG's poop-sheet reminded me of it. I had forgotten—in all honesty, had I ever known?—that Alessandro Scarlatti composed more than a hundred operas, not to mention numerous oratorios, Masses, other church works, and pieces for various instruments. Corelli, Vivaldi, and of course his own son. Donemico, have gradually overshadowed Alessandro Scarlatti, but Archive has already set about redressing this unmerited neglect; you can already get his six concertos grosso for strings and another serenata Il Giardino di amore, on the Archive label, and the twelve sinfonie di concerto grosso will appear soon.

Alessandro wrote Endimione e Cintia in Rome in 1705 to one of those incredibly dimwitted texts of that era. Cintia, feeling forsaken by Endimione, comes upon her lover asleep and petulantly regards his slumber as indifference. In fact—silly goose!—faithful Endimione has gone to sleep purely and simply in order to dream about his Cintia. A duet between these two near-imbecilic lovers does nothing but compound the misunderstanding until finally—believe it or not—they clear things up and propel the work to a happy ending.

These two scenes really do force you to suspend all logic. In this one Miss Grist, a coloratura, sings the man and Miss Troyanos, a mezzo, sings the girl. Don't ask me why, ask Alessandro Scarlatti—or his posthumous psychoanalyst, if he ever had one. Well, anyway, I find the music very pretty.

This Hamburg session also afforded me my first experience with a studio trick which theoretically would seem to let a singer perform something like The Flight of the Bumblebee without breathing from beginning to end. In the aria Miss Grist recorded during my visit, there occurred long passages of fioritura with an occasional long note sustained in between. The engineers recorded these passages in several short takes, one such long note marking the end of one brief take and the beginning of the next one, with plenty of time, of course, for Miss Grist to refill her lungs in between. A singer of Miss Grist's extraordinary accomplishments needs no such coddling in concert, or even in recording, but a surplus supply of breath does, of course, make any vocal performance easier and more secure.

Tatiana Troyanos, the half-German, half-Greek New Yorker who is one of the Hamburg Opera's leading singers, joined us for a glass of champagne after the session. I just had time to congratulate her on her superb performance in the leading role of Penderecki's opera The Devils of Loudun at its world premiere before Miss Grist snaffled her off into a corner to get advice about a fur coat she wanted to buy in Hamburg.

Paul Moor

HAMBURG

Alessandro Scarlatti's Pretty Pastoral

Deutsche Grammophon's present and past press chiefs encountered each other at a recent recording session for the company's Archive label in Hamburg. Hans Rutz, who dealt with the press for a number of years, has now advanced to the handsome position of director of the Archive series (the late Professor Hans Hickmann had guided the destinies of that unique project almost from its inception and had built up its universally admired catalogue of authentic performances of early music recorded to absolute perfection). Shepherdng the invited press people this time was Dorothea Koehler, a charming, imaginative, polyglot young lady who had taken over Hans Rutz's former position.

Alessandro Scarlatti's little serenata entitled Endimione e Cintia provided the occasion. We were regaled at DG's offices on the Alter, that improbable lake which lies spang in the middle of Hamburg, and then boated a chartered bus journeying across the River Elbe to Friedrich Fertl Hall in Hamburg. There we found New Yorkers Reri Gris and Tatiana Troyanos, the two singers involved, plus Parisian trumpet virtuoso Pierre Thibaud, Viennese lutenist Karl Scheit, Hamburg harpsichordist Mathias Sedel, and a chamber group from the Hamburg Philharmonic under the Berlin conductor Mathieu Lange, who led the German premiere in 1958. Dr. Manfred Richter sat in the control room directing the recording.

We had just come in a found Miss Grist rehearsing one of her arias, "Fui ch'huoi vita." In a green sweater, black slacks, an Afro coiffure and long earrings, she seemed relaxed and completely at ease in German, which she spoke not only with the musicians and technicians but also with her husband, who at one point reminded her to keep her voice down when not actually recording. The atmosphere

continued from page 22

BEHIND THE SCENES

with the medium of video cassette! Herbert von Karajan, of course, has taught the visual aspects of many of his recordings with his own production company, but these have been on film, not tape, and designed with large theaters rather than television in mind. Bernstein too has formed his own company, Amberson Productions, for this purpose. (Bernstein is the German for "amber," and the conductor, in his youth, sometimes used the name "Lenny Amber" as an arranger.) The other principal of Amberson is former Columbia Masterworks director Schuyler Chapin, who served as co-producer with Oliver Smith. Humphrey Burton directed, and the production was in association with Dowlings-Stevens-Whitehead. Edward Greenfield.
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His Country's "Most Experienced Hermit" Chooses a Desert-Island Discography

by Glenn Gould

In Canada, a nation where government radio is still alive, well, and subject to parliamentary questions, one venerable institution of the air waves was recently disbanded. The program, Hermit's Choice, afforded an opportunity for the selection of four books and an equal number of records which weekly guest/exiles pledged to take with them to some hypothetical desert isle: like many productions in the colonies, Hermit's Choice was a straight steal from the British Broadcasting Corporation, where an identical format had been exploited with great success for many years. In the Canadian version, would-be castaways frequently settled for some remarkably revealing inclusions— I remember with particular delight one edition which featured the selections of a psychoanalyst of Austrian extraction, who spoke incessantly not of his own favorite discs, but of his mother's! Through some dreadful oversight of casting, and despite a peerless reputation as the country's most experienced hermit, I was never invited to contribute to the series. A year or so ago, on a program of my own, I took time out to remedy this oversight.

The inclusions I proposed on that occasion still seem valid enough, though I suppose one should draw some sort of fine line between discs which would fill the bill as companions-in-exile and those which, at any given time, one might count as favorites per se. Quite apart from the fact that the desert-island format can encourage unlikely choices—there's always the chap who, under cross-examination, will confess undying affection for the Art of Fugue or the Elliott Carter string quartets, but when left to his own devices and with microphone removed, would in fact select The Pines of Rome and "Starlight Favorites from the Hollywood Bowl"—there are records that simply would not minister to one's island needs and would thus have to be rejected on therapeutic grounds alone. Karajan's Walküre, for instance, is perhaps my favorite album of the last few years; but I suspect that any work dependent upon the mechanics of a plot, no matter how metaphorically interpreted, would more closely approximate an absolute of human interaction than one could comfortably afford to contemplate if desert-island peace of mind is the goal.

In any case, my first three choices were all, in their way, therapeutic: the hymns and anthems of Orlando Gibbons as recorded for Archive by the Deller Consort (ARC 3053, deleted), Schoenberg's Serenade, Op. 24, in the luminous realization by Bruno Maderna on Oiseau-Lyre (SOL 250), and Karajan's Berlin Philharmonic version of Sibelius' Fifth Symphony (Deutsche Grammophon 138973). The Karajan is a must because, even though some Sibelius discographers quibble about the quasi-impressionist textural refinements favored by that maestro, it strikes me as the ideal realization of Sibelius as a passionate but antisensual composer—precisely the dichotomy that endears the great Finn to me and that makes his scores, with their unique ability to rid out the more mundane ramifications of their material without embarrassment, the ideal backdrop for the transcendent regularity of isolation. (Besides, as an Arctic buff, my own notion of isolation involves, at the very least, a Helsinki-like latitude; the Aleutians, for example, would be quite acceptable, but if consigned to Devil's Island, I'd be the first prisoner to try an escape, swimming north.)

The Schoenberg, on the other hand, would be a bit of a risk since the obvious advantage of life in exile would be the opportunity to re-create in one's own image whichever corner of the world caught one's attention and since, consequently, any conflicting, contemporary evidence should undoubtedly be screened with care. The Serenade, however, is one of my all-time favorites for reasons other than its germinal influence on the twelve-tone movement; it's surely one of the few works of its period which offsets the idiomatic rigors of its discipline with a genuine out-of-doors delight in the act of making music.

The Gibbons, however, would be number one choice on any list of mine, not only because, as a hermit, one would probably be grateful for a reminder of those antecedents of the modern world which one could endeavor to extenuate in quite a different fashion than post-Renaissance traditions decreed, but, more subjectively, because ever since my teenage years this music (and for close to fifteen years this particular record by the Deller Consort) has moved me more deeply than any sound experience I can think of. In fact, this is the only disc in my collection three copies of which I have literally worn out. There would, however, be a fourth recording which I should take, not because it's a record to which I listen with great frequency any longer but because of the unique role it played during a particularly impressionable period of my adolescence.

When I was a tad of thirteen a misguided pedagogue at my alma mater, the then Toronto (now Royal) Conversatory of Music, suggested that I might prepare for my debut with orchestra, which was to coincide with the annual year-end blowout of the school band, and play Beethoven's Fourth Concerto. The suggestion, of course, was enthusiastically

Continued on page 32
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admitted that as I saw it, very little preparation was required; for two years I had been in possession of an RCA album—acquired with funds painstakingly set aside from my allowance—featuring Arthur Schnabel, Frederick Stock, the Chicago Symphony, and on the cover, surely the earliest example of pop-album art extant.

The illustration in question (an uncanny anticipation of Motown art nouveau) showed Schnabel—sleeveless, I believe—at the keyboard surrounded by a discreet platoon of sidemen all huddled beneath some luscious vegetation of the sort that would be hard to come by in Upper Illinois (pitch pine, perhaps, or pecan trees maybe—the memory plays tricks after a quarter century), and which suggested to me that the date was probably scheduled while orchestra and soloist were touring the Carolinas. But though I was much impressed by the pictorial reveries afforded by the jacket, it was, of course, the Schnabel/Stock collaboration itself that was indelibly impressed upon my memory. Almost every single moment that was traced every intuitive nuance of the Schnabelian rhetoric, surged dramatically ahead whenever he thought it wise—that is to say, in most interpretively inclined and/or motivically awkward situations—and glowed to a graceful cadential halt every four minutes and twenty-five seconds or so while the automatic changer went to work on the turntable.

These changeover points proved an especially significant formative influence: without them the D major second theme, the ambivalent F natural inauguration of the development section, the E minor string at bar 238, and of course the coda—unto mention only landmarks pertaining to the first movement—lost emphasis and pertinence and Beethovenian point. Indeed, to this day I am unable to tolerate any performance of this melodic episode that omits these obvious points of demarcation, that does not pay at least token homage to that phenomenon of flip-side overlap—which those of us reared in the 78 era came to cherish and anticipate—but strikes blithely, uncaringly onward to the finish. And as the years have passed, the new lot—chaps like Casadesus and Serkin, Fleischer and Moravec—have simply not lived up to my Schnabelian expectations and have fallen by the wayside accordingly.

Anyway, as the concert date approached, my own Schnabel impersonation had acquired such awesome authenticity that my teacher, a scholar scarcely noted for his indulgence of student power, compelled me to hand over my album with the sort of pedagogical highteeness that propelled S. I. Hayakawa into political prominence. Nevertheless, giving first evidence of the wily concert strategists I was shortly to become, I adopted a brisk Serkin-esque dispatch—

I'd heard him play it with Toscanini in '45 or '46—somewhat tempered by a suitably tactful Casadesusish élan, and my good professor pronounced himself entirely satisfied with my progress, my tractability, and his own expertise in the field of tutorial psychology.

On the day of my debut it rained, and that evening—it was early May, the first week of daylight saving, and the sun set at eight—the low-pressure area moved eastward, the ceiling lifted, and the skyline of Toronto took on that misty, orange-shaded cyclamene effect that Walt Kelly would soon celebrate in the color installations of Pogo at Okefinokee. Surely this was no night for Marlborovian objectivity, nor even for the worldly ironies of Fontainbleau. This was an occasion from which great cover art could draw inspiration. This was a time for personal statement—a moment to grasp and to make one's own.

Considering the fact that the subsequent performance was somewhat at variance with performances, the orchestra followed superbly. There was a moment of stress, perhaps, at the D major entry, and the oboes and flutes didn't quite get the point at the E minor stretto, but I left in high spirits, my teacher was shattered, and the press, on the whole, was quite kind. There was, to be sure, one dissenting report from a stringer attached to the morning paper—the Toronto Globe and Mail: "Beethoven's elusive Fourth Piano Concerto was left in the hands of a child last night," he noted. "Who does the kid think he is, Schnabel?"
If your taste in music tends towards the philharmonic, but your speaker-space is of intimate dimensions, the Marantz Imperial III Speaker System is the perfect combination of big sound in a small package.

Handsomely finished in elegant walnut with French lacquer finish, the Marantz Imperial III is as beautiful to look at as it is to hear.

Marantz achieves big sound in a small space by incorporating an advanced three-way speaker-design technique. Its newly developed 12" acoustic-suspension woofer, dome-type midrange and dome-type tweeter, provide the big performance you'd expect from much larger speakers. Transient response is unmatched by many speakers costing twice as much. Frequency range is a wide, 30 Hz to 20 KHz, and the Imperial III handles up to 100 watts of power. Performance is backed by Marantz' unconditional, five-year warranty on speakers and electrical components.

So if you think bookshelf speakers have to sound small just because they are small, visit your Marantz dealer and hear the Imperial III. Then let your ears make up your mind.

Heard any good bookshelves lately?
Your reply to a question in the February 1970 "Too Hot to Handle"—the question about the Elpa PE-2020 turntable and the way it handled records in changing them—clearly shows how you have whitewashed what is possibly a defect in the equipment. Since you referred directly to Consumers Union, why didn't you tell it like it is? Specifically, CU amended their report after they tested an improved "Series II" version of the unit. According to the January 1970 Consumer Reports, it was not just the records used for the test that made them change their mind, as you implied in your answer. I don't remember your magazine ever finding fault with any equipment you test, and—we—the buying public—know that everything is not that good.—Hank Miller, Pasadena, Calif.

If you'll look in the CU 1970 Buying Guide, you'll find that the PE-2020 is check-rated (CU's highest acclaim) with no mention of any Series I or Series II. Neither of the samples we tested bore any series designation since they were the pre-Series-II design, and both performed satisfactorily in all respects, including the dropping of records onto the turntable. In its January 1969 item, CU specifies that the records causing the original problem were not production run pressings and that the difficulty they encountered was exceedingly unlikely with standard pressings—even when played on the earlier, "unacceptable" version of the PE-2020. Your claim of whitewashing indicates that you either have spent little time reading our test reports or that you have done so with a jaundiced eye. We are convinced that our published reports contain more unvarnished test data—derived from CBS Laboratories, a world-wide leader in its field—that you'll find in any other magazine. Criticism of equipment, when warranted, does appear in these reports. If you find few reviews that dismiss a product as substandard by any important criterion, it is because we screen the products before review to avoid wasting our readers' time and our editorial space on unimportant or inferior equipment.

I have seen mention of an Acoustic Research four-channel amplifier but I can't find a dealer who knows anything about it. What goes on?—Richard Severin, Oak Park, Ill.

We understand that AR has two hand-built quadriphonic amplifiers that have been used in its own labs for research. Outside of a single press demonstration of four-channel sound, they have made no public appearance, and AR tells us that there are no plans to market the amplifiers—or any other product specifically geared to quadriphoniq.

I used an Ortofon S-15T cartridge feeding through its cable transformer into the medium-level magnetic input on a Pioneer preamp. The other day one channel went dead while I was playing a record. I finally isolated the fault in the cable transformer. I have heard that the Ortofon cartridge run directly into the preamp with no transformer. Can I do that with my system or should I get a replacement transformer?—Arthur J. Piedmont, New York, N.Y.

If your whole system is of high quality, comparable to the Ortofon cartridge and Pioneer preamp you mention, you will enjoy better sound from the cartridge if you can bypass the transformer. It should sound cleaner, with firmer bass and consequently improved mid-bass, mids and middles. Some preamps may provide inadequate gain without the step-up transformer since the output level of the Ortofon itself is usually low. But fed through its lowest-level magnetic input, the Pioneer has ample gain.

I have a gadget in the line cord to my system that lowers line voltage to somewhere around 50 volts for the first fifteen seconds the turntable is on. I've used it for years to make the tubes last longer, on the principle that high voltage between an unheated cathode and anode hastens stripping of the cathode coating. Now I'm using a Marantz 9 tubed amp. To be sure Marantz 7 transistorized preamp. Can the low voltage harm the transistorized unit?—Patrick Carey, New York, N.Y.

We know of no reason for supposing it will. But if you want to be on the safe side, why not use the gadget only in the line to the power amp?—Roger Parris, Evanston, Ill.

I use a Garrard 40B turntable with a Pickering V15/ACE-3 elliptical stylus cartridge. I've recently read that elliptical stylus should be used only in arms that permit tracking below 2 grams and have antiskating compensation. Should I continue using my present setup, buy a cartridge with a spherical stylus, or replace my present stylus with a spherical-tip model?—Roger Parris, Evanston, Ill.

Stick with what you've got. The V15/ACE-3 is designed with your sort of use in mind and has a 0.12-inch minor tip radius. To be correct, the statement you read should have specified that some spherical stylus—those of smaller fore-and-aft tip radius than that on your Pickering—should not be used at higher tracking forces. Much the same might be said about antiskating compensation. In any case, you'd do better to follow manufacturers' recommendations on a model-by-model basis than to accept a single blanket statement about all cartridges.

BASF recording tapes have a metallic or foil strip on the leader to trip the automatic stop or automatic reverse devices on some recorders. While I like the tape, the metallic strip is not needed for my Revox A-77 and I worry that it might scratch or damage the heads. —Sgt. Bill Morley, APO, New York.

Since the foil usually is made of soft metal, and since it is quite short, we see no reason to worry about it damaging the heads any more than does the iron oxide of the tape coating itself.

The most versatile stereo component I own is a Grundig Concert Boy 4000 FM/AM/SW/LW portable radio, which has become the heart of my system. With my present Grundig 412 speakers I get very satisfactory results. My next-door neighbor has a 70-watt Pioneer receiver with an outdoor antenna, but he still doesn't get as many distant stations as my portable. So why do you report on products like the Pioneer and not on my Grundig?—Edwin E. Thoma, Providence, R.I.

The ability to pull in faraway stations, while admirable in itself, is not a prime criterion of high fidelity FM circuitry. It often is achieved in multiband models such as yours at the expense of frequency response or even low distortion, since circuitry that does a good job of sorting out a weak signal from neighboring strong ones is easiest to achieve at the expense of bandwidth, and users of multiband radios generally are more interested in getting any signal at all than they are in the ultimate degree of quality in that signal. So while any fine multiband radio ought to produce dramatically better sound from FM than it will from short wave or even AM, lab tests should not be expected to give it a rating comparable to that of a good FM tuner or receiver. Furthermore, your radio would not be considered by most of our readers as well designed for use in a home system because it contains no magnetic phono preamp. If we were to review such a unit, therefore, we would have to treat it as a portable radio rather than as a stereo component.

High Fidelity Magazine
Another major breakthrough

Oh No! Not Again! Yes it seems that every year someone "re-invents" one of the discarded speaker designs of the past. Or they purport to modify the laws of physics by miniaturizing a 32-foot wavelength. They may even write a "technical" article on their revolutionary discovery and succeed in getting it published.

We customarily make an optimistic estimate that these speakers will survive five years. Some make it. Some even get re-invented all over again after a subsequent five years. In the meantime they sell. Because they sound different. Different from all other speakers. Different from the live performance.

We'd sort of miss them if they failed to show up. After all, what would spring be without a new major break-through? And would it really be fall without the letter edged in black? Pity!

So aren't you glad you own KLIPSCHORNS?

P.S. We have a list of over 20 major breakthroughs that have appeared, died and were interred. Your Klipsch dealer will be glad to show it to you. We know some more good prospects for this list. You can't see those names — until next year.

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[Reader Service Card]
SCOTT OFFERS SUBASSEMBLY EXCHANGE/REPLACEMENT

We've noted in this column before that H. H. Scott has for some time been designing components with plug-in subassemblies. It seemed like a grand way of simplifying service on the equipment should it ever need servicing. But recently Scott has made the idea seem even more attractive.

The plug-in circuit boards, which Scott calls Modutrons, are now being offered at reduced prices on an exchange basis. That is, you (or your service technician) may exchange a malfunctioning subassembly for a new one for a flat fee of $10—about one third of the average regular cost of the Modutrons presently available—as long as it has suffered no physical damage.

At present the list of Modutrons includes the preamp, FM IF strip, and tone-control boards for the Model 342C receiver; the multiplex, driver amplifier, and stereo amplifier boards for the 368 receiver; and the AM/FM IF strip for the 2506 compact. All these subassemblies are connected into the unit by multipronged connectors, and when a source of trouble is localized in a Modutron, it can be slipped out of the set without desoldering and sent to Scott for replacement. The exchange policy, of course, does not include equipment that is still covered by Scott's two-year warranty on parts and labor. Should malfunction occur during the warranty period, Scott will replace the offending Modutron without charge.

CIRCLE 147 ON READER-SERVICE CARD

AQUARIUS: FAMILY PORTRAIT

The Aquarius series of omnidirectional speaker systems just announced by James B. Lansing Sound contains some striking shapes—the result of various combinations of loaded reflectors, radial diffraction slot panels, and direct radiators that go into the four basic models. According to JBL, computer design techniques were used to calculate operating parameters and determine optimum configurations.

The photograph makes it clear that JBL has not overlooked visual design considerations, however. The speakers at the upper left, for example, are basically the same model (Aquarius II) as those at the lower right. The oiled walnut cabinet is called the Standard version, the enamel-finished one the High Fashion. So far, enamel colors include white, red, yellow, and cosmic blue. JBL says that more colors may be made available as time goes on.

All the systems in the group contain their own reflective elements—that is, they do not depend on reflection of sound from nearby walls to achieve the dispersion characteristics for which they were designed, allowing wide latitude in placement without loss of the stereo image, according to JBL. Prices cover a range from under $150 to over $650 per unit.

CIRCLE 148 ON READER-SERVICE CARD

FOUR CHANNELS DEMONSTRATED AND DEBATED

As engineering meetings go, the March 17 session of the New York Chapter of the Audio Engineering Society was a social success: it boasted a stellar roster of audio luminaries, an impromptu controversy that erupted from

Continued on page 38
"...quite probably the best buy in high fidelity today."
— the Dynaco A-25 speaker ($79.95 assembled only)

"...we cannot see how any preamp, present or future, could surpass the PAT-4."
($89.95 kit, $129.95 assembled)

"...makes most loudspeakers sound better."
The Dynaco Stereo 120 power amplifier
($159.95 kit, $199.95 assembled)

These opinions from The Stereophile are even more meaningful since it is the most respected journal in the audio field, whose sole source of revenue is from its subscriptions.

Over the years Dynaco has proved faithful to its philosophy of providing outstanding performance at a most moderate cost. Proper initial design eliminates the need for model changes. The savings achieved are passed on to you. What is "state-of-the-art" when you acquire it will still meet contemporary performance standards years later.

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IN EUROPE WRITE: DYNACO A/S, HUMLUM, STRUER, DENMARK
the floor, and a bomb scare that emptied the hall a little sooner than anticipated.

An estimated 200 audio insiders—representing recording, broadcasting, and equipment firms—gathered in RCA's Studio A in midtown Manhattan to be brought up to date on four-channel sound. Jim Cunningham explained mixing and recording with eight tracks; Len Feldman outlined the system for broadcasting four channels via one FM station [see article "Four-Channel Stereo FM—From One Station," HF, March 1970]; Jerry Minter spoke about his quadraphonic disc; Peter Scheiber introduced his device for encoding four channels (from any source) into two and then decoding that signal back into four. The discussion was moderated by John Eargle of Mercury Records.

The ideological fireworks started when a question from the floor challenged Scheiber's talk as being non-communicative or even obscurantist. Scheiber replied that he "was telling it like it is," and at least two others rose to his defense. But when the challenger asked those who felt they had understood Scheiber's address to stand, only a handful did so.

Further complicating matters was a demonstration using four huge speaker systems placed at the ends of the large room. The audience seemed unable to agree on what it had heard or how effective it was. By the end of the evening, judging from those comments to which we were privy, it seemed that a small group definitely favored some form of four-channel sound, another small group felt quadraphony would go nowhere commercially or artistically, while the muttering majority simply had no firm opinion.

The announcement of the bomb warning ended the proceedings, but a few diehards waited outside the building on West 44th Street to see if any real fireworks would erupt. When nothing happened, they dispersed with comments about "a new gimmick of the janitors to empty out a meeting so that they can go home early."

**video topics**

**FOR THE LATE-SHOW CROWD**

A device for private televiewing—or telelistening, at any rate—has been announced by the Sharpe Audio Division of Scintrex, Inc. It is the Sharpe Cordless Headset Model 100, which can be used to bring in the audio even with the TV receiver's loudspeaker turned off. Word of similar devices has come our way in the past, but FCC regulations concerning use of radio frequencies to transmit the signal from receiver to headset often have prevented their being marketed. Since Sharpe appears to have solved the practical problems of making private listening a cordless affair, perhaps a stereo model will be next.

CIRCLE 149 ON READER-SERVICE CARD

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**equipment in the news**

**Four amps in one integrated unit by Hitachi**

The Hitachi IA-1200, one of the first products to be announced in Hitachi's line of stereo components, is listed as a 120-watt (music power) integrated amplifier. The unusual feature behind this spec is that four separate amplifiers divide the total power. For standard two-speaker stereo the amplifiers are ganged in pairs, delivering half the total power to each speaker. In a two-way electronic crossover system, one of the amplifiers can handle each of the frequency bands in each channel. Or one amplifier in each channel can be used for the main speaker while the other drives a remote speaker. In reproducing quadraphonic tapes from a deck with its own four-channel playback preamp, the four power amps can be used independently to deliver full four-channel sound. Finally, all four can be ganged for mono use. Among the unusual features of the IA-1200 preamp and control sections are separate tone controls for each channel, a tone-control defeat switch, and a power-limiting control. The model sells for $550.

CIRCLE 150 ON READER-SERVICE CARD

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**Scott's mini-Quadrant speaker**

The Q-102, like Scott's other Quadrant speaker systems, is designed to spread sound throughout the listening area but—unlike the other Quadrants—does not have speakers facing in all four directions. Instead, it is designed to be placed against a wall. The 8-inch woofer fires outward from the acoustic suspension system, as does one of the 3-inch tweeters. The other two tweeters face toward the sides. The system is 19 inches long and sells for $89.95. It is equipped with a tweeter lever control and has a rated input impedance of 8 ohms. It may be used with any amplifier delivering at least 7 watts, according to Scott, and is rated for 35 watts continuous power capacity.

CIRCLE 151 ON READER-SERVICE CARD

Continued on page 40

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CIRCLE 52 ON READER-SERVICE CARD—

www.americanradiohistory.com
Our new stereo won’t add any distortion to their sound. And it won’t take any away, either.

When you listen to hard rock, it’s not the easiest thing in the world to tell where the sitar ends and the distortion begins. But we at Sony have a new stereo that can help slightly. It’s the HP-580.

With it you get FM/AM and FM stereo in the tuner section, 8-inch woofers, 3-inch midranges, and 2-inch tweeters in the speaker section, and a Pickering cartridge in the cartridge section.

It has a Dual 1210 turntable, extremely sensitive FM stereo separation, a high filter switch, loudness control, and specially designed Sony transistors that fit our specially designed electronic circuits. (Niceties you don’t usually get from a stereo short of going out and buying components.)

So the Cream won’t sound sour. The Strawberry Alarm Clock won’t sound piercing.

And because of its built-in dust cover and dustomatic brush, the Rolling Stones will gather no moss.

Nothing-but-the-truth Stereo.
The Sony HP580
Heath introduces a console kit

The Heathkit AD-19 Component Credenza combines an FM receiver, a BSR McDonald 500A four-speed changer, and a pair of two-way speaker systems in an all-wood Mediterranean cabinet with oak trim and decorative pieces. The cabinet and changer are factory built; the remainder is delivered in kit form for assembly and installation by the user. The electronics in the console are based on Heath's AR-14 receiver. The speakers, housed in reflex enclosures, use a high-compliance 10-inch woofer and a 3½-inch tweeter, crossed over at 2,000 Hz. The AD-19 sells for $299.95 plus shipping.

Sony offers low-cost receiver

Sony's STR-222 stereo FM/AM receiver, which sells for $149.50, is intended for the budget-minded component buyer. Its power rating (8 watts per channel) is comparable to many units on the European market though it is not staggering by U.S. standards. All the usual basic controls are included. Some are not quite so basic: the loudness switch, scratch filter, and speaker switching for two stereo pairs. A headphone jack and signal-strength meter are included as well.

Double-diaphragm speaker from Air-Coustic

Air-Coustic Corporation of Danvers, Mass., has announced a speaker system in which a rectangular woofer diaphragm of polystyrene foam is driven pneumatically by a more conventional cone placed behind it, the air trapped between the two acting as the driving medium. According to the manufacturer, the combined action produces enhanced bass performance in a manner comparable to that of horn-loaded woofer systems. The area of the outer diaphragm is approximately three times that of the inner 12-inch woofer, and the design mechanically damps the driver above the crossover frequency (400 Hz), obviating the phase shift of complex L-C electrical crossovers, according to Air-Coustic. In the PC12, the first system to be announced with the pneumatic-coupled woofer, an elliptical driver handles the midrange and a 1-inch dome tweeter handles the highs. The PC12, which is equipped with a control for adjusting the midrange and highs, sells for $239.

Aiwa deck handles both cassettes and cartridges

The Aiwa TP-1028 auto deck uses a single slot and set of controls to play either eight-track tape cartridges or cassettes in vehicles equipped with 12-volt electrical systems. Pilot lights make the controls visible during night driving; indicate whether a cassette or a cartridge is in use, and show which tracks are being played. Not only does the cartridge pickup advance automatically from one pair of tracks to the next but the cassette reverse automatically at the end of the first side and ejects at the end of the second. In order to accomplish this, Aiwa uses two heads (one for cartridges and one for cassettes) and three capstans (cartridge, cassette side 1, and cassette side 2). Insertion of the cassette or cartridge automatically determines which drive will be activated. The unit costs $159.95.

Radio Shack adds a stereo headset

The Nova Pro headset offered by Radio Shack is equipped with a coiled cord and is styled in stainless steel and leather-look brown vinyl. Interior padding on the headband is made of polyurethane foam. The headset is rated at an impedance of 8 ohms. Its Radio Shack catalogue number is 33-1014 and its retail price is $29.95.
When you spend $395.00 each on a speaker system for your home, you expect to get the same fine quality components that are used in "The Voice of the Theatre" systems and now performing in most theatres, recording studios and concert halls in the nation plus a wider angle of distribution through mids and highs for clearer sounds plus a smoother and flatter response plus an unbounded dynamic range plus a hand-rubbed-pecan-finished cabinet plus a high-relief-decorator design plus a lot of other things.

We don’t think that’s expecting too much.

Altec Lansing full-size speaker systems include the Milano in pecan (shown), $395.00 each; the Valencia in walnut, $339.00 each; the Flamenco in oak $339.00 each. Hear them perform at your Altec Lansing dealer. Or write for a free catalog: 1515 South Manchester Avenue, Anaheim, California 92803. Attn: H-6

A QUALITY COMPANY OF LTV LING ALTEC, INC.
by Benjamin Bauer

Speaker Tests Can Be Relevant to the Listening Experience

The author, vice president of CBS Laboratories, explains the breakthrough his organization has made in testing loudspeakers.

Since the beginning of civilization all endeavors that combine art and science have advanced through the quantification of subjective perceptions. For example, modern concert-hall architecture could not have flourished without an analysis of the role played by reverberation time and its dependence on sound reflections and absorptions. The science of nutrition could not have been properly developed without discovery of the relationship between the basic values of food and their analysis in terms of protein, carbohydrates, minerals, and vitamins. While a touch of genius is still needed to create a great concert hall or a memorable meal, the discovery of measurable relationships and cause-and-effect factors undeniably contributes greatly to their art.

And so it is with high fidelity and its associated equipment. Its practitioners used to engage in cut-and-try experiments that were a mixture of intuition and voodoo magic. I recall, for instance, pickup arms of varnished wood and cello-shaped speaker enclosures, apparently built in the hope that they might somehow inherit the spirit of Stradivarius.

The precise measurement and evaluation of high fidelity components is a relatively recent art. Not so long ago even phonograph pickups were difficult to measure. After extensive research, however, CBS Laboratories managed to produce test records that permitted a pickup to be measured in a continuous and semiautomated manner, thus solving the pickup problem. But the loudspeaker, without a doubt, has been the most difficult component to measure in a meaningful manner. For one thing, it is extremely difficult to test a device whose dimensions differ vastly from the wave lengths of the sound it is supposed to generate. At 20 Hz, the wave length is perhaps thirty times greater than the diameter of the loudspeaker; at 20,000 Hz, the speaker may be thirty times greater than the wave length. For this and other reasons, the loudspeaker designer usually selects drivers of different sizes, each to handle the most appropriate wave lengths, and assembles them into one box as a “speaker system.”

Although this widely practiced design approach helps solve the problem of wide-range frequency coverage, it gives rise to new problems. The interaction of the drivers with each other and with the environment tends to cause variations of the sound radiated in any one direction, as well as in different directions, and so the task of evaluation remains most difficult indeed. Added to this is the complication that the environment itself (or “load” into which the speaker system is working) varies from room to room and from position to position within the same room. These and other difficulties have caused many workers in the field of high fidelity to throw up their hands and declare that a loudspeaker cannot be accurately measured but must be assessed purely through listening tests.

Of course every reputable manufacturer uses sound-measuring equipment in the design of loudspeakers. This equipment produces a curve that depicts the sound pressure level produced by the loudspeaker at different frequencies. Often such curves are published, but we find them of little significance because each manufacturer takes the measurements under the specific conditions that prevail in his own laboratory. Though this information may be useful for quality control in a particular line of loudspeakers, it is no indication of how one type of loudspeaker
compares with another or how it will sound in a particular room.

Since the beginning of the association of CBS Laboratories with the equipment-testing program of HIGH FIDELITY, the magazine's editors have encouraged us to develop a method for the objective measurement of loudspeakers. Heretofore, loudspeaker evaluations made by HIGH FIDELITY were based upon controlled listening in a variety of rooms using high-quality program material and trained listeners, aided by such additional measurements with oscillators and test records as have been previously available. At the same time, the editors realized that an advanced, scientifically rigorous method of loudspeaker measurement would provide much significant information to the sophisticated listener. In the course of a research program that has taken almost a year, we made an exhaustive study of speaker performance measurements that are most significant from the listener's standpoint. These factors were incorporated into a standardized program of measurement, which could be performed under controlled laboratory conditions and which could be readily applied to a variety of loudspeakers in an accurate and repeatable manner. An important test of the validity of such measurements is that they correlate closely with the subjective listening experience in normal rooms. In other words, the measured factors shown in the form of graphs and charts should provide a meaningful quantified representation of what one might actually hear at home. This is precisely what the CBS Labs loudspeaker tests are intended to do.

It goes without saying that the most comprehensive and sophisticated of measurements cannot in themselves tell the whole story. A listening test by trained auditors is still essential to the total assessment of any audio product and particularly of a loudspeaker. This point notwithstanding, the newly developed method goes a long way in eliminating the uncertainties that previously existed in loudspeaker evaluation, and it provides a standardized method of comparing loudspeakers of different manufacturers.

The loudspeaker evaluation method we developed includes the measurement of impedance, frequency response, directional characteristics, relative efficiency, distortion, impulse response, and an indication of "distortionless" power-handling capacity. Each of these has a special significance in appraising the performance capability of the loudspeaker.

Impedance

The measurement of speaker input impedance helps ascertain that the loudspeaker will properly match the rated amplifier output impedance. It also insures that subsequent measurements will be performed in a fair and accurate manner for that speaker. It is known, for example, that when two loudspeakers of identical efficiency are A-B'd with the same amplifier, the speaker with the lower impedance generally will sound louder (and thus be preferred by the listener). This fact might encourage some manufacturers to shave off the impedance. But the speaker with the lower impedance may also overload the amplifier.

To verify impedance, we use the apparatus shown in Fig. 1. The loudspeaker is connected to a constant-voltage variable-frequency oscillator, while a high series resistance maintains a constant current through the circuit. The voltage (E) measured across the loudspeaker, divided by the current (i), gives the value of impedance (E/i = Z). When we vary the oscillator frequency over the full audio range, we find that the impedance changes with frequency, as shown by the graph in Fig. 1. The pronounced rise in impedance at a low frequency is caused by the resonance of the woofer and associated acoustical elements. At frequencies above this resonance, the impedance drops down, levels off for a while, and then rises somewhat again. Often, at mid-highs the impedance curve becomes quite uneven because of the frequency-dividing networks which distribute the power between the several drivers. Sometimes a dip appears, with the impedance falling below 4 ohms and even approaching zero. A small dip would do no harm. A deep one is undesirable since it imposes a virtual short circuit at the particular frequency and might cause the amplifier to overload.

The nominal impedance of the loudspeaker is taken to be the lowest value of impedance right after woofer resonance, at which point it usually is a pure resistance. This nominal impedance may be higher or lower than the manufacturer's rated value, although in the better class of equipment the two values are reasonably close.

We next determine what signal voltage to feed to the loudspeaker for its tests of frequency response and efficiency. We choose a voltage that will supply 1 watt of power to the loudspeaker at its nominal impedance. The power in watts for a resistive load is computed from the equation \( P = \frac{E^2}{Z} \) (where \( E \) is the voltage and \( Z \) the impedance). That is to say, the voltage we seek is simply the square root of the nominal impedance. It is evident that with constant applied voltage the highest power will be delivered.

![Fig. 1. Measuring loudspeaker impedance.](www.americanradiohistory.com)
to the loudspeaker at the frequency corresponding to the nominal impedance value. Above and below that frequency the measured impedance rises and the power diminishes. This change represents the conditions under which the loudspeaker actually is used, because modern transistor amplifiers have a very low output impedance and thus give an output voltage which is largely unaffected by the loudspeaker impedance.

Frequency Response

The frequency-response curve tells us how well the loudspeaker responds to the audio spectrum. Although this curve may be readily measured in any well-equipped acoustical laboratory, the "listening" frequency response of the loudspeaker has proven to be one of the most difficult factors to determine objectively in a manner useful to the final listener. You might think that the simplest way to obtain this curve would be to place the speaker in a room with a precision microphone installed a known distance away (say, 1 meter), connect the microphone through a suitable amplifier to a curve tracer, and then energize the loudspeaker with a variable-frequency oscillator. When this is attempted, however, we get the kind of response curve shown in Fig. 2. This curve, with its hundreds of narrow, sharp peaks and dips, does not indicate speaker performance alone—it also includes the room characteristic. The wiggles are actually caused by air resonances in the room. With such ragged response, one might expect the sound to be rough and unpleasant. And yet, when this particular loudspeaker reproduces musical material it provides fine sound reproduction.

This paradox can be explained by the fact that musical sounds constantly present us with a complex and rapidly changing pattern of attack, decay, percussion, trills, and chords. Such sounds contain not single frequencies but a continuum of frequencies which tends to average all the peaks and valleys to produce smooth sound. But since they also prevent us from finding out what the loudspeaker itself is doing, we must seek a different environment in which to measure the speaker. After all, we wish to evaluate a particular loudspeaker and not a particular room! To avoid room effects we can perform the measurement outdoors, away from reflecting surfaces, by mounting the loudspeaker on a roof tower, for example. Alternatively, we can use an anechoic chamber, a special room lined with sound-absorbent wedges. Made of fiberglass, the wedges are attached to floor, walls, and ceiling and almost completely absorb the sound over the audible range, creating an illusion of unimpeded free space. CBS Labs' anechoic chamber is illustrated in Fig. 3, with the loudspeaker in its response-measuring position. An open floor grating mounted on a channel-iron structure permits the sounds to pass unimpeded to the lower wedges, yet is strong enough to support personnel and equipment.

In this chamber, with the boundary reflections eliminated, a much smoother and more useful frequency response curve is obtained, as shown in Fig. 4. A few peaks and dips still remain, especially above 1,000 Hz. These, however, are not caused by the room but are inherent in the design of the particular loudspeaker. Some of these small wiggles are caused by local resonances or "breakup" of the driver cones at various frequencies, while others are a result of constructive or destructive interference of the sound waves produced by various drivers interacting with each other and with the outside and inside portions of the loudspeaker enclosure.

The effect these small wiggles have on what we hear from the speaker has never been established with complete certainty. One might suspect that the smoother the response the better the sound quality. Experience teaches us, however, that small wiggles, such as those shown in Fig. 4, usually are inaudible. A large sharp peak, however, would produce distorted sound and cause "ringing." A dip, by the way, is less audible than an equivalent peak.

![Image](www.americanradiohistory.com)
For an input test signal, we had a choice of either slowly varying pure tones or some form of random noise. Experiments convinced us that the random noise, in one-third-octave bands, would produce response curves that related closely to audible performance. The noise tends to average the small response perturbations very much as they are averaged by the impulsive character of speech and music; yet at the same time any really significant peak or dip in the loudspeaker response is not masked by the narrow band of noise. Random noise, by the way, is obtained ideally by amplifying the random movement of electrons in a circuit to the point of audibility. Such noise, which has constant energy at all frequencies, is called "white noise"—it is very similar to the "rushing" sound you hear between stations on an FM tuning dial. When the frequency content of this noise is adjusted so that each one-third-octave band contains equal amounts of energy, it becomes "pink noise." This is the signal—fed to the speaker through a one-third-octave band filter—we use for the frequency-response test.

Of course we cannot merely measure the frequency-response curve in the anechoic chamber at a single orientation, e.g. on the loudspeaker axis, because loudspeakers radiate differently in different directions. A loudspeaker typically radiates equally in all directions at low frequencies, where the wave length is much longer than the driver dimensions. For this reason bass reproduction is inherently omnidirectional. However, at higher frequencies, where the wave length becomes small compared to the driver cone, the sound is increasingly beamed. To overcome this undesirable effect, loudspeaker designers employ several techniques: they use very small tweeter drivers, which are more or less omnidirectional even at high frequencies; or they provide acoustical "lenses" (made of slats of special shape); or they install special whizzer cones or other diffractors to spread the sound. As a result, an important function of loudspeaker evaluation is to ascertain the degree to which these efforts are successful and the beaming eliminated. Some loudspeakers are purposely designed to radiate only a part of their energy directly toward the listener and to cause a large part of their energy to be reflected from the room boundaries, thereby enhancing the spatial perspective.

Considering all of these factors, we decided that three frequency-response curves are needed to portray fairly the acoustical performance of any speaker system. One curve is an on-axis frequency response by one-third-octave bands. A second curve describes the average radiation toward the front hemisphere. A comparison of curves 1 and 2 would then tell us something about beaming and about the sound perceived by listeners randomly oriented within the room. The third curve is the average response in all directions in space, which gives us an idea of the total sound power emitted by the loudspeaker as a function of frequency. This latter concept is very important inasmuch as most listening rooms are fairly live (they contain numerous reflections that contribute to the total music power we hear). Therefore, the total amount of sound power radiated is apt to have a most important bearing on sound quality. If the total average radiated power remains uniform with frequency, the loudspeaker is a likely candidate for a good rating.

Some experimenters have attempted to measure the total radiated power by placing the loudspeaker in a "reverberation chamber" (a room with hard walls and little sound absorption). But this method does not provide information about beaming or about the average front radiation response. After a study of these factors, we decided to derive the over-all radiated power response in the anechoic chamber by performing a large number of measurements in various directions surrounding the loudspeaker. The measuring pattern finally chosen is the one shown in Fig. 5. The frequency-response curve is measured at every 45-degree point on two imaginary intersecting circles surrounding the loudspeaker, one in the horizontal plane and one in the vertical. In this manner fourteen measurement points are established,

![Diagram](image-url)
Fig. 6. Response data being fed into the computer.

each providing its own frequency-response curve. Since the orientation of the loudspeaker in an anechoic chamber is unimportant, we may use one stationary microphone and rotate the loudspeaker about its axes, first vertically and then horizontally, until all fourteen one-third-octave-band response curves have been obtained.

Displaying the Frequency-Response Data

The fourteen graphs thus produced are not easy to interpret in raw form. We reduce them to manageable proportions with the help of a modern digital computer, shown in Fig. 6. From each of the fourteen graphs, we select thirty points along the curve, one-third octave apart, covering the full range from 25 to 20,000 Hz. The resulting 420 points are entered into the computer, which first converts the decibel sound pressure level readings on the chart into sound power, then averages the power for each corresponding set of frequencies, and next converts the average back into the equivalent sound-pressure level for a 1-meter distance from the loudspeaker center. In addition, the computer determines the average power and the equivalent average sound-pressure levels emitted in the generally frontal direction as defined by the five sets of axes normally oriented toward the listener.

Interpretation of Response Curves

An example of the resulting data is shown in Fig. 7. The upper curve, representing the on-axis sound-pressure level, tells us what the listener will hear in line with, or directly in front of, the loudspeaker axis. In this example, it shows a somewhat scooped-out midrange between 1,000 and 5,000 Hz, which suggests a slight deficiency in the “presence” region, an effect that is preferable to the mid-high exaggeration found in some units.

However, in normal listening—especially stereo—we seldom sit precisely in front (on axis) of the loudspeaker. For this reason, the second curve—showing the average front hemisphere response (designated by circled points)—has much greater significance. In this example, it suggests a speaker that should provide smooth, broad-band sound reproduction. Furthermore, since the two curves are quite close to each other above 1 kHz, we can safely conclude that high-frequency beaming has been successfully dealt with and is relatively insignificant.

In our experience, the third curve—the one showing the total average radiated sound-pressure level or equivalent omnidirectional response (identified by X points)—is the most meaningful of all. Here we see that the average power radiated by the loudspeaker remains uniform over the full frequency range without pronounced peaks and valleys. We may conclude, therefore, that this is a highly satisfactory loudspeaker capable of meeting high fidelity requirements when used with an amplifier of adequate power and tone-control capabilities.

Why tone-control capabilities? In interpreting these curves, it should be remembered that they were obtained in an anechoic chamber, where there are virtually no room reflections. When the same loudspeaker is placed in a listening room, its power radiation efficiency increases, especially at low frequencies. In a room corner, the radiation efficiency at bass frequencies may rise by as much as 6 dB; when the loudspeaker is placed against a wall, some bass improvement also occurs, though to a lesser degree than in the corner location. While there is no way in which the evaluator can tell, ahead of time, how the loudspeaker will be placed in the room, the bass and treble adjustments in every good amplifier usually have adequate range to compensate for the excess or lack of highs or bass produced by any particular situation. The speaker adjustments, if provided, also help in this regard. Experimentation and optimum adjustment of these controls for maximum performance is a task that each high fidelity enthusiast must undertake for himself. He can be aided in this endeavor by using a suitable test record. (CBS Laboratories has one titled 7 Steps to Better Listening.)

Fig. 7. The final three curves derived for a speaker.
Since the response curves are plotted in terms of absolute sound-pressure levels, relative to .0002 microbars, it is easy to compare the efficiency of one loudspeaker with another. Moreover, since the response curves are obtained with one-watt power fed to the loudspeaker, we can calculate readily the power needed to produce a given sound-pressure level one meter from the loudspeaker, which suggests the amplifier wattage requirement.

Distortion

A loudspeaker's distortion of steady-state tones is simply measured by the use of an analyzer that can select the desired harmonic components. Experience shows that the most prevalent distortion components in loudspeakers are the second and third harmonics. In our tests we have found it desirable to measure the distortion as a function of the fundamental sound-pressure level produced by the loudspeaker. The speaker's efficiency thus does not become a part of the distortion equation, as it would if it were measured on the basis of the power applied to the speaker.

Examples of typical distortion data for a small loudspeaker are shown in Figs. 8a and 8b. Note that distortion tends to increase at the lower frequencies. As the sound-pressure level decreases, distortion also tends to decrease, but below a given output level it may increase again. This may be caused by a slight tendency of the cone to "oilcan," or it may be evidence of mechanical hysteresis. A photograph of the setup for distortion measurements appears in Fig. 9.

Impulse Testing

In addition to testing with steady-state signals, testing by means of electrical impulses is important in loudspeaker evaluation. After all, music consists more of constantly varying sonic impulses than of steady-state tones. The ability of the loudspeaker cone to follow an impulse faithfully at all frequencies thus becomes an important performance criterion. Furthermore, loudspeaker cones can withstand much greater power applied as an impulse than on a steady basis. For example, an amplifier feeding 100 watts average power (200 watts peak) continuously to a loudspeaker might burn out the voice coil in short order. But it may be possible to apply intermittent

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Fig. 8. Distortion data for the same loudspeaker taken at two frequencies. Note that distortion increases at lower frequencies and/or at higher sound-pressure (output) levels.

Fig. 9. Distortion is measured on this apparatus.
200-watt impulses to the same loudspeaker without damage.

In developing a theory and procedure for testing by means of impulses, we could begin by applying a single, brief, impulsive force to the loudspeaker—for example, by discharging through the voice coil a capacitor suitably damped to prevent oscillation. But we would find the results of such a test extremely difficult to interpret. Mathematical analysis tells us that a very brief pulse is equivalent to a continuous distribution of all frequencies from 0 Hz on up, the practical upper end of the continuum being defined by the reciprocal of pulse duration. For instance, a pulse of 0.0001 second is equivalent to a continuum of frequencies from 0 to 10,000 Hz. If the pulse is repeated at a rate of one per second, then the resulting signal can be shown to contain a line frequency structure, beginning with 0-Hz frequency (that is, DC) and continuing at one-cycle intervals all the way up to about 10,000 Hz. This is shown graphically in Fig. 10a. Imagine the analytical complications that arise when we apply all these frequencies simultaneously to a loudspeaker—and this is precisely what the application of a single brief pulse does!

At the opposite extreme, we can use pulses in the form of a series of interrupted sine waves. This is equivalent to applying a single frequency with a rapidly decaying series of sidebands, as shown in Fig. 10b—again complex and difficult to analyze.

After a theoretical review of the problem, we decided to test loudspeakers with a pulse equivalent to the simultaneous application of one-third-octave bands of frequencies. Such a pulse, shown in Fig. 10c, has many important advantages. For one, it includes a known and well-defined band of frequencies. Also, by the very nature of this finite band of frequencies...
we avoid simulating an event that seldom occurs in sound reproduction. As a matter of fact, the impulse in Fig. 10c simulates the type of wave shapes we observe from musical instruments far better than either impulse in Figs. 10a and 10b. We find that the simplest way of obtaining a pulse like that in 10c is by using the sharp spike of 10a followed by an adjustable one-third-octave filter to eliminate all frequencies outside the desired band. By adjusting the center frequency of the band, the center frequency of the pulse may readily be selected. This is precisely the type of instrumentation we have adopted.

Examples of Impulse Testing

Photographs of the results of pulse testing of loudspeakers appear in Figs. 11a through 11e. They were taken by displaying on a dual-beam oscilloscope the applied pulse (upper) and the acoustical pulse picked up by the measuring microphone placed approximately one meter from the center of the loudspeaker. Fig. 11a shows the normal behavior of a loudspeaker with the application of a 1 watt average power (2 watts peak) in a one-third-octave-band pulse centered at 300 Hz. It is clear that the output is a replica of the input wave, although slightly displaced in time principally because of the interval required for sound to travel from the loudspeaker to the microphone. We would classify this as excellent impulse response.

However, when the peak power is raised to about 72 watts by applying a 24-volt (peak) pulse to the loudspeaker terminals, as shown in Fig. 11b, the sound pressure measured by the microphone reveals the waveform distortion. Therefore, the loudspeaker under test cannot be expected to handle 72 watts peak or 36 average watts power input, and should be used below this limit.

Our method is the only one we know of that is able to reveal and measure this type of distortion, because the particular unit under test could not possibly have withstood steady application of 36 watts without heat damage. The test measures only the ability of the loudspeaker to handle the power without distortion, not its ability to stand up under continuous application of such pulses.

A similar high-power one-third-octave-band pulse, this time centered at 100 Hz, is shown in Fig. 11c. The woofer of this particular speaker system was defective, producing a scraping or rubbing sound with the application of a high-level input. Listening to music, we perceived this sound only on occasional loud drum beats, so the defect might easily have been missed in a listening test. With impulse testing, the defect appears immediately as the ragged edge at the bottom of the reproduced pulse.

At the other end of the spectrum, near 3,000 Hz, the output and input pulses are alike, as shown in Fig. 11d; but at certain higher frequencies, near 6,000 Hz, distortion and reflections appear. This latter condition (Fig. 11e) shows faulty transient response. The degree to which this characteristic corresponds with the actual listening experience has not yet been fully evaluated, but it provides us with added evidence that contributes to our over-all assessment of loudspeaker performance.

What Remains?

With the measurement of a speaker's basic properties—impedance, directional characteristics, frequency response based on front-hemisphere and total radiated power, relative efficiency, distortion, impulse response, and maximum power-handling capacity—a battery of tests has now been provided which places in the hands of the editors of High Fidelity all the essential facts necessary to perform a final listening-test evaluation of the loudspeaker on an intelligent and objective basis. "Why then a listening test?" you may ask, "Aren't the measurements enough?"

Both High Fidelity and CBS Laboratories are convinced that a listening test still remains the ultimate judge of performance. No degree of instrumentation and no computer can replace the mind and the experience of a perceptive listener in judging the shades and nuances of sound, the reaction to placement in various room positions—the acoustical feel of the speaker, if you will. Mathematics and science notwithstanding, a personal test remains the final arbiter of speaker quality, just as it does for evaluating Philharmonic Hall or beef Stroganoff. Our new measuring program is important not because it does away with listening tests but because it spotlights the particular areas in which listening tests might be concentrated. At the same time, our measurements provide a solid basis for the assessment of engineering aims and technical values; in this sense they form a new contribution to the instrumentation and quantification of high fidelity and to audio art generally.

Fig. 11. Examples of pulse testing. See text for explanation.
Should You Consider Omnidirectional Speakers?

Although "omnidirectionality" has been espoused of late with considerable gusto, it is neither a new feature of loudspeakers nor the sole criterion of speaker performance. It is, however, an important feature—some contrary opinion notwithstanding.

The term omnidirectionality refers to a broadening of the sound waves produced by a speaker—and more precisely, of the treble portion, inasmuch as bass tones naturally radiate in a circular or 360-degree fashion. As frequency rises, however, wavelengths shorten and tend to form into a beam. The beaming tendency increases with the size of the speaker diaphragm, so that a relatively large-diameter speaker will "want to" beam high frequencies more readily than a smaller-diameter unit. This is one major reason for tweeters being traditionally smaller than woofers.

Which, of course, points up the obvious: that some effort to avoid beaming of the highs always has been a part of speaker design. Lately this one aspect has loomed quite prominently as a feature of speaker systems. Why?

To begin with, an overly directional speaker is a distorting speaker: midrange and highs that are concentrated in a beam sound unnaturally bright, edgy, harsh. Moreover, such sound reproduction, besides being unpleasant, tends to obscure the inner detail of musical textures and is especially degrading of complex instrumental passages. An upper string, for instance, playing in close harmony with a woodwind, might sound strong over a beaming speaker, but chances are you would not be able to recognize that you were indeed listening to the two distinct instruments playing together. Finally, such a speaker tends to sound like a hole in a box instead of a transparent "window" (or indeed an open window) on the performers; it imparts a constricted sense of eavesdropping instead of an unimpeded feeling of clear, open sound.

For years, designers of quality speakers have attacked this problem (along with others, such as wide frequency range, low distortion, smooth and linear response, power-handling ability, and so on) in terms of tweeter designs that sought to achieve wide sound dispersion instead of narrow beaming. One of the strongest impetuses to this trend came from the movie sound people, at the time that they attempted to solve the sound-dispersion problem in theaters when the first talking pictures were shown some forty years ago. Moviegoers sitting in the extreme side seats of the theater couldn't hear the dialogue on the soundtrack nor distinguish sounds clearly because the upper-middle and treble tones (the frequency range that carries all the important overtone structures that define different sounds and voices) were not getting to them. The solution to that problem—the sectoral- or multicellular-horn type of tweeter—proved something of an engineering coup. Not only did it disperse the sound over a very wide angle, but it was inherently a device of great efficiency, since a horn loaded to a smaller driving element acts as an acoustic transformer by helping to match the high-pressure/high-impedance sound energy from the vibrating element in the horn's throat to the low-pressure/low-impedance energy at its mouth. This efficiency in turn meant that these horn systems could be driven to high output levels (big, room-filling sound) with the use of amplifiers that were themselves relatively modest in terms of size, power, and cost. The horn tweeter, in one style or another, has since found its way into many excellent home

Mr. Lanier, former Consumers Union audio specialist, recently set up shop as an independent audio consultant.
speaker systems. The roster is indeed impressive and includes such names as Altec Lansing, Klipsch, J. B. Lansing, Electro-Voice, Jensen, and University.

Not to be outdone, advocates of cone tweeters have steadily improved their designs to achieve—although with the concomitant need for somewhat higher-powered amplifiers to properly drive them—pretty much the same acoustic results. An early design effort in this direction resulted in the whizzer—a small auxiliary cone or flat ring projecting near the apex of the speaker's main cone. Such a device can serve as an inexpensive way of extending, or at least of smoothing, the frequency response of a full-range speaker by decoupling the outer surface from the throat so that the former handles only the bass. Its shape also helps to spread the high frequencies by diffraction: the effective treble aperture of the speaker becomes the diameter of the whizzer cone, while bass is produced over the remaining area of the diaphragm.

Many fine speaker systems use separate cone tweeters (which superficially resemble small woofers), and they achieve wide dispersion in several ways. They can use a really small diaphragm, two inches or less in diameter. Properly made, and backed by a hefty magnet structure, such a tweeter can produce excellent highs. In the last ten years the convex hemispherical dome tweeter has been used extensively. Because the sound tends to go out at right angles to the plane of the diaphragm, the outward-curved dome spreads the highs over a very wide angle. Dome tweeters are found in many bookshelf speaker systems.

Using more than one tweeter to form a divergent array that covers a wide angle, such as in the Bozak system or JansZen tweeter, is another way to spread the highs. Yet another is the slot-loaded tweeter: the highs emerge from several tweeters radiating into a narrow slot that characteristically has a wide projection angle. Specially shaped cone units and plug-loaded midrange and treble cones have also been devised for fanning out the sound. Acoustic lenses—small slats or vanes that help spread the highs—have been used on both cone and horn tweeters.

All of these speaker types, which can achieve wide-angle dispersion of high, are based on fairly popular design approaches. One other that until recently received relatively little attention outside of engineering circles was investigated some years ago by Dr. Harry Olson, head of RCA Laboratories and a pioneer audio designer. He mounted the same loudspeaker in a series of enclosures, each of a different shape (though all having the necessary internal cubic volume to baffle the speaker correctly), and then tested each for dispersion characteristics. The best of those he tested was a design in which the usually flat mounting board (baffle) had been cut and reshaped to form an enclosure that approached a sphere.

This shape of course has appeared recently in the form of loudspeakers of the ball type—such as those made by Panasonic, JVC/Nivico, and others in which the spherical surface of the enclosure is used to mount an array of multiple tweeters.

Cylindrical-shaped enclosures represent another, though apparently related, design approach. In the Empire Grenadier series, for instance, the bass—though presumably already omnidirectional—is directed downward by the woofer so that it emerges through a slot running around the entire circumference of the enclosure near the floor. Midrange and high-frequency drivers, however, are mounted on a metal panel in the cylindrical belly, and the sides of the panel are beveled away from the listener, following roughly the cylindrical form beneath. Other companies, such as University and Aztec, also have announced cylindrical-shaped enclosures.

**Dispersion and Stereo**

Many conventional speaker systems spread strong highs over 120 degrees; some do even better. A pair of stereo speakers, each having 120- to 150-degree dispersion, will spread the highs throughout any typical living room. If the speakers are set in the corners, 90 degrees of dispersion in each speaker will be enough to cover the entire room. Only when a speaker system is placed mid-wall in a very wide room would 120-degree dispersion fail to cover most of the listening area.

Omnidirectional dispersion allows greater flexibility in speaker placement. For example, multidirectional systems need not—in most cases should not—be placed against a wall. Moving a conventional speaker out into the room would almost certainly produce dead spots in its coverage.

How does dispersion relate to stereo? Actually, good stereo depends not only on a sense of left-to-right breadth, but also on the stability of that directionality. The localization of sound depends on our ears' ability to sense the relative strengths and timing of the sounds from the two speaker systems. Each of the two separate sounds that enter this comparison must seem to come directly from the relevant speaker. The mid-highs and highs are especially important. If the strength of the treble changes markedly as you move around the room, stereo localization will come loose from its moorings. Of course there always will be some change with motion in two-loudspeaker stereo. But if the highs are evenly spread, the stereo image should be at least reasonably firm—without jumps or reversals—throughout the listening area.

**JUNE 1970**
Omnidirectional speaker systems have taken several design approaches. Left, indirect sound from rear speakers bounces off walls to mix with direct sound from front. In second example, speaker faces upward so that sound is dispersed by means of a reflecting element within enclosure. Third example represents the use of speakers on all four sides of a rectangular enclosure, or of several drivers in a spherical enclosure. In last example, a reflector panel may be angled to disperse sound.

Furthermore, as long as some direct sound is still produced by a speaker, that direct sound will reach our ears a split second sooner than the indirect sound. For this reason omnidirectional speakers can indeed preserve the directional clues needed for stereo, some British commentators to the contrary.

But there’s more. Wide-angle dispersion relates closely to “broad-source” sound which seems to emanate from an area larger than the size of the speaker system itself. Inasmuch as good stereo coverage intrinsically presents an apparently broad source to the listener, the question of opening up or spreading out the sound from the individual speaker systems received less attention in stereo’s first years than it did in mono days. But the concept of the broad source has invariably implied a more natural kind of sound: a sense of the proscenium, an ambience that suggests depth as well as breadth in order to achieve greater realism in music.

This feeling, and one’s evaluation of it, may be purely personal—but it has become a vital part of today’s speaker designing. Indeed, when Quad and other companies first introduced these large, full-range electrostatic speakers the claim was that they gave the sensation of hearing the music as if it were coming through a large doorway. This broadening of the apparent sound source is also implicit in the Bose concept and other multiradiating systems—reproduced sound reaching the listener not only from the speaker directly but from the surrounding walls too by reflection.

Note, however, that a large radiating surface in itself does not guarantee wide-angle dispersion. Precisely the reverse would happen, for instance, in a large electrostatic panel for the same reason it happens in a large cone diaphragm; as wavelengths shorten with respect to the dimension of the surface producing them, they tend to form a narrow beam. Today’s large electrostats overcome this tendency in several possible ways. The Quad has a curved front which helps fan out its sound. The big flat electrostatics have frequency-sensitive sections which make sure that the extreme highs are reproduced only by a relatively small area. And an electrostatic—by being located at some distance from the wall behind it—can be made to function as a dipole or doublet so that a large portion of the rear radiation is reflected and mixed with the front radiation. This effect, of course, varies with the relative positioning of the speaker and so some experimentation is required for optimum results in a particular room.

The prediction and evaluation of reflected sound effects is, of course, a complex subject. A few British commentators have taken the position that sound reflection equals sound interference, and thus these effects should be avoided at all cost by designing a loudspeaker to beam, thereby minimizing reverberation and concentrating sound energy in the directly propagated signal. American designers for the most part reject this concept. [So do we. The speakers we have heard that were deliberately designed to concentrate their highs this way invariably sounded edgy or overbright to us.—Ed.]

Bouncing the Sound

An interesting approach to this problem of consolidating sound is embodied in the JBL Paragon. The long, low cabinet contains two complete and separate stereo speaker systems: folded-horn woofers, midrange drivers, and horn tweeters for each channel project from the ends back toward a long, convex wooden reflector surface that spreads the sound from both channels and helps mingle the output of the drivers on each channel into a unified broad source.

Though the wide-front dispersion commonly found in many of today’s better speaker systems will produce a satisfactory stereo image, some speaker systems are aiming at even wider dispersion—up to 360 degrees, or omnidirectionality—at least in the horizontal plane. And a few are going after dispersion in more than just the horizontal plane by spreading part of the vertical plane in an umbrella effect, suggested in the early Hegeman designs and still in evidence today. The Harman-Kardon HK-50, for instance,
employs speakers that point upward toward a suspended reflector of roughly conical shape. The Utah OM-1 system employs a coaxial two-way driver that fires upward into a sort of concave cone. Built-in reflectors need not be conical of course. In its Omni-1 system, Lafayette aims the tweeters upward toward a panel that deflects some of the sound outward toward the listener and the rest of the sound against a wall so that it reaches the listener indirectly. It is therefore a semi-indirect radiator that is not omnidirectional in the usual sense. Eastman Sound also has shown the Martin Spectrum Slope speaker, which appears to incorporate an angled, flat-plane reflector in its diffusion system.

Wharfedale has announced an elaborate flat-plane speaker known as the W-80 Vertiflex—so called because the orientation of the reflecting panel can be altered to suit the room acoustics, the position of the speaker within the room, and the option of the owner for more or less room reverberation.

Most recent of the omnidirectional designs at this writing are the various systems in the Aquarius Series, just announced by James B. Lansing Sound. In them, JBL combines reflective panels with diffraction techniques and similar means to deliver wide-dispersion sound, though the various models do not necessarily all use the same mix of devices.

Indirect radiation is an important feature of the Bose 901, which goes all out for reflected sound but uses the room itself rather than a built-in reflector. According to Bose about ninety per cent of the sound reaching the listener from the Model 901 has been reflected one or more times from the walls insomuch as eight speakers face toward the wall in back of the speaker system and only one is in the front, pointed toward the listener. The one direct-firing speaker, triggering our hearing's precedence effect, is enough to establish a stereo image amid such a high preponderance of reflected sound.

The use of walls and even the ceiling as reflectors is implicit in the multidriver spherical systems and in such designs as the Epicure 201 with its upward-angled tweeter panel. Similarly, the Barzilay H-Series equipment cabinets are designed with speaker enclosures at the rear, firing back at an angle toward the wall. And Electro-Voice's Landmark 100 compact system has a multifaceted enclosure with drivers mounted in two facets for the speakers: a full-range driver points forward, the other three are angled upward from sloped rear facets, making possible a variety of orientation for room reflection.

There are also intrinsically omnidirectional direct-radiating systems such as Scott's Quadrant series and the Epicure Model 1000 Tower. The Scott Q-101 employs four outward-directed sets of tweeters and midrange drivers, one in each side of the enclosure. The Epicure is a column, square in cross section and about seven feet tall, that contains an entire full-range speaker system in each side; that is, four systems per enclosure, each facing toward a different compass point. Systems of this type are intended to permit locating one's speakers almost anywhere in a room without degrading the stereo image.

The Listening Experience

The kind of omnidirectional coverage that presupposes the use of walls to reflect part of the sound obviously aims at something more than getting strong highs. As stated by Bose, a major design aim is to increase the ratio of reflected-to-direct sound in the listening room.

The precise effect of increased living-room reflection remains a controversial subject among speaker designers; additional experiments, involving large samples of listeners, are needed to obtain more data in this intricate, largely unexplored area of speaker/room/ear relations.

What does seem certain in the general omnidirectionality thrust is that stereo is being helped, not hindered. Since the direct highs from an omnidirectional speaker reach all parts of the listening area relatively unmuffled, the stereo image has maximum stability and it can be perceived from a greater number of listening spots in the room than is possible when using directional speakers.

In investigating these and related considerations, I ran several listening tests, comparing omnidirectional speakers with a pair of good, conventional direct radiator speakers that have normally wide dispersion. The test consisted of careful switching back and forth on the same program material, with the tonal response and acoustical output level of the two sets of speakers balanced as closely as possible. This balancing is important because sharp differences are likely to swamp any other considerations; if one speaker is either louder or tonally brighter, it tends to sound better to the ear than another speaker of otherwise identical qualities.

The net results of these tests revealed that there was little difference in the way each type of speaker projected concert-hall ambience or surrounded the listener with sound; both types produced good stereo images and the hall sound in the recordings tended to dominate the listening-room reverberation.

What did develop from these tests was a preference based on the old, well-known high fidelity speaker criteria; frequency range, tonal balance, smoothness in the highs, openness in the midrange, and so on.

This experience would seem to emphasize what I pointed out earlier: poorly designed speaker units will not sound pleasing just because they put out highs in all directions. Thumping bass, honking midrange, and screechy or edgy highs are not more acceptable when they come at you from all directions than when they hit you in a straight line. The over-all smoothness, transparency, and naturalness of a speaker system remain basic criteria. If a system has these virtues plus that of omnidirectionality—and it pleases you—then it is a speaker for you.

JUNE 1970
Wire Your Backyard for Stereo

by Leonard Feldman

Increasingly I am asked whether component stereophony is strictly an indoor bloom or whether there is a practical method of transplanting it to backyard, patio, or poolside as warmer weather approaches. If this endeavor seems farfetched, reflect for a moment on how much outdoor music we do encounter in the summertime. Not only is the music festival firmly established as part of the summer scene, but nearly every town and village boasts some sort of band-concert program at least once during the warm months. With that much exposure to the idea of outdoor music, there’s no reason to turn off your electronically reproduced music just because temperatures climb. But transferring your favorite music from living room to patio does involve some aesthetic and technical considerations.

Anyone who has tried to sing or shout outdoors has found that sound does not carry the way it does within the confines of a room. It takes much more acoustic energy to convey audio intelligence over a distance of a few yards in the open than in any indoor area. In a closed-room environment, much of the sound reaches our ears by a complex series of reflections from all the undamped surfaces, including wooden furniture, glass and metal objects, and the like. The sum of these reflections is often called the reverberant effect of the listening room or just plain room acoustics. Even a relatively “beamy” speaker has the opportunity to spread its sound throughout the room so long as the acoustics are sufficiently live, particularly in the treble range. Without room effects, as in outdoor listening, virtually no reverberant sound energy reaches the listener, since the sound coming from a speaker system dissipates in all directions with only a small fraction reaching the listener’s ears.

It follows then that for speaker systems of equal efficiency, greater angular dispersion of the sound and much more electrical power will be needed for an outdoor system than would be required for indoor listening. The difference in power requirements alone dictates the need for high-efficiency speaker systems when one contemplates an outdoor installation. An alternative, of course, is to use higher amplifier power, but if you already have selected your electronic system with your indoor listening needs in mind, that may not be a practical alternative.

In experimenting with outdoor stereo listening, you’ll find that another great difference exists vis-à-vis indoor stereo. As a rule, stereo separation is optimized in a living room of average size by spacing the two speaker systems eight to fourteen feet apart. For an outdoor installation, however, that much spacing may be too wide. Even when you listen at a distance of over twenty feet from the sound sources, about eight feet of separation between outdoor speakers is all you’ll need for good stereo. More separation than that produces a sonic spread with a weak center or, worse, a sense of two distinct mono program sources instead of real stereophony. No doubt the lack of a backup wall contributes to this difference. But whatever the cause, you must allow for the effect in planning an outdoor stereo installation.

In all but the very driest of climates, a conventional paper-cone loudspeaker diaphragm will not stand up for long under the variations of temperature, humidity, and moisture that typify an outdoor environ-

Leonard Feldman, an electronics engineer, is the author of Hi-Fi Projects for the Hobbyist and innumerable articles in the field of audio.
Sound traveling directly from loudspeaker to ear will do so in much the same manner whether the speaker is indoors or on the lawn—as indicated by the solid arrows. This direct sound is only a small fraction of the speaker's total output, however. Most of the remainder is dissipated outdoors, whereas it would reverberate from walls and furniture indoors, reinforcing direct sound and increasing apparent volume.

Most people, I feel, prefer a more permanent and convenient setup than that, and there are speaker systems specifically designed for outdoor use. As I discuss their characteristics, you will note that such speakers are much more than weatherproofed versions of their more conventional counterparts. Many of the criteria I have mentioned, such as improved angular dispersion and efficiency, have also been engineered into these systems.

While ordinary lamp cord or "zip cord" is satisfactory for most indoor runs to loudspeakers, it is not the wire to use in connecting outdoor speakers. First, the gauge of this wire is usually #18, which is too small for runs longer than fifteen to twenty feet between amplifier output terminals and speaker inputs. In all probability, your outdoor speakers will be located considerably further than that from your amplifier, necessitating the use of a heavier wire gauge (#16 or #14) if audio power is to be transferred from amplifier to speakers with little loss along the way. Furthermore, zip cord doesn't last too long when used outdoors. Usually it is insulated with neoprene or some other rubbery compound that does not resist extreme cold or extremes of moisture, so it tends to become brittle and develop cracks.

I know of many attempts by serious music listeners to weatherproof their conventional speaker systems in order to use them outdoors. Waterproof metal and plastic enclosures have been used to surround five sides of the system, and even miniature waterproof awnings have been affixed like hat brims, extending out over the front radiating surface of the enclosure. In every instance, however, the speakers could not withstand weather conditions for much more than one season. Of course there is no reason why, having installed the necessary runs of speaker wires, you can't move your existing speaker systems outdoors each time you want to listen to them and return them to their accustomed indoor location when you're through.
I have found that two-conductor, unshielded twisted-pair cables, such as Belden No. 8471, are ideal for outdoor speaker wiring. This particular cable is made up of two #16-gauge conductors, each of which is vinyl-jacketed, with a chrome-colored vinyl outside jacket surrounding both conductors. The over-all diameter of this cable is a little greater than one-quarter of an inch.

Incidentally, do not use antenna cable or lead-in for connecting outdoor speakers. Even the heaviest of twin-lead or coaxial types is not suitable, for though its outer covering is quite heavy and extremely durable under all weather conditions, the gauge of the wire found inside is usually #20 or even smaller. This is fine for delivering minute signals to the TV or FM set since negligible current is involved, but for transferring audio power in significant amounts it just won't do.

You might think it desirable to bury your speaker cables below ground level to avoid unsightliness in your backyard paradise. However, unless you are prepared to pass the cable through lead or copper-pipe tubing before burying it, I do not recommend the procedure. Even vinyls and other plastics may react in time to the chemicals and minerals present in the soil. It is for this reason that most private dwellings still get their electricity and phone service via overhead wires. The cost of sheathing and burying these feeders on a home-by-home basis, and doing the job properly, is prohibitive for the utility companies. So take your cue from them and string your speaker lines high above the ground as inconspicuously as possible. Incidentally, it is perfectly all right in stereo installations to run both dual-conductor cables alongside each other—even twisting them together if you like—to form a single run. Their paths can be split at the terminating end near the final speaker locations with no introduction of crosstalk or any other adverse effects. Direct runs from amplifier to speaker systems will prove satisfactory for distances of up to about sixty feet.

For greater distances or for multiple-system installations, such as might be required to cover an extensive lawn area, the use of matching step-up and step-down transformers is strongly recommended. The 70-volt line system often used in hooking up public address speakers should be considered. In case you're not familiar with this system, the brief description that follows will enable you to apply it to your own installation.

Power utility companies step up supply voltages for long-distance runs to reduce voltage drops along the line. It is possible to apply this same technique to power/voltage/current relationships in transferring audio power from one location to another. As an example, let us suppose a power company has to convey 120,000 watts from one location to another, the distance involved is 100 miles, and the resistance of the cable is 0.1 ohm per mile, or a total of 10.0 ohms. If the utility company were to attempt to transmit this power at 120 volts—the requirement at the user end of the transmission—Ohm's law dictates that the current involved would have to be 1,000 amperes. \[ I = \frac{P}{E}, \text{ where } I \text{ is current, } E \text{ is voltage, and } P \text{ is power.} \] The voltage drop along this line (found by the formula \( E = IR \), where \( R \) is the resistance of the line) would be 10,000 volts. Obviously, with only 120 volts available at the source in the first place, no voltage would reach the end point at all!

On the other hand, if the voltage at the source were first stepped up through a transformer to 120,000 volts, the new current required to supply 120,000 watts of power would now be reduced to only 1 amperes. That 1 ampere traveling along 10 ohms of line resistance would cause a voltage drop of only 10 volts, reducing the end voltage to 119,990 volts, which can easily be stepped down to the required 120 volts by means of a second transformer at the receiving end. The power dissipated in the line under these circumstances would be a mere 10 watts (10 volts x 1 ampere) of the total 120,000 watts supplied.

In applying these principles to audio systems, sound engineers have adopted a nominal audio-supply standard of 70 volts. (Actually, it's 70.7 volts.) That is, for any power amplifier, a step-up transformer can be used to raise the maximum audio voltage to 70 volts instead of the few volts normally associated with 4-, 8-, or 16-ohm output impedances.

Let's see how this dodge works. A 50-watt am-
plifier, for instance, delivering full power to an 8-ohm load normally would develop 20 volts of audio signal across the speaker leads at a current of 2.5 amperes. If a step-up transformer were inserted ahead of the transmission line to the speakers, raising this output voltage to 70 volts, the current required to develop the same 50 watts in the load would be only 5/7 of an amper, reducing the voltage drop and attendant power loss in any long lines used to reach the speakers.

A step-up transformer such as Triad's new S-44-Z, available from electronic parts distributors, is suitable for use with amplifiers having power-output ratings of from 15 to 50 watts per channel. For stereo applications, one transformer is needed for each channel. The 4-, 8-, or 16-ohm winding (usually defined as the secondary) is connected to the speaker-output terminals on your amplifier, while the other winding (primary) feeds the long speaker lines. The primary taps are labeled in terms of power rather than impedance, and the particular transformer mentioned has taps for 15, 25, 40, or 50 watts. Choose the taps that correspond most closely to the rms power-output rating of your amplifier.

In adopting the 70-volt system, you actually have altered the impedance of your amplifier output, so the ends of the lines to each speaker cannot be connected directly to the speaker terminals without an impedance mismatch. The converse transformation, back to conventional voice-coil impedance, is accomplished by installing additional, smaller step-down transformers at each speaker location.

Depending upon the number of speaker systems involved, the power rating of these individual transformers will be less than that of the main amplifier step-up transformer. Thus, if you are using an amplifier rated at 50 watts per channel and want to drive five speaker systems per channel at remote locations all operating at about the same power level, each of these speakers will require a step-down transformer set up for 10-watt operation. Triad's S-71-Z is typical of such smaller transformers and has the advantage of providing several primary taps that enable you to select the power output desired at each speaker location. The ratings are 10 watts, 5 watts, 2.5 watts, and 1.25 watts.

In 70-volt installation schemes, all lines are wired in parallel (in much the same way that all electrical appliances are plugged into the power company's 120-volt AC source). So the 70-volt audio system allows today's high fidelity amplifiers to be treated as constant-voltage sources. With the heavy voltage feedback applied to modern amplifiers, this approach will work unless you exceed the total power capability of the amplifier.

In outdoor stereo installations, phasing of both speakers in the stereo pair is every bit as important as it is in conventional indoor installations, and therefore should be checked carefully. If matching transformers are used for 70-volt distribution, color-coded cables alone will not insure correct phasing. To check your installation, listen to any monophonic material while standing directly between the left and right channel speakers. Then reverse the connections to one of the speakers, settling for whichever connection yields the most focused sound and the best over-all bass response.

In multiple outdoor stereo speaker installations it is usually desirable to provide some sort of on/off switch. Many receivers and amplifiers are now equipped with terminals for remote speaker selection; and if you have only one pair of speakers outdoors, in addition to your indoor systems, you can use the remote-speaker terminals along with the switching on the front panel of your receiver or amplifier. If your set lacks such a switch you can add one as an accessory. The switch should remain indoors, ahead of the long speaker lines, since few if any of these speaker switches are intended for outdoor use over extended periods of time. If you own solid-state equipment, use care in selecting a commercially available speaker switch. Many of these devices have shorting-type terminals, which place a direct short across the output transistors when the switch is between positions. With vacuum-tube circuitry you can use almost any multiple speaker switch—for example, Lafayette Radio's six-speaker switch No. 99E00549 or their No. 99E00531, a three-speaker switch that enables you to select any one speaker or combinations of two and three speakers at once. For owners of solid-state amplifiers Lafayette has introduced a three-position switch (No. 99E01745) handling both the stereo channels but capable of selecting only one of three speaker pairs at a time.

Any level controls also should be installed indoors, ahead of the speaker-line runs, since the commercially available units likewise are not intended for use under extreme weather conditions. Of course this separation of level control from listening site, perhaps by considerable distances, represents an inconvenience: you may have to run back and forth a couple of times before you can establish the desired sound levels. But once you become familiar with the requirements of your outdoor locations, you can make notations or marks right on the level-control faceplate to indicate preferred settings.

Relevant speaker specifications are more difficult to determine than those for any other component. Since this subject is discussed at length elsewhere in this issue, there's no need to belabor the point here. But keep it in mind when reading the table of outdoor speaker models that accompanies this article. The specifications for acoustical performance that you will find here generally are not impressive compared to those for large, indoor systems. But considering their size and the requirements of weather-proofing itself, that is not surprising. Keep in mind...
too that these specifications are supplied by the speaker manufacturers, no two of whom may determine their figures in quite the same way. The figures, then, are only the roughest of guides to the performance you can expect from a given model.

Our advice with respect to the specifications we list is to consider them first in terms of power-handling capacity, dimensions, and price. The tonal response is something you'll have to judge by listening extensively, as you would in selecting your indoor speakers. Ideally you should audition your speakers outdoors, the way they will be used; but this is not practical unless your dealer is extremely co-operative and lets you take samples home on approval, or unless you know someone who already owns the systems you contemplate buying. Or you can use a very large, heavily damped room, with as much sound-absorption material as possible (draperies, carpeting, etc.) as an approximation of outdoor listening conditions.

The list of speaker systems is by no means exhaustive. Manufacturers are constantly adding new products and many have indicated that they are researching the whole area of high-quality outdoor speaker systems.

Finally, may I suggest once again that you should not expect concert-hall performance from any outdoor system. The fact is, you are not in a concert hall; and when you stop to think of it, live outdoor concerts don't sound like concert-hall performances either. They are, nevertheless, very pleasant to hear on a warm summer evening and well worth the bother of attending. Similarly, the effort involved in selecting and installing one or more pairs of stereo loudspeaker systems in your own outdoor area can prove uniquely rewarding.

### Strictly for the Great Outdoors

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Designation</th>
<th>Power Capacity</th>
<th>Frequency Response (Hz)</th>
<th>Impedance</th>
<th>Dimensions (inches)</th>
<th>Weight (lbs.)</th>
<th>Price</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Altec-Lansing</td>
<td>829A</td>
<td>20 watts</td>
<td>60-15,000</td>
<td>8 ohms</td>
<td>14 1/4 x 17 1/4 x 12 1/4</td>
<td>10 1/2</td>
<td>$77.50</td>
<td>Infinite baffle; free standing or wall mount.</td>
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<tr>
<td>R. T. Bozak</td>
<td>B-1000</td>
<td>15 watts</td>
<td>50-10,000</td>
<td>8 ohms</td>
<td>21 x 18 x 12</td>
<td>20</td>
<td>$89.50</td>
<td>Infinite baffle; free standing.</td>
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<td>Electro-Voice</td>
<td>Sonocaster I</td>
<td>30 watts peak</td>
<td>70-13,000</td>
<td>8 ohms</td>
<td>16 1/4 x 17 x 5 1/4</td>
<td>6</td>
<td>$25.00</td>
<td>8-inch speaker; portable, free standing case.</td>
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<tr>
<td></td>
<td>Musicaster IA</td>
<td>30 watts peak</td>
<td>80-10,000</td>
<td>8 ohms</td>
<td>21 1/2 x 21 1/4 x 8 1/2</td>
<td>29</td>
<td>$70.00</td>
<td>12-inch speaker; portable-style free standing case.</td>
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<td></td>
<td>Musicaster IIA</td>
<td>30 watts peak</td>
<td>80-16,000</td>
<td>8 ohms</td>
<td>21 1/2 x 21 1/2 x 8 1/2</td>
<td>31</td>
<td>$90.00</td>
<td>12-inch coaxial speaker; portable-style free standing case.</td>
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<td>Frazier</td>
<td>FB-1K (Patio)</td>
<td>15 watts continuous</td>
<td>50-15,000</td>
<td>8 ohms</td>
<td>15 1/2 x 15 1/8 x 8 1/4</td>
<td>18</td>
<td>$49.95</td>
<td>Two-way ducted port system; wall mount (can be corner mounted).</td>
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<tr>
<td>Jensen</td>
<td>HF-100A</td>
<td>25 watts continuous</td>
<td>60-15,000</td>
<td>16 ohms</td>
<td>24 3/4 dia. x 11 1/4</td>
<td>23</td>
<td>$92.85</td>
<td>Two-way; compression tweeter, folded-horn woofer; bracket mount.</td>
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<td>Mfg. Div.</td>
<td>TXC-56</td>
<td>100 watts continuous</td>
<td>100-10,000</td>
<td>8 ohms</td>
<td>9 5/8 x 40 1/8 x 5 1/2</td>
<td>33</td>
<td>$150.00</td>
<td>Sound column containing six 5 1/4-inch speakers.</td>
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<tr>
<td></td>
<td>TXC-84</td>
<td>100 watts continuous</td>
<td>50-10,000</td>
<td>8 ohms</td>
<td>13 1/8 x 52 3/8 x 7 1/4</td>
<td>54</td>
<td>$177.00</td>
<td>Sound column containing four 8-inch speakers.</td>
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<tr>
<td>University</td>
<td>MLC</td>
<td>15 watts music power</td>
<td>150-15,000</td>
<td>8 ohms</td>
<td>12 3/4 x 9 1/4 x 10 1/2</td>
<td>10 1/4</td>
<td>$75.08</td>
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<tr>
<td>Sound</td>
<td>CLC</td>
<td>30 watts music power</td>
<td>55-14,000</td>
<td>8 ohms</td>
<td>22 3/4 dia. x 12 3/4</td>
<td>13 1/2</td>
<td>$128.15</td>
<td>Direct radiator, rear horn loaded; bracket mount.</td>
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<td></td>
<td>WLC</td>
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<td>50-15,000</td>
<td>8 ohms</td>
<td>33 1/2 dia. x 20</td>
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<td>$362.95</td>
<td>Two-way folded-horn system; bracket mount.</td>
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<tr>
<td>Utah Electronics</td>
<td>HFOD-8</td>
<td>30 watts peak</td>
<td>35-19,000</td>
<td>8 ohms</td>
<td>10 7/8 x 10 7/8 x 5 1/8</td>
<td>5</td>
<td>$24.95</td>
<td>Direct radiator; portable case can be wall mounted.</td>
</tr>
</tbody>
</table>

As the accompanying article points out, these weatherproof speakers are not the only means of moving stereo outdoors. Any available compact speaker system can be used temporarily outdoors in good weather as long as speaker efficiency is high enough and sound dispersion characteristics broad enough to provide adequate coverage of the listening area.

June 1970

59
By Donald R. Hoogenstyn, Jr.

I Love It, I Love It Not

Now you can rate your musical preferences with scientific precision

In this frenzied age, when so many problems defy a simple solution, many individuals find themselves approaching certain subjects with a sense of apprehension and confusion. In the world of music, for example, some listeners often experience a great deal of difficulty in accurately determining how they should react to various compositions. If asked to decide between two or three favorites, these people register varying degrees of indecisiveness, ranging from mild uncertainty to ungovernable hysteria. But now, through the miracle of mathematics and modern data-processing techniques, all this confusion may have reached its final cadence.

Using the revolutionary Preferential Indicator, anyone may easily evaluate a composition and rapidly compute its status. The Indicator is a scale consisting of five broad categories, each of which is subdivided into smaller, more specific sections. The broad categories are 1) structure of the composition, 2) instrumentation, 3) nature or mood, 4) the era in which it was written, and 5) the composer.

The subjects covered by the smaller subdivisions are more flexible, making it possible for anyone to adapt the Indicator to his own personal requirements. Under the category devoted to structure, for example, one will find subdivisions for symphony, concerto, and other forms; under instrumentation, we note subdivisions that stand for the composer's use of instrumental groups (strings, brass, etc.), scoring for a solo instrument, and vocal writing; nature or mood takes into consideration melodic appeal, dissonance, and intelligibility; the era contains sections for baroque, classic, Romantic, etc.; and the composer is examined both from the standpoint of his nationality (English, Russian, Swedish, etc.) and his personality (is he, or was he, a religious person? vulgar? shy?).

To evaluate a composition, the listener gives certain numerical values—from zero to minus three—to the subdivisions which relate to the work in question. In other words, the listener is rating his displeasure within each subdivision. (It seems to be easier to criticize what you don't like than to specify what you do. Only a professionally trained musician would be advised to work with a Preferential Indicator based on plus ratings—but then he probably would not need an indicator in the first place.) A zero is the best score and indicates no displeasure at all—thus, an ecstatic reaction—within a particular category. A minus one reflects a lesser degree of delight and represents a listener's minor objections to something or other. When a reaction is even more negative, a minus two applies, and of course, a minus three denotes total displeasure and rejection. The status of a composition is the sum of these subdivision scores, a low total (i.e., minus four) indicating a favorable over-all impression.

As proof of the Indicator's efficiency and accuracy, we need only observe how a typical music lover manipulates the scale. Consider, for example, someone who adores opera. He likes easy-to-whistle Italian melodies and Romantic music in general. By adapting the scale to his own interests, he may quickly calculate his reaction to any work from Monteverdi to Malipiero.

Our Italian opera buff begins with an evaluation of Verdi's Falstaff. He awards fat zeros in the appropriate subdivisions (i.e., opera, length, instrumentation, melody, intelligibility, Romantic, Italian, etc.), giving it a perfect score. Another Italian opera, however, Boito's Mefistofele, sinks to a score of minus eight. Why? Two points each are deducted for an objectionable emphasis on brass, percussion, Germanic influence, and philosophical content. Rossini's William Tell comes nearer the mark with a minus-six score. This is because of minus-two scores due to its length (beyond our listener's limit of two and a quarter hours), Germanic influence (the Schiller play on which the opera was based), and unintelligibility.

How about Gabrieli? Thoroughly Italian, Giovanni's score, while good, is not perfect. The Canzoni for brass choirs score minus two in the fourth category (era), and of course minus three for the emphasis on brass. Mendelssohn's Italian Symphony also does rather well with its loss of only five points—two for being a symphony and three for Mendelssohn's Germanic background.

But another German symphonist, Mahler, is an entirely different matter. His Eighth Symphony scores minus thirteen in the first category alone (two for being a symphony, two for length, and
nine for number of movements, poor use of sonata form, and other unorthodox structural characteristics). In the next category the "Symphony of a Thousand" amasses an additional minus fifteen for the excessive number of strings, brass, woodwinds, percussion, and vocal forces employed. Seven points are deducted in the third category for objectionable philosophical influence, unwhistleable melodic line, and unintelligibility. The post-Romantic subdivision in the fourth category removes another two points, and six are lost in the composer category. The grand total for Mahler's Eighth is minus forty-three, putting it completely outside the pale.

But Mahler's score does not put in the poorest showing recorded by our Italian opera buff. That honor goes to Wagner, whose Parsifal breaks all records. In the structural category, the use of leitmotivs receives minus three—an ominous beginning. Nine more points are subtracted for length (three for each act), and three for unorthodox operatic form. Like Mahler, Wagner scores fifteen points for excessive instrumentation. Nine points are withdrawn in the mood category for religious atmosphere, scarcity of melodies, and total lack of intelligibility. Since Wagner was a Romantic, the fourth category happily earns a zero, but this beam of radiance is effectively canceled out with a reduction of twelve extra points in the composer category. Parsifal retires ignominiously with a minus-fifty-one.

An opera lover, of course, is not the only listener who may benefit from the Indicator. The piano aficionado may obtain equally satisfying results. One particular specialist had always adored Chopin's First Concerto and therefore was somewhat surprised to find that the Indicator gave it a score of minus twelve. Since this reflected Chopin's weak orchestration, Hofmann's solo piano version was analyzed and received a score of only minus one. The single point—in the concerto subdivision—was subtracted because without the orchestra the term "concerto" becomes erroneous. Our connoisseur happily listens to the orchestralless version these days in total bliss.

He also finds that Bach's Concerto for Four Harpsichords receives a rather impressive score—minus eight. Most of these points occur not because harpsichords are used instead of pianos (only two points are lost for that reason), but because the concerto was originally written (by Vivaldi) for four violins. Such a distinction is dubious, to say the least.

An analysis of our man's rating of the original piano version of Mussorgsky's Pictures at an Exhibition and its orchestral arrangement by Ravel will be instructive. The piano version naturally achieves a favorable score of minus ten. Five points are from the composer category, and three of these result from the personality subdivision. The orchestral version predictably tallies up an embarrassing total of minus twenty-eight. The extra points are for excessive instrumentation, unintelligibility, and French influence (see chart).

Although a lover of most piano music, this particular keyboard enthusiast cannot avoid giving Scriabin's dissonant Ninth Sonata a score of minus twenty-two. This is due to the work's odd use of sonata form, undiopatic piano writing, lack of melody, deficient intelligibility, the era involved, and the composer himself. The Sonata's subtitle, "Black Mass," doesn't help matters, since our connoisseur is also a theologian. Scriabin's symphonic poem Prometheus receives an even poorer score (minus thirty-three) despite its prominent piano part. A partial breakdown of the score reveals that twelve points are deducted for excessive instrumentation, especially because Scriabin has thoughtlessly included a color organ. (The color organ also appears as a factor in the intelligibility subdivision, giving it an unusual place in this analysis.)

Another music lover—a music appreciation instructor—has a weakness for baroque music. Through his use of the Indicator, Handel's Royal Fireworks Music understandably gets a zero score. However, he notes that Leopold Stokowski's massive version of this work is a little too flamboyant and definitely unauthentic, so the conductor's interpretation receives a score of minus fifteen. Excessive instrumentation contributes twelve points, while three are given for unintelligibility.

Schubert's Unfinished Symphony makes a better showing with its minus fourteen. Nevertheless, it fails in the areas of form, instrumentation, intelligibility, Romanticism, and Schubert's shy personality. But the Symphony does receive one zero score because it was not completed, and two minus-one scores for length (one point for each movement).

He has less sympathy for Bruckner's Romantic Symphony, which loses two points for being a symphony and three each for unorthodox sonata form, extreme length, heavy instrumentation, lack of melodic interest, unintelligibility, Romanticism, and the composer's eccentric personality. Score: minus twenty-three.

One might guess how Berg's Violin Concerto would fare in the hands of this particular listener. Its poor showing results from the strange use of sonata form, twelve-tone technique, baffling instrumentation, unintelligibility, and other factors. It receives a minus two for dissonance, the full three points being withheld because of Berg's use of a Bach chorale in the final movement.

A lover of contemporary music, however, would necessarily have a different view of the Berg concerto, and he consequently awards it a score of only minus three. Zeros occur in most areas, except in the subdivisions of concerto (minus two) and dissonance (minus one for the chorale melody in the last movement). On the other hand, this contemporary music aficionado would give a miserable rating to Lalo's Symphonie espagnole. It receives minus two for its form, twelve for instrumentation, six for French and Spanish influence, three each for melody, intelligibility, era, and composer. Lalo is thus eliminated from further consideration with a score of minus thirty-two.

Stravinsky's Rite of Spring emerges much more impressively, with a score of minus six. Excessive
lyricism and intelligibility account for most of these points. Vladimir Ussachevsky's electronic Creation-Prologue does better with a minus four. Our avant-gardist adds that this work could have achieved a perfect score if it had been purely electronic (that is, not defiled by the added choral part), and if it had dealt with a different subject. However, perfect scores are obtained by Schoenberg's String Trio, Babbitt's Composition for Synthesizer, and Webern's Quartet for Violin, Clarinet, Tenor Saxophone, and Piano.

Even though the five basic categories of the Preferential Indicator allow an accurate evaluation of compositions, a more expanded analysis may be desired. In that case, additional categories and subdivisions may be inserted. For instance, interpretation could become a factor, as it was in the baroque enthusiast's analysis of Stokowski's Royal Fireworks. Other possibilities, for advanced dilettantes, include sections for meters and keys with subdivisions that include cross rhythms, frequent meter changes, bitonality (note: polytonality—the simultaneous use of more than two conflicting keys—is seldom heard as such), chromaticism, etc.

The inclusion of these supplementary categories naturally increases the size of the Indicator considerably. As a result, the user may want to construct a large wall chart containing all the necessary data. This would make an attractive addition to any music room or home library, while also serving as a handy reference source for the lucky owner. For practical purposes, however, the five basic categories are sufficient. Ideally, of course, they should be memorized, together with the subdivisions. The simple formula Pl = s + i + n + e + c may help one to remember at least the five main categories.

By using the Preferential Indicator regularly, any music lover will conquer confusion forever. When someone asks, "What do you think of this piece?" he may confidently respond with, "Minus thirty-one."

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**Selected Subdivisions**

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<tr>
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<td>leitmotiv</td>
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**PREFERENTIAL INDICATOR**

- **Pictures at an Exhibition**
  - piano version
  - orchestral version

- **Score:**
  - piano version -10
  - orchestral version -28

*A piano aficionado's Pl of the two versions of Mussorgsky's Pictures. The use of orchestral instruments lowers the orchestral version's rating considerably.*

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**HIGH FIDELITY MAGAZINE**

62

www.americanradiohistory.com
If you've been looking for a compact speaker system that would give you big sound reproduction from an ordinary amplifier, knock on wood. Thanks to JVC's paperwork, they're here. We call them our new High Efficiency (HE) line, and they're specifically designed to exploit less powerful amplifiers with maximum effect.

The secret of the HE systems is in the cone paper, specially developed to give it exceptional air permeability, which in turn means a significant increase in the output sound pressure level.

In other words, by employing this special paper, JVC makes it possible for the HE systems to deliver the same sound volume as conventional systems while needing only one quarter as much power.

JVC does its paperwork. And this is just one example of how such research is passed on to you in the form of improved, more sophisticated audio products.

Model 5340. 4-way 4-speaker system. Handles up to 80W peak. Frequency response: 20-20,000Hz. Crossovers: 1,000, 7,000, 10,000Hz. Impedance: 8 ohms. Price: $229.95.

Model 5304. 4-way 4-speaker system. Handles 80W peak. Frequency response: 30-20,000Hz. Crossovers: 1,500, 7,000, 10,000Hz. Impedance: 8 ohms. Price: $149.95.


See the JVC dealer nearest you and let him show you how JVC's paperwork has made the difference in giving a big sound boost to compact speaker systems.

*Suggested list price
How to recognize a stacked deck.

No matter how elaborate your home stereo sound system is, it's incomplete without a tape deck. And Sony/Superscope brings you the most complete line of stereo tape decks in the world. Decks that fit all pocket-books, that suit particular systems, that meet specific needs. And every Sony/Superscope deck—regardless of price—is the finest money can buy. Each instrument is flawlessly crafted, with rigorous testing at every step of construction. Then each instrument undergoes a complete series of quality-assurance tests—performed by skilled technicians at one of the most modern and sophisticated tape-recorder test facilities in the world. So you may be sure that the Sony/Superscope product you purchase will give you years of trouble-free service. The Sony/Superscope deck that's exactly right for you is at your dealer's now.

SONY SUPERSCOPE
You never heard it so good.
DUNE BUGGY CHARACTERS
SOMETIMES WEIGHS 3/4 GRAM

The same inertial forces that make a vehicle airborne when cresting a hill affect the tracking force of the phono stylus. Record surfaces, unfortunately, are a morass of miniscule hills and valleys. When the stylus is nominally tracking at 1 gram, this force significantly increases as the stylus enters a "hill," and decreases as it begins the downward "plunge." In addition, frictional characteristics of the tone arm or record changer mechanism may further affect uniformity of tracking forces; however, the Shure V-15 Type II Improved Cartridge retains its trackability throughout the audio spectrum. It accomplishes this difficult task within a critically determined latitude of tracking forces (3/4 to 1 1/2 grams) to insure continuous contact with the groove walls regardless of the varying tracking forces caused by the hills and valleys in a record groove.

Here is why fractions-of-a-gram are important to record and stylus-tip life: 3/4 gram tracking exerts a pressure of 60,000 lbs. per sq. in. on the groove walls—and this rises to 66,000 lbs. per sq. in. at 1 gram, and 83,000 lbs. per sq. in. at 2 grams. At 2 grams you have added over 11 1/2 tons per sq. in. to the groove walls over 3/4 gram tracking! Think about it.

Shure V-15 TYPE II IMPROVED
Shure Brothers Inc., 222 Hartrey Avenue, Evanston, Illinois 60204
CIRCLE 51 ON READER-SERVICE CARD
new equipment reports THE CONSUMER'S GUIDE TO HIGH FIDELITY EQUIPMENT

OUR NEW SPEAKER REPORTS

Since this issue of HF breaks one precedent by introducing laboratory-derived measurements in its speaker test reports, we decided to put another sacred cow out to pasture by running together four reports on the same type of product. The products—you guessed it—are all speaker systems.

Running these four reports is, however, no mere caprice on our part. For one thing, by covering a very wide price range (we have come up with speaker systems costing $10, $70, $600, and $1,800) the four reports appearing simultaneously provide insight into relative differences in performance that may be found among speaker systems priced significantly far apart from one another. Moreover, by choosing units that operate along different acoustic principles (we have a miniature air-suspension direct radiator, a modified bass-reflex model, a transmission line system, and a triamplified system made up of electronic dividers, electrostatic panels, and matrixed dynamic bass) we have subjected the new test program itself to a most rigorous test.

The results presented in the following reports amply document that our new test procedure works well indeed—whatever the speaker design. Next month we return to normalcy with a more balanced representation of different product types, but for now our four-in-hand project has turned up some interesting results.

RADIO SHACK MINIMUS 0.5


COMMENT: The smallest and lowest-priced speaker system we ever have tested, the Minimus 0.5 stands about as tall as a paperback book and makes a sound that belies its ultrapetite dimensions, its low price, and its modest name. Although it won’t provide full bass or extreme treble, you can count on it to furnish a measure of clean sound that, by today’s standards, certainly represents a good ten dollars’ worth. The Minimus 0.5 can serve as an extension speaker, or improve the sound of a small radio set, or—in twos—become the stereo pair in a modest system using an amplifier that will feed them with no more than 10 watts average power per channel. Rated impedance is 8 ohms, and you may connect the Minimus 0.5 by its screw terminals or a phono jack, both of which are at the rear. The speaker may be positioned vertically or horizontally.

The measured response of the Minimus 0.5 shows a rapid roll-off below 200 Hz and a somewhat less steep roll-off above 8 kHz. Over-all, the response runs within plus or minus 8 dB from 110 Hz to 12,000 Hz. The broad midrange area is surprisingly smooth except for a peak at about 3,000 Hz, which frequency—along with that of 5,000 Hz—shows a fairly directive or beaming tendency. This effect will tend to make the speaker sound either brighter or smoother depending on your position in the room.

Measured impedance is 9 ohms, and impedance remains very smooth over the speaker’s operating range, rising gradually at the high end. Thus, paralleling a Minimus 0.5 with another 8-ohm speaker should present no overload problem to a solid-state amplifier.

Distortion measurements confirmed the low-end response readings; the speaker simply produces no clean bass below 100 Hz. Upper bass (or “lower midrange”) distortion, however, is very low up to a 90-dB output level, which can be achieved with an input of 7.5 watts power. At 3,000 Hz some ringing was observed, which relates of course to the rise in the response curve at that frequency and the attendant beaming effect noted.

For noncritical listening, and particularly in a small room, the Minimus 0.5 is—within its response limits—
pleasant enough, and a pair can provide a modest sort of scaled-down stereo reproduction. Just don't try to pump the Poulenc Organ Concerto through them at full volume.

**CIRCLE 144 ON READER-SERVICE CARD**

**Minimus 0.5**  
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<td>95</td>
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</table>

*Data on all tested speakers is taken until a level of 100 dB is reached, or distortion exceeds 25 per cent, or the speaker produces the spurious output known as buzzing.

**LAFAYETTE CRITERION 200A**

forcing the amplifier to look into less-than-optimum impedances. If you plan to parallel speakers for extension use, the 200A can be helpful in that at no frequency will the paralleled impedance be less than 5.5 ohms—well above the danger point in terms of possible damage to the amplifier.

Separate tweeter and midrange controls are provided on the recessed rear panel of the 200A. Lafayette uses the terms "brilliance" and "presence" respectively, and perhaps these words better describe the action of the controls since there is some interaction between them, the midrange knob raising and lowering the level of the tweeter's output somewhat along with its own. But lab data indicate that the action of both controls is in any event more complex than one might suppose. At 9 kHz, for example, decreasing the setting of the presence knob from its mid-point increases response at that frequency, while increasing the setting reduces response. The same can be said of the brilliance control's action at about 16 kHz. For this reason, optimum settings of the controls to match the speaker to the room are problematical, involving the trading of one factor against another in the search for the most satisfactory sound.

The three curves for frequency response—which represent an over-all performance of 50 to 15,000 Hz ± 9.5 dB—help to explain why. The pronounced sag in on-axis response in the neighborhood of 1 kHz, coupled with a treble range that is somewhat peaky and beamy (indicated by the spread between on-axis and average response curves, particularly at those frequencies where peaking occurs), make it difficult to get enough highs into the off-axis signal without over-balancing the midrange weakness on axis. We found the discrepancy less noticeable in a large, live room than in smaller spaces with absorbent materials that inhibited reverberation, however.

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**COMMENT:** The Criterion 200A is one of a series of bookshelf speaker systems now being offered by Lafayette under its own brand name. Essentially a modified bass reflex design, it employs a ducted port to augment the bass response of its 12-inch woofer, which is crossed over at 700 Hz to an 8-inch midrange cone, in turn crossed over at 5,000 Hz to a 3-inch metallic dome tweeter. The dividing network is housed inside the enclosure, a neatly styled, sturdy cabinet finished in oiled walnut and framed in ebony and gold trim. Rated impedance is 8 ohms; the power-handling capacity of 50 watts program material listed by Lafayette was easily confirmed by lab tests at 55 watts. The Criterion 200A may be positioned vertically or horizontally. Connections are made at the rear using screwdriver terminals color-coded for polarity.

The nominal impedance of the system as measured in the lab is 11 ohms and the impedance curve is relatively smooth. While the fact that actual impedance values at all frequencies lie somewhat above the rated impedance of 8 ohms means that most solid-state amplifiers “seeing” the higher impedance will operate at a bit less than maximum efficiency into it, this relationship is preferable to the converse:
Response characteristics, fairly typical of this price class of speakers, were good but not ideal. Bass rolls off sharply below 100 Hz with some loss of firmness, clarity, and focus in the sound, particularly in big orchestral effects. The extreme highs also roll off, though the peaks in the upper range, particularly at high brilliance settings, prevent an over-all impression of dullness in the sound.

The harmonic distortion figures indicate clean response down to about 80 Hz. Some mid-frequency ringing showed up in lab scope tests and was heard as a slight blurring of very loud passages, particularly of brass instruments.

A relatively efficient speaker, as bookshelf systems go, the Criterion 200A could be driven to a 94dB output level with only 8 watts of amplifier power. In view of its 55-watt capacity, we'd say that it can be used with amplifiers supplying from 10 to 75 watts average power per channel.

In sum, the Criterion 200A may be taken as representative of speakers in its price class. It delivers sound that is noticeably less smooth and natural than many audiophiles would prefer, yet is good enough to provide satisfying listening, even over long periods, for less demanding listeners.

CIRCLE 143 ON READER-SERVICE CARD

<table>
<thead>
<tr>
<th>Criterion 200A</th>
<th>Harmonic Distortion</th>
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</thead>
<tbody>
<tr>
<td>Output Level</td>
<td>80 Hz</td>
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<tr>
<td>(dB)</td>
<td>% 2nd</td>
</tr>
<tr>
<td>70</td>
<td>0.35</td>
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<tr>
<td>75</td>
<td>0.44</td>
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<td>80</td>
<td>0.46</td>
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<tr>
<td>85</td>
<td>0.50</td>
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<tr>
<td>90</td>
<td>0.46</td>
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<tr>
<td>95</td>
<td>0.45</td>
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<tr>
<td>100</td>
<td>0.95</td>
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IMF TLS
MONITOR MK II


COMMENT: With the TLS speaker we reach a distinctly superior performance level. The unit's wide and smooth frequency response, low distortion, and excellent dispersion pattern should appeal to owners of very high quality home stereo systems in addition to studio personnel seeking a reliable reproducer of monitor caliber.

The monogram TLS stands for "transmission line speaker system" and refers to both the loading used for the bass portion and the separate loading used for the midrange portion. A detailed explanation of the theory behind it is available from the manufacturer.

Briefly, however, the woofer in this system is mounted on the front baffle but its rear faces a long folded passageway that terminates in two openings near the bottom of the baffle. Specially stranded layers of sound-absorbent material in this passageway absorb the rear sound waves, but the open end adds acoustic mass to the woofer diaphragm, increasing its effective area, and providing for strong bass with relatively little diaphragm motion. Boxiness in the sound is eliminated, and strong, clean bass is coupled into the room. The woofer itself, a flat, rectangular "sandwich," is made of plastic. It covers the range from below 30 Hz to 350 Hz.

The midrange section employs a five-inch plastic cone which also is installed on the front baffle and which, again, looks into a unique passageway at its rear. This "line," which extends to the rear of the enclosure, is damped to avoid spurious reflections of sound. The driver covers the range from 350 Hz to 3,500 Hz.

The highs in this system are handled by a "mid-tweeter" which crosses over at 12,000 Hz to a "top-tweeter." Frequency crossover to the four drivers is provided by a network within the enclosure, itself a handsome and sturdy cabinet made of high-density building board laminated with Formica. The system has two controls, one each for midrange and highs. Rated input impedance is 8 ohms. The TLS is recommended for use with amplifiers that can supply at least 30 watts average power per channel.

The measured curves indicate unusually good re-
This feature, and becomes especially natural sort of sound but at all exception ally smooth.

The bass end holds up beautifully, with no false peaking and no serious roll-off either. The three curves, representing different listening positions, follow each other very closely, indicating very good dispersion characteristics and the ability of the speaker to sound very nearly the same at all frequencies from virtually any part of the room. This feature, by the way, contributes not only to a natural sort of sound but helps maintain a firm stereo image, and becomes especially important when listening to complex musical passages.

Distortion, tabulated in the accompanying table, was outstandingly low at sound pressure levels up to 95 dB (which represents a full symphony played very loudly), becoming relatively high only at 100 dB which is beyond a normal home listening level. Even then, at its worst, the distortion was no higher than many a speaker system typically might have at lower output levels.

Measured impedance (at 80 Hz) was 7 ohms; across the audio range it averaged 8 ohms, dipping to 6 ohms only at 4,000 Hz. All told, the impedance characteristic of the TLS is very smooth and thus permits the speaker to load itself to amplifiers very easily.

Lab tests indicate that it will handle up to 42 watts of amplifier power before any sign of overload. It needs 31 watts to produce a 94-dB output level. These figures, taken with manufacturer's recommended power requirements, indicate that amplifiers capable of supplying 25 to 60 watts per channel would be well suited for driving a pair of TLS speakers with maximum stability and excellent transient characteristics. Measurements of the effects of the rear controls indicate a variation of plus or minus 2 dB from about 500 Hz to just below 3,000 Hz (for the midrange control), and a similar variation from about 5,000 Hz to 20,000 Hz (for the highs control). The slight lift or attenuation provided by either control is completely linear and introduces no peaks or dips in the over-all response.

All told, the TLS went through its lab tests with the ease and authority of a champion. The only annoyance encountered was a buzz at high levels due to the fact that the screws holding the woofer in place had somehow loosened. Once they were tightened the buzz vanished.

Listening tests confirmed the lab measurements in all respects. In our rather live room, we opted to set the controls to their minimum (-2 dB) positions. On any program material we played, the speakers presented sound that was transparent, full-bodied, and balanced. Although these speakers are not advertised as omnidirectional, they provided room-filling stereo when simply placed against the wall a normal distance apart.

CIRCLE 141 ON READER-SERVICE CARD

TLS Monitor Mk II Harmonic Distortion

<table>
<thead>
<tr>
<th>Output Level (db)</th>
<th>35 Hz</th>
<th>80 Hz</th>
<th>400 Hz</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>% 2nd</td>
<td>% 3rd</td>
<td>% 2nd</td>
</tr>
<tr>
<td>70</td>
<td>2.87</td>
<td>1.67</td>
<td>0.78</td>
</tr>
<tr>
<td>75</td>
<td>1.67</td>
<td>0.41</td>
<td>0.64</td>
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<tr>
<td>80</td>
<td>1.17</td>
<td>0.70</td>
<td>0.68</td>
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<tr>
<td>85</td>
<td>1.53</td>
<td>0.83</td>
<td>0.50</td>
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<tr>
<td>90</td>
<td>1.10</td>
<td>1.02</td>
<td>0.63</td>
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<tr>
<td>95</td>
<td>1.11</td>
<td>2.80</td>
<td>1.07</td>
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<tr>
<td>100</td>
<td>3.20</td>
<td>0.87</td>
<td>9.10</td>
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INFINITY SYSTEMS SERVO-STATIK I


COMMENT: Big, complex, and costly, the Servo-Statik I embodies several design concepts that make it fascinating just to discuss. But you must hear this system to appreciate it; without a doubt it is one of the very finest sound reproducers ever offered. The test data indicate outstanding performance in all areas, and listening tests easily confirm this excellence. For enthusiasts who can afford both the cost of, and the installation space required by, the Servo-Statik I, it can offer second-to-none acoustic performance.

To understand how this speaker system works, refer to the block diagram on the next page. Signals from the stereo system's preamp are fed to the Servo-Statik I's servo control amplifier, which also functions as an electronic crossover. This unit divides the total frequency range on each channel into highs, middles, and lows. The highs and middles are kept separate. The bass is matrixed and then amplified within this unit. The highs must be fed to an external stereo power amplifier, which in turn drives the upper part of each electrostatic panel. Similarly, the midrange for each...
channel is fed via another stereo power amplifier to the larger portion of each electrostatic panel. The mixed and amplified lows feed directly into the bass commode; additional leads link the control unit to the woofer and carry the feedback signal that triggers the servo action in the bass amplifier. Sliding controls on the unit permit adjusting relative levels of highs and lows to suit room acoustics, program material, and individual tastes.

The servo amplifier/control unit is compact and stylish enough to place alongside other units in one's installation. The electrostatic panels occupy the positions in a room usually taken by conventional left and right channel speakers, while the bass commode may be placed wherever convenient. According to the system's designer, the mixed bass approach was used here not as a convenience or a compromise (vis-à-vis separate bass on each channel), but rather because it introduces a sonic advantage. He points out that ordinary full-range systems actually do mix the bass below 100 Hz acoustically as the sound emanates from the woofer into what he calls "very non-linear rooms." By mixing it beforehand electronically, then amplifying it through the built-in 110-watt rms amplifier, and further controlling it via a feedback/servo device, the designer claims fuller and smoother bass than is possible with conventional speakers. Furthermore, such low frequencies are inherently non-directional and, regardless of the position of the bass commode, you do get the fullness of strong bass power in the reproduction. The overtones that identify different musical sounds, and the instruments producing them, occur above 100 Hz, and since these frequencies are handled by the left and right electrostatic panels, the stereo image is not degraded as a result of the common bass reproduction.

The Servo-Statik I, by the way, uses elements especially designed for the system. They are not standard units that have been assembled eclectically. The woofer is a new product; it has an 18-inch diameter (for which 16 inches of piston action is claimed) and a sensing element on its voice coil to send a signal back to the servo amplifier to correct its vibrations. The amplifier itself is rated for 110 watts rms and is capable of peak powers above 200 watts. The electrostatic panels are also new designs, utilizing narrow strip elements for tweeter reproduction and

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**Servo-Statik I**

<table>
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<th>Harmonic Distortion</th>
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<tr>
<td><strong>Output Level</strong></td>
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able at the present state of the art. It runs from below 25 Hz to 20,000 Hz within plus or minus 3.5 dB—which, for a speaker, is altogether remarkable. Moreover, it is a very smooth curve showing no real peaks or dips and indicating a most natural and faithful reproduction of signals from the lowest to the highest tones in the musical spectrum. Note too how very close to each other the three curves run, no more than 2 dB apart anywhere along the response range. This feature shows an excellent dispersion of sound energy with no beaming and the ability of the system to sound the same from any listening position in a room while maintaining a very firm and convincing stereo image.

The careful engineering that went into this system is further evidenced by the very low distortion figures, which were measured through the entire system, including its electronic crossover and servo-bass amplifier. Further confirmation of the system’s very clean response was found in pulse-tests, which showed an absence of serious ringing or hangover, indicating superb, rock-solid bass, clear, transparent treble, and excellent transient behavior.

All of these characteristics were readily confirmed in listening tests, during which several experienced listeners unanimously agreed that they were hearing stereo reproduction second to none. The complex orchestral and choral passages of Bernstein’s demanding recording of the Mahler Third Symphony (COL M2S-675) came through with a fullness, clarity, and sense of breadth and depth that were exhilarating. As one of those present commented, “I doubt that Bernstein himself heard it any more clearly during the performance.”

The system is of course very expensive—and to realize its full performance potential you do require additional costly amplifiers. The midrange response, in particular, demands enormous clean amplifier power if it is to blossom out into the room. According to the manufacturer, any high quality unit that can supply at least 75 watts rms power per channel and that remains extremely stable under capacitive loads will suffice. The high-frequency sections of the electrostatics also require a very stable amplifier, but with somewhat more modest power output, from 25 to 60 watts rms per channel. You thus can easily spend in the neighborhood of $2,500 or more to set up this system (and that figure doesn’t include a main preamp and whatever program sources you opt to use). But those who can manage this kind of expenditure may not want to settle for anything less once they listen to the system.

CIRCLE 142 ON READER-SERVICE CARD

REPORTS IN PROGRESS

Crown D-40 Amplifier
Concord Mark III Tape Recorder
Sherwood SEL-100 Turntable

Quad Amplifier Report—Price Addendum

We have been advised by Harmony House, Inc. that the prices stated for the Quad preamp and power amp [HF, March 1970 test reports] were for units that had been part of a commercial system supplied with special auxiliary equipment provided by the New York dealer. These prices also included delivery charges and an extension of the normal one-year guarantee to five years. The actual consumer selling prices for these units—and this has been confirmed by another dealer, Audiolab of New Brunswick, N. J.—are: Model 33 preamp, $148; Model 303 power amp, $183. Current U.S. prices for other Quad products are: the stereo FM tuner, $138; the electrostatic speaker, $260. These prices include a one-year guarantee.
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The SX-770 (shown below) offers 70 watts (IHF) of music power. You can build a complete stereo system around this versatile AM-FM receiver. It incorporates an FET front end and two IC's in IF strip. Two speaker outputs plus 5 sets of inputs promise endless hours of listening pleasure. Boasting many refinements found only in much more expensive units, the SX-770 features a Lunar Glow tuning scale. Elegantly styled in an oiled walnut cabinet. $249.95. Of course, you'll have to decide who gets which Outperformer.

You may also wish to consider the SX-990 (130 watts—IHF, $299.95) or the SX-440 (40 watts—IHF, $199.95). Hear them all at your Pioneer dealer. For further information write direct.

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West Coast: 1335 West 134th St., Gardena, Calif. 90247 • (213) 323-2374 & 321-5076 • In Canada: S. H. Parker Co., Province of Ontario

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CIRCLE 47 ON READER-SERVICE CARD
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ROBERTS 650XD
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3-head system including 1-Micron Gap Play Head with "LTG"* for amazing fidelity... $199.95

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JUNE 1970
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Shostakovich's Banned “Babi Yar” Symphony in the Original Version

RCA captures with perfection
Ormandy's totally inspired performance

by Royal S. Brown

It is one of those ironies inherent to negativistic thinking that the Russian government, in periodically attacking the music of Dmitri Shostakovich, has paid an enormous tribute to the power and universality of the composer's work. I don't think there has ever been any question of Shostakovich's loyalty to the Soviet regime. Yet most of Shostakovich's greatest compositions are shot through with a mélange of sardonic humor and a deep-seated pessimism that on more than one occasion has been regarded as a challenge to the “socialist realism” aesthetic sanctioned by the Russian government. And so perhaps it is not surprising that the monumental and grim Thirteenth Symphony has caused Shostakovich's most recent clash with the powers that be. Although the Thirteenth was premiered in Russia in December of 1962, the score did not reach this country until last year. Before then, the music could be heard in the West only through a recording pressed by Everest (3181). This tape apparently originated from the third and last live performance of the work (in 1965) in the Soviet Union. RCA's new release, recorded shortly after the first performance of the Shostakovich Thirteenth outside the Soviet Union, proves to be a disc well worth waiting for on every count: rarely has such a totally inspired performance been captured with such perfection.

Probably the first thing that should be mentioned about this recording is that, unlike the Everest release, it presents the original sung text of the Symphony. It was, of course, the use of Yevushenko's poem Babi
Shostakovich's Banned "Babi Yar" Symphony

Yar in the first movement—and not the music itself (which remained unaltered in the later performances)—that got the Symphony in hot water in Russia, and a second performance was not allowed until Yevtushenko agreed to make a slight revision in the poem (a revision that does not appear in the some half-dozen Russian and English versions I have come across in various publications). The change, as incorporated into Shostakovich's Symphony, occurs shortly after the climactic restatement of the opening theme during the transition between the middle section (which deals with Anne Frank) and the last section of the movement. After the male chorus has re-entered with what can be considered the Babi Yar motif, there is an extended baritone solo. In the original version, which starts with the words "Ee sun ya" ("And I myself"), the poet identifies with the thousands of people who were murdered by the anti-Semites. The revised version, on the other hand, begins with the words "Ya damayu..." ("I think"); here, the poet tells of the martyrdom accepted by the Russian people as a whole, and how they fought against Fascism. The two versions coincide again with the words "Nothing within me will ever forget this," the last line sung by the baritone before the re-entry of the chorus. The modification, intended to soften the poem's attack on Russian anti-Semitism, obviously makes little difference as far as the eventual fate of the Symphony is concerned. Since, in fact, this new release presents the original version of a work still awaiting the Russians' official blessing even in its revised version (although there are indications of a studio recording having been made in the Soviet Union), one cannot help speculating as to just why the Soviets let the score out of their hands...or whether they had much to say about it.

Musically, the Thirteenth marks a new phase in Shostakovich's symphonic output. To begin with, it is the composer's first truly successful choral composition (one is tempted, in fact, to call it a "symphonic cantata"), disregarding the afterthought choral finales of the Second and Third Symphonies and a fair amount of occasional music. Although Shostakovich had been promising to write a choral symphony for some time, apparently he never found a satisfactory text. It therefore seems particularly sad that Shostakovich, so often attacked for his music, should be condemned for his choice of text after finally producing his long-awaited choral masterpiece.

Shostakovich's Thirteenth represents, in fact, a nearly perfect setting of Yevtushenko's poems (five of which are used here). Although one critic has found Shostakovich's music much less "daring" than the Yevtushenko poetry it sets, this is hardly the case. On the level of pure poetic form, Yevtushenko is by no means a "daring" poet, and the relatively conservative musical style of the Symphony is in perfect accord with the poetic technique. Yevtushenko's particular strength lies in what he says, rather than how he says it, and although it is more difficult to judge music in this respect than poetry, there is no question that the tone of the Thirteenth is a far cry from the official optimism and harmonic platitudes of "socialist realism."

Except for the second movement (appropriately entitled Humor), which brings to mind the brilliance and sarcasm of some of Shostakovich's earlier compositions, the Thirteenth does represent a stylistic departure from the composer's previous symphonies, particularly in the moody, dark-hued orchestration, depending primarily on the strings and low brass (whose mellow tones, by the way, are superbly reproduced in this recording). It is typical of the Thirteenth that the long instrumental recitative opening the fourth movement is played on the tuba, while similar passages in earlier works are often given to the English horn or violin. And in many ways, the vocal style, with its quasi-recitative, quasi-folksong lines, is reminiscent of Mussorgsky, and not especially apparent in Shostakovich's other symphonies. Yet one finds even in this highly vocal work, Shostakovich's typical instrumental orientation. More often than not, the Symphony's movements are built around instrumental motives that are seldom repeated in the vocal lines, which very often depend for their character on the orchestral accompaniment. For example, the bitter-sweet, melismatic figure played in duet by the flutes at the opening of the fifth movement gives way to a different theme (also melismatic in character) when the baritone enters, and throughout the movement this pattern is never used vocally. The baritone's theme, on the other hand, later serves as the material for a fugue that forms the movement's central episode as well as for the celeste figure that closes the Symphony.

In comparing this new version by Ormandy with the recording by Kondrashin on Everest, one is immediately struck by the solemnity and grandeur of Ormandy's interpretation, next to which Kondrashin often seems rather glib. In spite of his generally slower tempo, Ormandy has imparted a movement and spirit to the Symphony that give the climaxes a rare musical and dramatic inevitability. It very nearly duplicates the excitement of his live performance of the work in New York's Philharmonic Hall, when all of the forces apparently "peaked." Finnish baritone Tom Krause, in spite of his non-Russian origins, is infinitely more convincing in the solo part than Vitaly Gromadsky on the Everest recording. Not only is his flawless intonation a marvel, but he was quite obviously working on the same aesthetic plane as Ormandy. Aided by the superlative singing of the male members of Philadelphia's Mendelssohn Club, the Symphony's extraordinary intensity is maintained from the chime that opens the work to the one that closes it. With the astonishing clarity and the perfect balance of its stereo sound, this recording should become something of a landmark, and one eagerly looks forward to next year's Ormandy/Shostakovich project: the performance and recording of the composer's much more radical Fourteenth Symphony.


High Fidelity Magazine
Two Sopranos: A Discovery and an Old Friend

An imposing operatic debut by Erzsébet Házy

by George Movshon

There are records that shake not only a reviewer’s self-confidence but his sense of cartography too. He is, after all, expected to have the map at his fingertips, to be able to tell you how the great singers are distributed on the globe and where they are to be found. And it is, at the least, unsettling to come upon a voice and style that (a) he has hardly even heard of, and (b) clearly belongs to one of the very best lyric sopranos in the world.

Nor was it necessary to listen long and hard before reaching this conclusion. The opening track is perhaps the best known of all soprano arias, and there are some forty versions around my house. Very few of them are as good as this one, which gives us all the shy naiveté of Puccini’s little seamstress conveyed in limpid, passionate, and totally convincing singing.

Erzsébet (the Hungarian name corresponds to Elizabeth) Házy sang in the Radio Budapest chorus until her 1961 Manon Lescaut turned her into a star overnight. Critics responded (so the sleeve notes say) to her soaring voice, dramatic power, and personal loveliness; and the first two qualities are amply demonstrated in a somewhat ill-assorted, unplanned, but really irresistible recital disc. The voice itself sounds young, fresh, endowed with just enough vibrato to bring it to life. But what does she do with it in the miracle: here is the kind of full-blooded, headlong, totally committed singing from which great nights are made in opera houses.

Everything is sung in its original language, which gets us some rather Balkanian Italian and Danubian English (“Auw, Shauwus devvy to dineerest Vhiskybar”: by Kurt Weill). The voice seems much too light to deal with the demands of Tatiana’s Letter Aria; but its weight sounds ideal for the Puccini heroines and for Cherubino and Nedda too.

Try Miss Házy if she turns up in the bin of your neighborhood record shop; you won’t regret it, even though Erdélyi conducts the Puccini too slurrily and too slowly. The recording is very satisfactory.

Oh, and by the way, if your summer travels should take you to Budapest this year and you find the opera house announcing a Puccini work titled Pillangókisasszony, don’t turn aside in disbelief; just go in, and wait for Cso-Cso-Szán to sing her aria.


A delectable Catalanian paella by Victoria de los Angeles

by Peter G. Davis

VICTORIA DE LOS ANGELES has explored almost every musical corner of her native land for the phonograph over the years. While all of these discs are worth their weight in diamond needles, her current investigation of Catalan folk and art songs may well be the most gorgeous of them all.

Like most countries, Spain has its fiercely independent regional areas, and Catalonia, located on the southeast coast, has long taken pride in its language, natural beauty, political separatism, and thriving commerce. Rich in all the good things that make life worth living, Catalonia has also evidently imbued its composers with a keen appreciation of the finer elements: seductive melodies, pungent harmonies, and an uncanny ability to translate the poetry of the countryside into music. The four Toldrá songs are especially evocative of the latter—the salty smell of the sea coast, the piney hillsides, the fragrance of a May night. The fourth song, Anacreóntica, is a cute specialty number: Cupid, stung by a bee, runs crying to his mother—but what is his wound, she tells him, compared to the pain of his arrow in a lover’s breast?

Mompou’s little cycle is a mystical, impressionistic evocation of the beloved transformed by the beauty of nature, while Rodrigo (a Catalan by adoption—he was born in nearby Valencia) paints a picturesque religious triptych of David’s harp, St. Francis’ violin, and a conversation between the saint and a friendly grasshopper. The three folksongs are less sophisticated, adding a pleasant ingenious touch to the program.

The performances are absolutely bewitching. De los Angeles seems to save her freshest, sweetest, most feminine and subtly nuanced tonal coloring for the Spanish repertory; every song lies beautifully for her voice and the two orchestras under Ros-Marbà’s sensitive baton capture the mood exquisitely. Don’t miss this irresistible, immaculately engineered recital.

VICTORIA DE LOS ANGELES: “Songs of Catalonia,” TOLDRA: Cançó de grumer; Cançó incerta; Maig; Anacreóntica. MOMPOU: El combat del somni. RODRIGO: Triptic de Mosén Cinto. TRAD.: La Dama d’Arago; El cant dels ocells; Cançó de sega. Victoria de los Angeles, soprano; Orquesta Ciudad de Barcelona; Lamoureux Orchestra, Antonio Ros-Marbà, cond. Angel S 36682, $5.98.

JUNE 1970
Wanda Landowska will always occupy an honored place in the history of musical performance, for it was she who, at first almost single-handedly, brought the harpsichord back into general use in the twentieth century. It is easy for us to perceive the romantic framework within which she conceived many of her performances (including, certainly, the grandioso Pleyel instruments she favored)—but without her initial impetus the musical community might not have been brought to the point where younger musicians, scholars, and instrument builders took the harpsichord seriously enough to complete the job she had begun. Although her work was only a start, it was the start that was critical, and Landowska was one of the most potent protagonists in the restoration of authentic performance traditions for eighteenth-century music—the first step in making current once again the vast pre-Bach repertory now available to us all.

In her last years, something of a reaction set in, particularly among younger people working in the field who were able to recognize, much more easily than could her contemporaries, the extent to which her playing and even her scholarship were rooted in nineteenth-century practice: her tendency to overorchestrate, her often arbitrary way with phrases and rhythms. And yet she remains a very special artist: one need only listen to the famous recording of the Galléberg Variations (Victor LM 1080, still in print) to hear the formidable rhythmic address that she brought to all her playing, or to the two volumes of Scarlatti sonatas (available until recently in Angel’s “Great Recordings of the Century”), with their inimitable wit and precision of characterization.

One aspect of Landowska’s activity on behalf of the harpsichord that has never been directly documented on records was her encouragement of contemporary composition for the ancient instrument—a tradition that has been carried on by Sylvia Marlowe and many others. Although Manuel de Falla composed his Concerto for Landowska, she never recorded it (the composer himself was at the keyboard in the original recording), nor did she ever commit to commercial discs the Concerto champêtre that Francis Poulenc composed for her in 1927-8. Fortunately, a recording of the latter work was taken off the air the last time she played it (November 20, 1949, with Leopold Stokowski conducting), and this is now made available by the International Piano Library as part of a two-disc Landowska memorial set.

This Landowska/Stokowski performance is rather different in character from the brassy, bouncy stereo version made by Aimée van de Wiele and Georges Prêtre several years ago (Angel S 35993), and since the sound quality of this air check is on the thick, muddy side, it does not make a good introduction to the work—the sonic sparkle of Poulenc’s inventive textures (which were worked over in collaboration with Landowska to insure the audibility of the solo part) has to be supplied by the listener. It is not a profound, or even (I think) a structurally very satisfactory piece, and its Stravinskyan surface touches now sound affected when plastered onto the rather un-Stravinskian line of thought; but it is a pleasant, cheerful piece, and Landowska plays with great verve. She also adds a few personal touches in the eighteenth-century manner: ornaments, filled-out harmonies, etc. The orchestra’s few mutis are genuine shortcomings.

The remainder of this set is devoted to Mozart: two concertos (air checks of Philharmonic broadcasts in 1945 and 1946; note that the dates given on the labels are reversed—the correct dates will be found in the body of the article by Denise Restout printed in the booklet) and the F major Piano Sonata, K. 332 (an unpublished French HMV recording made in April 1938). Since Landowska made only one studio recording of a Mozart concerto—K. 537, recently reissued on Seraphim 60116—these two additional examples are decidedly welcome: as in the Coronation Concerto, she exploits to the full the possibilities of improvised ornamentation, cadenzas, and Études (exemplified passages leading into new material). Particularly in K. 415 these are very extensive, so much so that we may now find them somewhat excessive—but remember that Landowska was making a point that badly needed to be made at the time.

Out of curiosity, I made a comparison with the air checks of a 1941 Schnabel performance of this same Concerto with the Philharmonic (representing the pre-Landowska approach: a fascinating, indeed brilliant and profound account, but utterly devoid of any departures from the written text except for the obligatory final cadenza) and Alfred Brendel’s Turnabout disc (an example of the most informed and intelligent present-day playing, with improvisation at the same points that Landowska chose, but more modest—and, we would say today, tasteful—in extent). Brendel’s elaborations and cadenzas strike me as more substantial, inventive, and relevant to the specific works, but (there is no denying the force and rightness of the lady’s convictions about the necessity of such improvisation)

There is also no denying the elegance and point of her playing, even if the orchestral textures in these air checks are on the heavy side and the sound less than ideal (K. 482 is rather better than K. 415, which suffers from a fuzzy ringing on the piano tone; however, two measures are missing in the Rondo of the E flat Concerto). There is some lovely playing here—the delicate shaping of the third-movement theme in K. 482, for example—and I recommend these performances to any Mozart lover with an adventurous ear.

The Sonata, by contrast, is a fairly straightforward performance, barring a couple of ritards, the structural sense of which escapes me (although I imagine that the one in measure 192 of the last movement, first time around, is a result of the 78-rpm side break). It is not a strongly profiled reading (in the manner, say, of Schnabel’s on Pathé COLH 305), but this does not speak any lack of conviction, merely a more subdued idea of what Mozart was up to. The sound is quite acceptable here, despite a persistent surface from the 78-rpm test pressings that presumably served as source material.

The double-sleeve package includes a booklet with photographs, documents, and an essay by Denise Restout, Landowska’s “musical secretary.”

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June 1970

Last March, Bonynge gave us the first recording of La Péri. Burgmüller's 1843 sequel to Giselle; now he provides the first wholly satisfactory recording of Adam's romantic masterpiece of 1841—the oldest ballet which still remains in the active repertoire today. Of the two previous "complete" versions, that by Fokine in Angel monophony, goes back to 1938, while the Fistoulari/Mercury effort, in extremely harsh stereo, dates from 1961. The new set contains additional material, including besides the usual Burgmüller Pas de deux interpretation, the same composer's longer Pas de deux des jeunes paysans. Although I haven't yet received the album booklet, I am assured that it will supply illuminating background and descriptive information comparable with the material that the conductor himself provided for La Péri.

The present Monte Carlo Orchestra is scarcely a match for La Péri's London Symphony, but Bonynge inspires the musicians to their best efforts, and the performance is enhanced by warmly rich stereo recording. Most valuable, and perhaps the most surprising attraction here— at least for anyone who normally finds the music for Giselle unconsciously old-fashioned—is the conductor's ability to suggest a minor masterpiece of imaginative gracefulness as well as a historical monument to the gallic light age. What might have seemed like worn-out clichés are here revitalized, and the tunes once again take on their original freshness. This is how Giselle must have sounded before its charms were imitated or stolen by later, less inventive ballet composers. 

BACH: St. Matthew Passion, S. 244. Heather Harper, soprano; Gertrude Jahn, alto; Kurt Equiluz, tenor; Marius Rintzler and Jakob Stämpfli, bass; Viennna Academy Chamber Choir; Vienna Choir Boys; Vienna State Symphony Orchestra, Hans Swarowsky, cond. Nonesuch HD 73021, $11.92 (four discs).

Any Passion recording that boasts Kurt Equiluz as its Evangelist automatically has a great deal going for it; his reading of the St. John narrative on Telefunken is easily the best available, and here again he sets a standard for future St. Matthew Evangelists. Equiluz may not possess the most attractive tenor voice among the recorded competition, but few can approach his direct yet richly expressive declamatory style.

If the rest of the singers here approached Equiluz' standards, this would be the St. Matthew recording of the decade: while we don't quite have that, there are many attractive features, including a Jesus sensitively and humanly sung by Marius Rintzler, who applies his dark and heavy basso with musicality and intelligence. I also enjoyed Heather Harper, whose slow, hushed reading of "Aus Liebe" (accompanied only by a flute and two oboes da caccia with the continuo silent) is truly spellbinding. Jakob Stämpfli seems to be in better shape here than in some of his recent recordings, and he contributes poetic readings of "Komm stilles Krantz" and "Mache dich." In the former aria a less-than-virtuoso gambist has trouble in disguising the difficulties of his part—worse still; he reads all his dotted sixteths and thirty-seconds something between triplets and even sixteenths. It would be nice to have a different tenor for the arias, but Equiluz does an admirable job and it's certainly preferable to relying on an inferior talent just for the sake of contrast.

Swarowsky has made no attempt to imitate the current rash of "authentic" performances which use a small collection of old instruments and a small choir of boys and men—his mixed chorus is on the large side and his modern orchestra is definitely not a chamber ensemble. (The true baroque aficionados are still hoping for a St. Matthew from the Concentus Musicus of Vienna with the Vienna Choir Boys.) However, the purists will heartily endorse Swarowsky's meticulous and stylistically acute attention to Bach's phrasing and articulation markings, and the generous application of ornaments and appoggiaturas by both the vocal and instrumental performers. Otherwise, Swarowsky makes his presence felt most strongly in the large opening and closing choruses: he begins with a remarkably fervent and intense reading of the "Komm, ihr Töchter," which, in spite of a very fast tempo, never sounds rushed or less than perfectly controlled. Swarowsky closes the first part (most inappropriately, I feel) with a rather fast and breezy, almost light-hearted account of the chorale-chorus "O Mensch, be- wein' dein' Sünde gras." The monumental finale, "Wir setzen uns," however, is given an immensely satisfying and serene performance.

Swarowsky occasionally finds it difficult to achieve a smooth transition into some of the crowd scene interjections—one often notes a slight difference of opinion among the choristers on just when to start singing—but such problems are relatively minor ones, and for the most part these choruses are very effective, especially the terrifyingly intense "Sind Blitze, sind Donner." For the rest, Swarowsky seems to be concentrating on the chorus rather than providing distinguished orchestral support for the arias. There is nothing wrong with the accompaniments and he is certainly more than just a time beater; but whenever a "magi-
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...cal moment” comes along, it is supplied entirely by the soloist, while the instrumentalists play their parts capably, coolly, and with little involvement in the proceedings.

The recording, which originates from Tono in Zurich, seems to be somewhat overcut, and the microphone placement is definitely too close for comfort; but the sound is rich and clean and the balance is usually satisfactory. I found that a slightly cut treble was desirable, however.

Collectors who may have been disappointed with Nonesuch’s St. John Passion (also from Tono) are assured that this production of the St. Matthew is vastly superior—even perhaps the best of the budget versions. Still, I would recommend saving your money for the higher-priced Richter (Archive) or Münchinger (London) productions. C.F.G.

BEETHOVEN: Sonatas for Piano (complete). Daniel Barenboim, piano. Angel SNLV 3755, $61.98 (fourteen discs).

Most Beethoven specialists wait until their senior years before embarking upon a complete cycle of the piano sonatas—one need only think of Backhaus, Kempff, and Arrau, to name the most obvious examples. Even Schnabel, the first to record an integral set, was well into his forties before tackling his historic series. In comparison, Daniel Barenboim is barely out of kneepants—but with this year’s Beethoven bicentennial hard upon us, it is wholly understandable that Angel might well want to rush things a bit.

Although Barenboim’s renditions are anything but rushed (indeed, his slow tempos sometimes border on suspended animation), there are indications that the set itself was a bit hastily prepared. EMI has virtually thrown this gantlet, fourteen-disc tour de force in the public’s face with nary a word about the music or the artist—all we are given is a sheet of paper indicating how the sonatas have been distributed over these discs. It seems to me that anyone interested enough to acquire so expensive and formidable an album would be justified in expecting some annotated material inside. I would also hope that when and if all the sonatas are eventually issued on separate discs, they will be coupled with consideration for those of us who purchased the eight sonatas previously issued. The complete set mixes new with previous re-issues—but does not, incidentally, maintain numerical order.

Another word of warning: with some of the boxy cases (by a colleague’s), it is possible to slide the inner jacket wrongly into the outer. If this occurs, you will need a crowbar the next time you want to hear a Beethoven sonata. Remember, the inner jacket must be inserted with the open side facing upward.

Barenboim’s way with Beethoven is rather difficult to summarize. His readings tend to be emotional but they do not lack intellectualness. In general, he opts for a kind of “free expression,” and one often gets the impression that the performer has more to say than the listener of where a given performance will lead. There is a great deal of poetry, color, and spontaneity in these readings, but frequently I find two elements—simplicity and discipline—notably lacking. One must admire Barenboim’s technical authority (he is not yet in Kempff’s or Gieseking’s class, however), his devotion to Urtext details, and most of all, his desire to explore more than the outer surface of musical meaning. His readings are engaging, alive, full of color and ideas; but for me, at least, they lack any discernible evidence of long-range planning. Whereas a great master like Schnabel, Edwin Fischer, or Kempff could muddle passages, drop notes, and even take liberties with a theme in which one was always aware of a musical entity. Barenboim, on the other hand, lacks the art of transition: often he attempts dangerous changes in the basic pulse and scansion of phrases and—unlike the masters cited above—they are the entire structural edifice out of kilter.

Barenboim is at his best here when he is being himself; his occasional attempts to play a work on a scale beyond his present scope of understanding often result not in grandeur but in tardy—grande liquore and lachrymose sentimentality. At his best, Barenboim’s work is bracing, impetuous, compassionate, and natural. I might add that Barenboim is the unfortunate victim of a cruel paradox. In the days of 78-rpm recordings, artists had to present their performances without the niceties of tape editing. The resulting shellac discs would give you sundry technical mishaps but compensated by affording more concentration, forward drive, and tension. Yet I think Barenboim is too cautious, if a “historical” performance falls short of perfection, but are, conversely, bothered to distraction when a turn is uneven on a modern disc, or when (horror of horrors!) a wrong note or two is allowed to pass. Barenboim, who reputedly favors long uninterrupted takes, is the victim of his own honesty. In some instances, when inspiration is running at high tide, his work here sounds like a real performance; most often, though, what we get falls midway between concern into excitement and studio pluperfectness. I greatly suspect that more stringent splicing might have given Barenboim’s generally assured playing a degree of tightness and profile it sometimes lacks. Often a performance sags toward the regime of a waltz because of microscopic unevenesses of touch or laxities of rhythm which could easily have been corrected.

Here is a rundown on the contents of each disc and a few notes about the performances.

Record 1. The F minor Sonata, Op. 2, No. 1 has been available for some time. I find it robust, broad, romanticized, healthily extroverted, and a bit unsubtle. The A major, Op. 2, No. 2 shows a basic awareness of over-all shape in the first movement, but tends to get slower as the music becomes more difficult. Barenboim alternates between sentimental, exaggerated pointing and aggressive pounding. Decent. But rather soft-centered, overly lyrical performances.

Record 2. The C minor Sonata, Op. 2, No. 3 is quite good on the whole. The first movement proceeds at an average tempo, is imaginatively nuanced but sometimes a bit flawed in articulation (the turns of the second subject, for example). The Adagio is very lush and expressive with round, full-bodied fortissimos, and the finale—brusque and untidy in a few spots—generally sounds fleet, delicate, and convincing. Op. 10, No. 1 gets a rendering that tries to sound Mature and Significant and ends up being merely soporific. Though the opening Allegro con brio is forthright enough, the Adagio drugs and the finale is played at two tempos: a requisite prestissimo for the first theme and an unsuitable allegro moderato for the second (no speed change is indicated). This whole Sonata, moreover, is blunted from an inapt use of the sustaining pedal and is remiss in certain crucial textual details.

Record 3. The E flat Sonata, Op. 7 spares nothing: the slow movement rounded out by the short Op. 14, No. 2. The E flat’s first movement gets an imposing, theatrical exposition from Barenboim with Mengelbergian ritards on climactic cadences. The great slow movement is also disintegrated in the separation of its opening chords. The Scherzo is “playful” in Barenboim’s familiar wise-old-man manner, and his dwelling over so many points in the finale makes it sound bloated and pompous. On the whole, though, the interpretation has warmth and force and is reasonably commensurate with the music’s stature. Op. 14, No. 2 has a moderate, unexceptionable first movement and a statement of the variations full of exaggeration, change, and the deliberate mannerisms that are characteristic of Barenboim’s approach. The Adagio of a pianistic cadenza, almost in point of the “surprise” forte ending of this section—you know beforehand that something is afoot. The finale is rather slow and steady, with a trace of Schnabel in the abrupt stops after some phrases.

Record 4. Op. 10, No. 2 is really ex-
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cellent, the first movement lightweight and lyrical (with very clear articulation), the Allegretto rather cool and fast, the Presto finale full of panache (and very accurate, too). The only things to quibble at here are Barenboim’s predilection to throw an occasional ethereal haze over details and his tendency to make short notes sound like long notes (a problem of design). The D major, Op. 10, No. 3 is unsuccessful. Barenboim sets bourgeois, comfortable tempos and engages in annoying interpretive cliches. The difficult to sustain Largo e mesto slow movement in particular is impossibly directionless and pretentious. The Op. 14, No. 1 is similarly soporific and lacks elan: too many under-workings and an “ashamed allegretto” for the second movement (the tempo is basically correct, but—as in the first movement of Op. 10, No. 3—it always seems to get slower).

Record 5. The previously released “Pathétique,” Op. 13 is well intentioned but a shade flaccid in its generalized romanticism. The first movement introduction is clumsy and atonal. The B flat Sonata, Op. 22 is reasonably clear and solid in its first movement but the succeeding ones are either placid and shapeless to a degree or flustered and flurried. This work demands an elegant sophistication that Barenboim cannot yet command.

Record 6. Both Op. 27 Sonatas are unsatisfactory for different reasons. Op. 27, No. 1 is straightforward and honorific enough but plagued by an intangible tiredness and lack of inspired nuance. The previously issued “Moonlight,” Op. 27, No. 2, by contrast, has plenty of attractive nuance (in the first two movements at least), but is replete with all sorts of offensive intentional mannerisms (such as the cheap device of hesitating before the first beat of every measure in the Adagio movement). The finale flails about wildly and is transformed into silent-movie background music.

Record 7. The theme for the first movement of Op. 26 is very languishing and sentimentalized, and though the variations that follow are more acceptable, they too are not without mishap: the minor No. 3 is droopy, the piuquant No. 4 is also sluggish, and the cantabile No. 5 lacks elegance. The Scherzo suffers from imperfect articulation: the double thirds emerge like wet noodles and the ambiguously accentuated finale is similarly coarse and blurred. What saves—or almost saves—this interpretation is the truly magnificent treatment of the marcia funebre. Barenboim’s anvil strokes and rhythmic freedom here, for once, sound meaner and authentic. Book 2 concludes with Op. 28, which is one of Barenboim’s better performances. Its first movement is unusually broad, reminding one of a Klemperer performance. The Andante (played at a slowish, four-to-a-bar tempo) has a judicious balance between melody and ostinato accompaniment. The Scherzo is slow but well thought out, and the only debits are the shapeless finale and the very disjointed, pretentious ending to the otherwise excellent slow movement.

Record 8. Op. 31, No. 1 is a strongly and vivacious. Perhaps there could be a bit more forward motion and satirical edge to the leisurly, warmly played slow movement, and others have more successfully separated the finale’s melody from its triplet accompaniment. Despite a few dawdling loose ends though, Barenboim’s interpretation held my interest. The previously issued “Tempest,” Op. 31, No. 2 remains a sturdy performance, albeit a shade too characterless in detail. In the slow main, though, the music’s essential truth comes through—and what a wonderful Sonata this is!

Record 9. Op. 31, No. 3 is one of the high spots. Barenboim plays this Sonata with relish and gusto. His unselfish—

The Best of Baker
by David Hamilton

By the time this review appears in print, a complete recording of Les Troyens will probably be in the shops, but I hope it will not cause Janet Baker’s superb performance of the opera’s final scenes to be ignored. An offshoot of the Scottish Opera performances in English a year ago, in which Baker, Greer, and Gibson took part, this recording (sung in French) shows, more than anything I have previously heard, the full range of Janet Baker’s talent and temperament; for this reason, it deserves to outlive the very brief span of time during which it will be the only recording of this music.

In the first of these two scenes (included in abridged form in Angel’s earlier “highlights” set), Dido begs her sister to plead with Aeneas to remain, and then, when the news of his departure is received, orders a sacrifice to Pluto and privately laments that she will die. The final tableau takes place on a terrace of a palace, where the sacrifice is prepared and imprecations are uttered against the Trojans. At its climax, Dido stabs herself and, as she dies, prophesies the future glory of Carthage under Hannibal—but also the eventual fall of her city and the glory of Rome.

Berlioz’ music for these scenes is richly varied: the lovely Gluckian accompaniment to Dido’s plea, with melodic fragments in the cellos and intertwining rhythmic figures; the dramatic recitatives punctuated by violent orchestral gestures; Dido’s highly expressive farewell, with its rocking wind figures; the chorus invoking the underworld, its quadruple meter crossed at the recapitulation with a triple stride in the violins and bass drum; the memorable homage to the composer’s idol Gluck at Dido’s words “Je sens revivre le calme dans mon cœur,” where the orchestral throbbing belies her claim of repose (cf. Iphigénie en Tauride); and, finally, the Trojan March welling up behind the choral oath of everlasting hatred for the race of Aeneas. If you are uncertain about investing in the complete recording of this remarkable opera, this sample should make a good introduction to the spacious musical-dramatic urgency of Berlioz’ masterpiece.

As I have intimated, the performance is excellent, with fine choral singing and orchestral work. The smaller roles are well taken, and I am glad that EMI saw fit to give Miss Baker’s gorgeously sung Dido a complete framework, as they did not do for Crespin’s

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ized brio, firm yet liquid trills, and detailed pointed phrasing stand him in good stead. The previously issued "Waldstein," Op. 53 is impecabbly played technically, yet sags a bit and seems pretentious. In the Adagio molto, insufficient attention to part-playing robs the music of its realistic feel. The outer sections, moreover, are ludicrously slow.

Record 10. The little G minor, Op. 49, No. 1 is well played and attractive as an interpretation. Its opening movement is very spacious and benign, the following "Rondo quasi rubato." The previously released companion, Op. 49, No. 2, gets a "half-and-half" rendering: excited and sanguine in the first movement (agreeable), full of powdered-wig droopiness and prissy staccato phrasing in the Minuet (distressing, though not unusual). Op. 79 is leisurely but full of life. Its first movement demonstrates, for once, exact placement of the subito pianos and the second clearly delineates the relationship between its double thirds and those of the first movement's development section. The F minor is high in quality, with only a trace or two of meretriciousness. The previously issued "Appassionata," Op. 57 is one of those broadly expansive, romanticized versions, but in the main cognizant of the composer's carefully notated instructions. There is a messy detail or two and the important repeat in the last movement is omitted. No matter—I like the performance. Record 11. Both the F major Op. 54 and E minor Op. 90 rank with Op. 31, No. 3 for sheer musical excellence. The cryptic F major is notable here for its perfectly controlled tempos (Barenboim resists the temptation to accelerate the octaves), its glowing colors, and remarkable composer even in the face of difficult off-beat accentuations. The quasi-contrapuntal writing too is masterfully clear. Op. 90 is played in the Arrau rather than the Schnabel manner: tempos are leisurely and affable, with beautiful tone color and intriguing clarification of individual parts. I personally prefer Brusque, less sentimentalyzed treatment of the finale, like Schnabel's or Gulda's, but there is much to be said for this gentler view. Op. 78 is a mite precious and superficial. This elusive little Sonata has more to offer than playfulness and pretty tone. The pianism, however, is well managed—which is more than can be claimed for the pugnacious, untidy "Les Adieux," Op. 81a (which dates back a few years and was previously issued). Recorder: Pappo. I am more successful with both the A major Op. 101 and E major Op. 109. I have always felt the A major Sonata to be rather caustic and objective, but Barenboim almost succeeds in convincing me otherwise. He plays the first movement very thoughtfully, the feeling very tender, the part-writing scrupulously clarified. The Marcia is a bit fast for comfort (rhythmic details, such as the sixteenth notes following the triplets, tend to lose distinction) but the Adagio, once again, has is sultry tone color and floating, velvety momentum. The difficult transition from the first-movement quotation to the finale is spacious and impressive, while the last movement itself, though a bit unpolished technically, proves a suitable conclusion. (It fares best in its lyrical aspects.) The first movement of Op. 109 is taken rather slowly, with delicate, ethereal details. The Barenboim version is not quite the same as is Kraus's (or rather, the Allegro ma non troppo as Barenboim plays it), and though the third movement starts out somewhere near the specified Andante, it becomes dangerously slow because of sundry "expressive" hesitations. There are other flaws in Barenboim's playing (he begins to jump beats and muddle notes), but with so musical a performance, I almost don't care.

Record 13. In the "Hammersklavier," Op. 106, too, one senses a really admirable intent to get at the music's inner meaning. I personally like my Op. 106 leaner, brisker, and more objective (e.g., the Schnabel and Webster versions), but Barenboim's broad, sensuous, monumental reading reveals some unsuspected yet perfectly natural things about this inexhaustible music. At the close of the Adagio, to cite but one instance, the left hand's fourths and fifths are made to sound amazingly akin to Chopin's C sharp minor Nocturne. Incidentally, though Barenboim continues to negotiate the last movement's final cadence, his approach to the fugue is far more muscular, hard driving, and exciting than it was on the 1964 Command version. And while that disc was well recorded, the pianist's manner solid and plangent on the Angel record. Unfortunately, the Adagio continues to be broken between sides.

Record 14. The Op. 110 has already been commented upon in these columns. It remains a well-proportioned, imposing performance, though unusually broad in its pacing. Op. 111 (new here, it has been available for several years in England), on the other hand, is more notable for raw talent and potential than for actual musical result. Rather close in the Arrau interpretation in its rhetorical first movement and ritard-laden account of the variations, the older artist manages it all with much more conviction and finesse. Some of Barenboim's execution here sounds flurried and class.

H.G.

BERLIOZ: La Damnation de Faust. Janet Baker (ms), Marguerite; Nicolai Gedda (t), Faust; Gabriel Baccquier (b), Méphistophélès; Pierre Thau (bs), Brander; Paris Opera Chorus; Orchestre de Paris, Georges Prêtre, cond. Angel SCL 3758, $17.94 (three discs).

Probably because it corresponded most closely to the popular image of Berlioz as a hot-blooded, literally inspired, quintessentially Romantic artist—indeed, as a kind of Faust figure himself—The Damnation of Faust was for a long time the most popular of his large-scale works after the Symphonie fantastique, which obviously fits into the same frame of reference. In recent years it has enjoyed somewhat less of a preponderance of public attention, and this is only the fourth complete recording, as against eight Requems, five Roméos, and six Enfances. The first of the four, a transfer from French Columbia 78s, disappeared long ago, but Charles Munch's mono version and the later Markovitch set (the Barenboim set is not quite so good either) are still around to compete with this new Angel version. I feel obliged to point out, too, that there will be a new Colin Davis version along soon on the Philips label.

The reason this must be mentioned is very simple: none of these three available sets is completely satisfactory, and patience is therefore in order. If the Munch set had been reissued on two records at Victrola prices, it would have made an acceptable bargain indeed, despite Polter's shouting (this has in fact been done by RCA in England, although in "electronic stereo," which is puzzling because genuine stereo master tapes were made at the 1954 recording session). And Markovitch's cuts disfigure an otherwise fine reading, along with the fact that it did enable Deutsche Grammophon to squeeze the performance onto two records instead of three without difficulty.

Since the new Angel set is on three records, it obviously will have to be properly balanced. Better, I think, remain competitive (although I note that Angel's English affiliate has managed to fit the same performance, apparently without cuts, onto two records; it would be interesting to know why the price is higher, although the demand for the American market). Unfortunately, it is not better in most respects.

The main point in its favor is the Marguerite of Janet Baker, a very touching and vocally skilled assumption. Miss Baker is now and then stretched by the upper reaches of the part, but most of the time she sings with beautifully focused tone and warm, natural phrasing; the King of Thule ballad is exquisite in its pure and subtle intonation.

Gedda's Faust is an entirely unknown quantity, but he took part in an earlier Angel "highlights" record; this is very accurate and honest singing, marred only by some failures of ensemble with the orchestra in his two big arias. Gabriel Baccquier gives us a forceful devil, but a rather rough one; he simply doesn't command the vocal suavity to make the proper effect with 'Voici des roses' and similar passages.

The major difficulty in this performance is with the orchestral and choral forces. The Piaf et Théophile are well developed in clouds of resonance, so that many important episodes are simply not satisfactorily audible: the peasants in Part I, the Amen Fugue and the Elbe Scene in Part II, and the Finale of Part III, in particular. And the orchestral playing is far from ideal—gelatinous and bass-heavy in the contrapuntal writing, clean but ponderous in the Menet des jeux-follets. It is this quality in the playing, rather than the compass themselves, that makes much of the performance seem to drag; if Prêtre had elicited more pointed and alert attacks, a good deal of this recording might have been more pleasurable.

D.H.
Some thoughts from Victor Campos on the new KLH $100 speaker system

This is Victor Campos, noted audio authority, musicologist, renowned raconteur, and all-around bon vivant. When asked by his associates at KLH Research and Development to describe the new Model Thirty-Three loudspeaker system, he said, "It's the best $100 speaker for around $100 anyone has ever made — and you can bet your $100 on it."

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COPLAND: An Outdoor Overture; Our Town; Two Pieces for String Orchestra; Quiet City. London Symphony Orchestra, Aaron Copland, cond. Columbia MS 7375, $5.98.

The novelty on this latest Copland-conducts Copland disc is the Two Pieces for String Orchestra, originally composed in 1923 and 1924 for string quartet and transcribed for the larger ensemble in the summer of 1928. The first Piece is elegiac in tone and very suggestive of the wide-open-spaces sound of later works, while the second (actually the earlier of the two) develops a staccato theme foreshadowing another aspect of the composer's later music. They are amiable and effective compositions, very well played by the L.S.O. strings.

The other three works have been recorded before and are, in fact, coupled (together with A Lincoln Portrait) on Vanguard VSD 2115 in performances by Abravanel and the Utah Symphony. They all had very practical origins: the cheerful Outdoor Overture (1938) was written for the senior orchestra of the High School of Music and Art in New York City; Quiet City, a masterfully proportioned modern piece, was based on the 1939 incidental music for Irwin Shaw's play of the same title; and the somewhat circular, slightly monotonous concert suite was drawn from the music for the film of Thornton Wilder's Our Town.

The composer's performances are well paced and reasonably well played, although not quite consistently up to the very high standards that we have come to expect from the London Symphony. In Quiet City, the solo trumpet does not play as comfortably or as idiomatically as his Utah counterpart, so that the total result misses some of the stylishness and cohesion of Abravanel's reading. However, this is a welcome issue, quite attractively recorded, and provided with useful liner notes quoting extensively from the composer's own comments.

DEBUSSY: Chansons de Bilitis—See Satie: Socrate.

GABRIELI, G.: Deus in nomine tuo; Beata es virgo Maria; Jubilæum singuli; Deus, Deus meus; O quam suavis est; Mass: Kyrie, Sanctus; Cantate domino; Domine exaudí; Hodie completi sunt. Gregg Smith Singers, Gregg Smith, dir.; Texas Boys Choir, George Bragg, dir. Columbia MS 7334, $5.98. Tape: $7.98.

The combination of Gabrieli, St. Mark's producer, John McClure, together with Gregg Smith Singers and the Texas Boys choir, has already produced two excellent discs designed to delight both the sound enthusiast and the music lover. The engineering marvels continue to astound me, but the absence of the thrilling brass sound—all the works included here are sung a cappella—removes the spectacular element which distinguished the first two volumes of this series. More musical values take precedence on this disc which is also warmly recommended.

The most exciting and successful works are the joyful double choruses Deus in nomine tuo and Cantate domino, whose enthusiastic spirit, delightful cross rhythms, and bouncy echo effects are irresistible. In these motets, Gabrieli tosses the motivic ball back and forth across the space between the choirs with breathtaking skill. As in the works with brass recorded earlier, sonority plays an important part in the formal design of Gabrieli's choral music. Perhaps the most striking instances here are the excerpts from his twelve-voice Mass. The opening Kyrie is for low choir, and indeed demands an entire section of Mozaratin Omms to negotiate the sustained low tessitura of the bass part. The Christe introduces the sopranos in a second choir, which is skillfully played off against the first. Yet a third group is brought in for the culminating effect of the final Kyrie where the three groups, each maintaining its individual character, combine in an impressive wall of sound. In the Sanctus, the other movement recorded here, the composer uses a more subtle approach exploring both ends of the spectrum within a firm structure. Two other motets on the disc, Jubilæum singuli and Hodie completi sunt also make use of this interplay of choirs and the climactic effect of piling chorus upon chorus.

Although with true baroque spirit Gabrieli is concerned with the affective treatment of the text, he doesn't attempt the harmonic audacities of some of his contemporaries. Even in the more sustained motets, he relies more on momentary dissonance to make his points, preferring to sacrifice some of the dramatic emphasis of the text to the maintenance of a constant stream of sound.

The acoustics at St. Mark's require somewhat slower tempos for these works than one might choose in another location. Occasionally this leads the singers, especially the boys, to sag and drag a bit. There is little or no supple expression in their version of the lovely Beata virgo Maria, for example, and the scored works as a whole come off less successfully than the quicker, rhythmically organized ones. Nevertheless this is an exciting disc. It is fascinating to see what can happen when the big boys like McClure really turn their attention and resources to these earlier periods. Telefunken has recently done a good job for Perotin and his contemporaries, and there are other areas, fifteenth-century ceremonial motets for instance, that would certainly lend themselves to exploitation by the recording technicians. If Gabrieli has proved a commercial success, as I hope he has, perhaps we can hope for more of this kind of thing in the near future.

GIORDANO: Fedora. Magda Olivero (s), Fedora; Lucia Cappellino (s), Olga; Kiri te Kanawa (c), Dimitri; Mario del Monaco (t), Loris; Riccardo Cassinnelli (t), Desire; Piero de Palma (t), Baron Rou vel; Atos Cesari (t), Sergio; Tito

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If you are one who draws pleasure from *Cavalleria rusticana* or *Tosca*, then you are likely to enjoy *Fedora*’s blood and thunder, its melodic directness, and the several instances of musical and dramatic ingenuity in the score. The parallel with *Tosca* is most apt, for not only are the two heroines fashioned from cognate clay, but both librettos owe their origin to plays of Victorien Sardou that were legit vehicles for Sarah Bernhardt. The two operas are closely contemporary, and their composers were simultaneously at work upon them. There is even a bucolic off-stage lament from a young country lad, to match the shepherd boy in Act III of *Tosca*.

At a more meaningful level of comparison, there is a counterpart to Puccini’s *Te Deum* scene which serves to raise the emotional temperature of Scarpia’s rascally soliloquy. In *Fedora*, we have a piano recital (by “Lazinski, nephew and successor to Chopin”) to form the background to a duet in which the Russian princess Fedora extracts from Loris a confession of murder. It is a rather tingly though clearly intended put-on. (Later, in the final act, the orchestra parodies Chopin’s best-known polonaise when Lazinski is referred to.)

A harmless pursuit open to anyone who takes in hand a vocal score of *Fedora* is the tracking down of such allusions, quotations, and parodies, to spot what might in more elevated operas be called the closed forms. There are waltzes (vivacious but uninspired) for the salon scene of the Second Act; effective edelweiss music in the Bernese Oberland of the Third Act, while the principal baritone aria is in fact *kazatska*—or Russian cossack dance—not far away in spirit from Varlaam’s song in *Boris Godunov*. But the main members of Fedora’s structural frame are a half-dozen strong melodic motifs, not quite as fresh or appealing as those of Andrea Chenier but of the same sort: material to be repeated at climactic places for the powerful emotions capable of being aroused by this technique. The motifs are not developed much, certainly not harmonically, though they are variously orchestrated in their successive incarnations; so if the method wins out, it does so by virtue of muscle alone—a rather crude procedure.

The plot is correspondingly brawny. A Russian princess whose husband-to-be is murdered on the family estate, sets off to track down the murderer and unmask him. In Paris, among the *émigrés*, she trap him. When she discovers that Loris is really the good guy and that she is in love with him, Fedora saves him from the pursuing agents of the Czar’s secret police and runs off with him to Switzerland (in search of the sort of rural bliss familiar from *Traviata*, Act II). But there, among the industrious peasants, things go wrong. From far-off Russia comes bad news that makes her hate her; she thus takes poison and, like Luisa Miller, dies a suitably operatic death while tenor Loris emits appropriate solos at her side.

The first Loris was Enrico Caruso, just settling off on his career when *Fedora* was produced in Milan in 1898. The audience, at first hostile, soon warmed to the opera, and the critics were favorably inclined too. *Fedora* was done in ten Italian cities in the next year, then moved on to other operatic capitals where its devotees included Gustav Mahler. Today the work survives principally in Italy, though occasional performances are given in the world outside; there was one in Dallas last year, featuring the star of this recording.

Magda Olivero, as everybody by now must know, was a popular Italian soprano of the Thirties who retired for ten years in 1941, later got “adopted” by the tape underground clique, and has only now won a significant and international band of devoted admirers. Hers is a voice with a special sound, and her manner is arresting, utterly commanding, and distincively musical, though some listeners may be disturbed by a lack of vocal velvet. She is a singer with many resources: a marvelous feeling for dynamics and for the shape of a phrase, a sure way with declamation and atmosphere, which she demonstrated recently in an abridged version of *Zandonai’s Fedora* at the New York City Opera and which is again in evidence here. Though her Fedora is likely to elicit admiration rather than affection—there are some wiry and gusty passages—it cannot be denied that she finds the very soul of this improbable Russian princess and transforms her into an operatically credible character capable of moving the hearer to considerable sympathy. Her diction is classic, she manages a high C with dignity, her passion is persuasive. Of how many other singers who retired in 1941 can you say that?

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**Magda Olivero,** as the Russian Princess Fedora, receives some distressing news.

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things well, in the generally forceful style for which he is famed; but among these is not included the opera’s one famous aria, which is the crown of Loris’ music. “Amor ti vien” is given with a few sliding pitch changes in the very first phrase; and though most of the rest of the part is adequately (and even handsomely) done, it is regrettable that a better take of the best tune in the show couldn’t be had.

The chief baritone part is that of the diplomat De Sirix and here Tito Gobbi gives a lesson almost as instructive as Olivero’s in the conservation and enlightened utilization of available resources. Firstly, there is, as might be said of a baseball pitcher, a lot of “stuff” in him: and he brings off an assured and ingenious character role with only occasional reminders that his voice up to the best time is not what it once was.

All in all, these three veterans bring a great deal of life to Sardou’s tale and Giordano’s music of violence and betrayal. Since you are not likely soon to find a more worthy competitor on records, let me suggest you give it a try. There is much to be discovered, admired, and enjoyed.

Lamberto Gardelli sets a firm pace, handles most of the score with the propulsion it needs. The chorus sounds anemic at times but the players respond alertly; and the recording is entirely acceptable.

HANDEL: Jephtha. Reni Grist (s), Iphis; Helen Watts (c), Storgé; Maureen Forrester (c), Hamor; Simon Woolf (treble), Angel; Alexander Young (t), Jephtha; John Lawrenson (b), Zebul; Arthur Artis Chorale; English Chamber Orchestra, Johannes Somary, cond. Cardinal VCS 1077/9, $11.94 (three discs). After more than half a century of unceasing composition, Handel arrived at the end of his creative career with Jephtha, the last of the oratorios, and the last of his major original works. Jephtha is not the most dramatic of his oratorios, but it is the most poetic, the most searching and, yes, the most religious. Handel did not compose “sacred” music; he comes to grips with the great final questions of life. In 1751 he was in his sixty-sixth year, well beyond the then prevailing life expectancy, his sight was failing, and his forces no longer responded to his imperious will.

He now examines the meaning of life, and in tremendous choral frescoes mediates on what can only be conveyed as his own spiritual fate. There is nothing Christian in the approach to the problem of suffering here. This deeply religious man—for such he was—was attracted to English deism and even to its sometimes pantheistic aspects, searched for answers beyond the ready comfort of conventionality. Religion. The meditation reaches its most penetrating and intense degree in the colossal four-section chorus “How dark, O Lord, are thy decrees,” unquestionably the greatest choral composition in his entire oeuvre, and one of the greatest in all music. Throughout this composition of this philosophical threnody that Handel had to concede the onslaught of blindness. “Got so far as this,” he writes in the score, “Unable to continue because of weakening of the sight in my left eye.”

This self-examination takes place within the well-known dramatic story of Jephtha, the warrior who covenants with the deity that if he wins the battle he will sacrifice the first creature whom he encounters upon his return. The Reverend Dr. Thomas Scott’s librettist, arranged the biblical version of the legend in which Jephtha meets first his beloved daughter, who therefore must be sacrificed. The story is palpably older than either the plays of Aeschylus or Euripides or the biblical tale of Abraham and Isaac, all of them probably going back to a common folkloristic ancestry.

Morell, who up to a point did an acceptable job, invented all the characters with the exception of Jephtha and his daughter, the latter taken from the Bible. The clergyman was something of a literary scholar who studied both the Hebrew and the Greek sources, giving the daughter the name Iphis, obviously derived from Iphigenia. Though he had some dramatic sense, Morell’s melancholy poetry could have thwarted Handel, whose imagination depended to an extent on the verbal imagery of his texts. Yet Morell managed to provide his composer with the necessary poetic imagery by employing a technique he had mastered. He borrowed snatches from Milton, Pope, and other great poets, blending their poetic expressions into his own pedestrian text.

So Handel went to work, in his turn borrowing a great deal from an obscure Bohemian poet, Habermann, from whose Masses Handel lifted thematic material, would have gasped had he seen what happened to his rather ordinary ideas; he had no more claim on them, they had become Handel’s undisputed property. Away. Handel ignored the librettist whenever he did not agree with him, and nowhere did he ignore him more than when he followed his words. The biblical story is simple.

The ancient Hebrews often made treaties or covenants with Jehovah, a practice that was acceptable to the solid English business gentry of the eighteenth century too. But to assure the happy ending demanded by the public, an angel is sent to interpret Jephtha’s oath as being capable of fulfillment by Iphis’s dedication of her virginity to God—a most un-biblical idea. This turn of events also gave Morell the opportunity to dwell on the virtues of virginity with the sentimentality with which the era regarded it. It is important to clarify this situation, otherwise Handel’s attitude in this overwhelming work cannot be explained.

The way the good reverend averted the catastrophe was distasteful to Handel, whose instincts rebelled against the gratuitous twist in the drama, and he was not interested in extolling the virtues of virginity. The result was a work flawed at the beginning and at the end, but magnificent in its core, where the aged and infirm composer found an opportunity to join the trembling with horror and wonder aloud about man’s raison d’être. When he arrived at the words “Whatever God ordains is right,” he changed Morell’s words to a quotation from Pope’s Essay on Man: “Whatever God ordains is right.” All his misgivings about “the composer in ordinary to the Protestant religion” must vanish here.

This man of rocklike principles and the highest ethical standards did compose a deeply religious confession, but one that owed little to the public.

The recording reproduces virtually the entire score. On the one hand it is gratifying to have the whole oratorio available on records; on the other, it is desirable that actual performances should offer the listener an absorbing experience undiluted by extraneous arias and weak spots that hold up or negate the evolving drama. Scholars can study the integral work from the printed score; a “public” performance should always aim at artistic conviction. Where, hand over hand, the few dramatic works are overdimensioned and in need of trimming. It takes Handel some time to wade through Morrell’s platitudes and arrive at the heart of the drama, but from that point onward not one bar is expendable until the last and the numbers following the denouement, where excisions are again needed. The oratorio should end on the great chorus. “Theme sublime of endless praise,” and there are indications that this was originally intended to be the final number, but Handel was compelled to follow the prevailing taste that demanded a happy ending complete with trumpeting halilujahs. The tacked-on family reunion in which everyone “congratulates” everyone else (Morell’s word), and particularly Iphis’s unexpectedly sober, petite-bourgeois advice to her ardent fiancé to look for another suitable girl, since she must preserve her virginity in exchange for the reprove, should be dropped; the innocuous set of choral covenants. Somary is a thoughtful musician and a knowledgeable choirmaster who operates here with excellent forces. The choral singing is outstanding, the orchestra (except for the pinched first

High Fidelity Magazine

Handel, who crowned his career with the poetic and searching oratorio, Jephtha. 94
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CS-6632

Mendelssohn: Sextet in D Major (Op. 110)
Borodin: Quintet in C Minor
Members of The Vienna Octet
CS-6636

FRENCH OPERA OVERTURES
The New Philharmonia Orchestra—Richard Bonynge
CS-6643

Beethoven: Symphony No. 1 in C Major (Op. 21)
Symphony No. 2 in D Major (Op. 36)
The Vienna Philharmonic Orchestra—Hans Schmidt-Isserstedt
CS-6658

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JUNE 1970
recording of this great work, Jephtha is a fine present for all who cherish drama in song.

P.H.L.


This recording reached me shortly after I had heard Marilyn Horne as Adalgisa at the Metropolitan Opera and set me to wondering, although only briefly, how many Adalgisas in history I would care to hear singing the Wagner. Anything that reiterates anybody for Bruna Castagna singing the Canti sulla morte dei bambini?. However, the results in this case are not as satisfactory as might be anticipated.

The basic problem is one of tempo and rhythmic vitality. I think the Kindertotenlieder should be exactly cheerful—but the grief is expressed in so many dimensions of the musical texture that tempo does not have to be made to bear the entire burden. This performance is so limp that it sounds continually in danger of a complete breakdown, an impression reinforced by numerous inexactitudes of ensemble (I'm surprised that such things as the flat piccolo notes at No. 8 in the last song were allowed to pass). Along the way, Miss Horne produces some lovely sounds in the soft passages, but also a quantity of decidedly inappropriate chest tone.

The Wagner songs are not quite so debilitated; in fact, Mahler has a nice idea of how Im Treibhaus should go. However, neither singing nor playing is good enough to make me consider abandoning Farrell and Flagstad (orchestral version) or Lennitz (Wagner's original piano setting). Frankly, my overall impression is that these interpretations need a great deal more exposure and maturity before they will be ready for preservation on disc.

D.H.


In a brief interview on the back of this album, Sir John pays tribute to Bruno Walter as "the original Mahler pioneer." Barbirolli then goes on to recall that his own conversion to Mahler's cause was due to Sir Neville Cardus, who told him, "John, my boy, you do not know it, but this music was written for you."

So, indeed, it appears to be. Barbirolli's Mahler performances are never conventional in the Austro-German tradition, but never are they less than convincing. Frequently measured in pace, deeply felt, and reflecting the romantic side of the composer's nature, they show Barbirolli at his best. Although this version of the Fifth Symphony differs in many details from Bruno Walter's, one suspects it is a performance Walter would view with sympathy and respect.

To get the advice to consumers out of the way fast, every serious Mahler collector is going to want this album simply because of the final side in which Barbirolli and Janet Baker collaborate in the Five Rückert Songs. None of her most serious rivals (Ferrier, Ludwig, Fischer-Dieskau) provide the complete set, and even with all three editions you have nothing as satisfactory to represent the composer's intentions (although the Ferrier performances are of great historic value). So that really decides the issue. Mahler is one of the greatest composers of songs and these are some of his noblest and most beautiful works in the form. The performances are distinguished and well recorded, and one might say would be of less significance than playing the record and hearing these things for yourself.

It is Sir John's belief that "in Mahler's symphonies there are many highlights but only one real climax, which one must discover." I agree that every Mahler performance must begin from an overview of the score that brings its many elements into a musical unity, and structures, scales, and passages the performance into a single whole. Thus I reject the idea that an ideal performance might be secured by taking conductor X's first movement, conductor Y's second, etc. (This might be possible if you had multiple performances of the same conductor. That's another matter.)

Very well, where is the "one real climax" in this Barbirolli album? The answer is difficult because the recording was made in a rather spacious hall that loses a certain edge of the dynamic contrasts. Dramatic logic rather than decibels must be the key. As Barbirolli plays it, this is Mahler's counterpart to the Quartet, Op. 59, No. 3 of Beethoven, music that begins with horrific anticipation and ends with an affirmation of positive and optimistic thoughts. (In the case of Mahler, they suggest the return to the identification with nature that figures so largely in his early symphonies.)

My conclusion is that Sir John builds this work toward the final chorale, placing the high point of the music at the close. The peak of the drama, prior to this, is the codal of the Scherzo with the immediate (and highly effective) contrast of the opening of the jubilantly celebrated Adagietto. And to realize this design, the two opening movements are more subdued than you will find in other performances—although eloquently stated in their funereal tones.

The great historical recording of this music is Bruno Walter's, which is still in the catalogue and very much worth having. The Barbirolli is thoroughly competitive with the other stereo editions if you accept his interpretative approach, and the performance material (as in the case of the Walter) reflects the composer's later thoughts about the instrumentation.

R.C.M.


Of all the fine recordings I Musici has

HIGH FIDELITY MAGAZINE
given us, this is surely one of the most joyous—an unabashed romp in the sun from start to finish. The Mendelssohn Octet is soaring, free, and wonderfully flexible in dynamics; I Musici is a bit more biting and incisive than the Fine Arts group, but closely comparable to the Marlboro ensemble which recorded the piece several years ago—the choice between them is a tossup, and must depend on your preference among the companion pieces. I Musici offers a rare one, Wolf's shimmering, exuberant Italian Serenade in its quartet version (not the version for small orchestra). It is played with delicacy and translucence, seemingly a good argument against the stern warning delivered by the annotator for the score published by the Internationale Hugo Wolf-Gesellschaft (Vienna): Herr Doktor Jančík admonishes those who would have the quartet version performed by string orchestra, maintaining that the music's intimate charm is lost. It isn't when the orchestra happens to be this one. The Rossini Sonata dances all the way—a pure distillation of joie de vivre.

S.F.

MOZART: Concertos for Piano and Orchestra: No. 13, in C, K. 415; No. 22, in E flat, K. 482; Sonata for Piano, No. 12, in F, K. 332. POULENC: Concert champêtre. Wanda Landowska, piano and harpsichord; New York Philharmonic, Artur Rodzinski and Leopold Stokowski, cond. For a feature review of these recordings, see page 80.


SATIE: Socrate. DEBUSSY: Chansons de Bilitis. Marie Therese Escriberno, soprano and speaker (in the Debussy); Michele Bedard, Emiko Liyama, and Gerlinde Lorenz, sopranos; Die Reihe Ensemble, Friedrich Cerha, cond. Can dice CE 31024, $3.98.

I never cease to be amazed by the lack of care that most record companies take in packaging their products. This is, for instance, the third complete recording of Satie's Socrate I know in which absolutely no kind of text is supplied. Furthermore, the program notes (by Darius Milhaud) for this album lead one to believe that the Debussy Chansons de Bilitis recorded here is the song cycle composed in 1899. It is in fact the "incidental music" Debussy composed in 1900 to be played between the readings of twelve of the 143 of Pierre Louÿs' Chansons de Bilitis not included in the original three songs. Happily, these twelve poems are printed in the program notes accompanying the disc.

Outside of these oversights, this release offers an interesting coupling. The Debussy Chansons, written for two flutes, two harps, and celeste, with female narrator, was one of the composer's abandoned projects, apparently brought out of limbo only recently and completed by
Mozart and the Amadeus
by Shirley Fleming

If anyone still needs to be convinced that the Amadeus is one of the great quartets on either side of the Atlantic, a good session with these discs should do the job. It may also cause one—as it has me—to relinquish to a certain degree whatever pet theories one might have held on the subject of European ensembles vs. American. My own theory has been that the former are almost always high-keyed, less pressing, more mellow than the latter. Well, it ain't necessarily so, and the Amadeus recordings of K. 389 and K. 590 prove the point, for they are surprisingly in accord with the Guarneri version, and, in the case of K. 590, not even very far from that of the Fine Arts. Whether the meeting of minds is due to a quickening of the Amadeus viewpoint or a mellowing of the others, I cannot say. But I can say that the golden mean seems to have been reached, and if you are in the market for beautifully balanced, singing, livable accounts of these wonderful works, you need search no further.

Of the four quartets recorded here, the three from the Prussian series are the best (K. 575, K. 589, K. 590). Appropriately enough, the fact that they place so much emphasis on the cello (the instrument of Friedrich Wilhelm II, the recipient of the dedication) seems to have been just the encouragement that the Amadeus cellist needed to erase the reticence he shows in K. 499, where he sounds reluctant to hold up his end of certain violin/cello conversations that are exceedingly important, particularly in the development section of the first movement. (The violinist, be it noted, makes a much bolder showing here—especially in his moments of prominence in the finale.)

The Amadeus recordings are hard to talk about, for the music

narration on the present disc is done between the musical interludes, thus allowing one to fully appreciate the music. Miss Zorina's narration, on the other hand, often overlaps with the music. There also seem to be some slight variations in the Candide release, including the use of percussion in the interlude between the eleventh and twelfth poems. Although the adjective has been applied to many works, one has to say that Erik Satie's Socrate is a unique composition. One often thinks of Satie as a kind of quasi-Dadaist faceuix who drove a small car onto the stage as part of the ballet, Reiche, for which he wrote the music; he was also, however, a man who was seriously involved for a while in the Rosicrucian sect, a man who fought for his own religion, a devout socialist, and a composer quite serious in shaking the very foundations on which music and art are based. It should not be entirely surprising, then, that Satie should take a serious work as the subject of the interludes—the dialogues of Plato—and set it in a "symphonic drama in three parts with voice," which he composed in 1918. Written for four sopranos and small orchestra (one wood wind, one horn, one trumpet, harp, celesta, and strings), Socrate is neither a song cycle nor is it an opera. Listening to it, one is immediately struck by the almost total lack of dramatic movement. The vocal line flows, more often than not, in a kind of continuous melody that rarely leaves a conversational range, while the orchestra plays music typical of the static, Satie style: frequent ostinatos, unresolved, mildly dissonant harmonies, sparse orchestration, etc.

Although it has many good points, this recording of Socrate is not altogether successful. Almost all of Satie's music has a weightlessness to it that is largely responsible for creating the neutral character that typifies the French composer's music. The Die Reihe group's approach to the work is quite heavy in spots; I find the tempo overly slow, particularly in the second movement, which should have a definite 6/8 lift to it. Furthermore, each of the sopranos seems to be trying her best to sound as languishing as possible; and what should be a finely balanced, finely modulated form of a clearly defined melodic line often starts on a semigliss that rises to a deliberate crescendo and then falls away again. Nor am I altogether pleased with the radical separation of the four voices between two speakers—an overly dramatic effect that seems to run counter to Satie's intentions. Although this is the first genuine stereo recording of Socrate and has the best sound of the complete versions available, I prefer the recording conducted by Henri Sauget on a French Chant du Monde release. Although the Sauget performance uses only one soprano (which I find quite effective), it seems to me to be far the most idiomatic interpretation available.

R.S.B.

SCHUETZ: Psalmen Davids (1619): Psalm 6, Ach Herr, straf mich nicht, SWV 24; Psalm 23, Der Herr ist mein Hirt, SWV 33; Psalm 103, Nun lob, mein Seel, den Herren, SWV 41; Psalm 128, Wohl dem, der den Herren furchtet, SWV 30; Psalm 136, Danket dem Herren, SWV 45. Adele Stolle and Rotraud Riedel-Pax, soprano; Fräulein Halsatt, harpsichord, couterenier; Hans-Joachim Rotzsch and Johannes Höfflin, tenor; Wilhelm Pommerien, bass; Westphalian Choral Ensemble, Wilhelm Ehmann, cond. None such H 71235, $2.98.

Just close your eyes for a moment and imagine the splendor and magnificence
of a Giovanni Gabrieli polyphonic and instrumental piece rolling around in the sumptuous acoustics of St. Mark's in Venice—that's just what young Schütz must have done as he penned these twenty-six elaborate and splendid compositions, his first major publication in Germany after returning from four years of study in Venice with Gabrieli. These are not mere imitations of the older master, however. Even in his Italian madrigals, produced under the direct supervision of Gabrieli, Schütz's unique style is clearly in evidence. The Psalms represent the next stage of his development in which his Italian training was completely assimilated and put to the service of German liturgical art—specifically for the court chapel in Dresden of Johann George I, who loved the splendor of these grand, large-scale works as much as the Venetians loved Gabrieli's. Only a few years later the ravages of the Thirty Years War forced the dissolution of most of the musical forces of this magnificent chapel and sent Schütz wandering from court to court for many years. Never again did he have performing forces at his disposal to equal those at Dresden, and never again did he write music for such a lavish array of performers.

The five Psalms on this record present a good cross-section of the compet set. No. 136, Danket dem Herren, the most sumptuous of those included, is a setting for five-part chorus with trumpets, drums, and continuo, alternating line by line with two four-part solo ensembles consisting of two sopranos, alto, tenor, countertenor, and three trombones. In another, the penitential Psalm Straf mich nicht, Schütz restricts himself to two four-part choruses and continuo in a richly chromatic and highly expressive setting. Schütz rarely turned to the Lutheran chorale for inspiration as did virtually all his German Lutheran successors down to Bach, so it may be surprising to come across his setting of Nun lob, mein Seel, den Herren, which uses a hymn text by Johann Gramann paraphrasing the 103rd Psalm and whose music is based on the chorale of the same name by Johann Kugelmann. Schütz's scoring here calls for an SATB solo ensemble, two four-part choruses, and two optional five-part instrumental ensembles. Musicologist Ehmann gives us both versions, once through without the instruments and once again with them. A single performance (with the instruments) would have been sufficient, however, and I for one would rather he had used the extra ten minutes to include another of these almost exotically brilliant show pieces.

Ehmann and the Westphalian Choral Ensemble, whose magnifico two-record set of Kleine geistliche Konzerte was released by Nonesuch a few years ago, give us performances here quite up to the impressive standard established in the earlier set. Many of the same soloists are again present, and especially worthy of praise is tenor Hans-Joachim Rotzsch, for his marvelously rich and expressive singing, and soprano Adele Stolle, whose clean and sweet-toned voice and musician

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Vocal Gold for Trovatore by Peter G. Davis

Recordings of operatic bread-and-butter staples have tapered off considerably in recent years—as long as at least one superstar may be counted upon to grace the cast, most labels have demonstrated laudable enterprise in late in exploring neglected byways of the repertory. Even so, while a new edition of such a standard as Trovatore may not be a burning necessity, a fresh version with a first-rate group of singers is not to be disdained. Luckily RCA has been fortunate enough to assemble an exceptionally fine array of vocal talent for its most recent recording.

That company’s first LP performance has remained something of a classic since its release more than twenty years ago; Milanov in his prime and assisted by such comparable luminaries as Borlenghi, Warren, and Barbieri. RCA’s latest effort comes very close to matching that historic line-up. Leonora has always been one of Leontyne Price’s most congenial vehicles, Fiorenza Cossotto has established a legitimate claim on the mezzo roles of the Italian repertory, and the men are surely two of the most gifted artists from the current crop of younger performers. Trovatore is first and foremost a singers’ opera, and this quartet delivers no doubt about it. Both Price and Cossotto are recording their respective roles for the second time, and the results in each case show a great improvement. Price was fresh from a triumphant Met debut in this opera when she participated in RCA’s 1959 recording. Although there was nothing seriously wrong with her singing of Leonora ten years ago, how much better it sounds today. The voice is slightly darker now, with a rich, creamy quality that completely masks the fluttery vibrato that marred much of her legato singing in the older set; problems with Italian pronunciation have been ironed out and she phrases the music with greatly increased musical authority and expressive sensitivity. True, some of the florid sections are less spontaneous than before—“Di tute amor” is overly cautious and the coloratura tends to be labored—but the performance as a whole is a most satisfying one. In this note-complete recording we get the added bonus of Leonora’s oft-omitted caballeta directly following the “Miserere” (“Tu vedrai che amore in terra”—not especially top-drawer Verdi, but welcome all the same when sung as sympathetically as it is here.

Seven years ago, Fiorenza Cossotto was a promising light mezzo who seemed out of her depth in DGG’s La Scala Trovatore. She has developed impressively, however; her Azucena is now a powerfully dramatic characterization, solid and secure in the lower register, ringing and truthful up (she even manages a stunning high C in her second-act duet with Manrico). This wild gypsy haridan often surfaces as something of a cartoon, but not on these discs: Cossotto’s beautifully balanced singing re-creates what is perhaps the finest all-round Azucena to be heard anywhere today.

If the gentlemen are only slightly less imposing, the faults are those of youth. Placidio Domingo possesses a most ingratiatingly lovely tenor and he is an unfailingly sensitive intuitive musician. Right now one senses more instinct at work than mature artistry and occasionally he throws away a phrase that might have been more supply shaped; nonetheless, this is a performance that always falls gratefully on the ear. Other tenors may boast a brighter top C and more animalistic high spirits, but few can maintain such a steady, tastefully managed经理 of sheer vocal beauty.

Sherrill Milnes shows every sign of developing into an outstanding Verdi baritone—even today’s much to be said for his solid, rich sound (slightly more forward and metallic than that of his predecessor, Leonard Warren). The voice currently works best at medium and full volume: a few spots on this recording show Milnes attempting to swell and diminuendo on a note and the results reveal some loss of quality in the process. All that is needed is a more flexible approach and additional experience to temper an already impressive achievement.

Had a really authoritative conductor been in charge, this might have been the Trovatore to end them all. Not that Zubin Mehta is in any sense incompetent—he sets sensible temps, holds to them, and in general elicits smart, crisp playing from the excellent New Philharmonia. Perhaps with more preparation he could have even achieved something quite remarkable. What is lacking is any real vitality and rhythmic profile to his accompaniments: a solid, workmanlike job, but little else. It would be hard to improve on the smoothly sung contributions of the Ambrosian Chorus, Bonaldo Giaiotti’s sonorous Ferrando, and the fine work of the comprimarios. The sound is a trifle cavernous and the device of beginning each scene “up stage” with the soloists vaguely discernible amid the dank reverberation becomes annoying after a while. Still, as I said before, in Trovatore the voice is king, and in that respect this performance is an uncommonly strong one.

VERDI: Il Trovatore. Leontyne Price (s), Leonora; Fiorenza Cossotto (ms), Azucena; Elizabeth Bainbridge (c), Inez; Placidio Domingo (t), Manrico; Ryland Davies (t), Ruiz; Neilson Taylor (v), Messenger; Sherrill Milnes (b), Di Luna; Bonaldo Giaiotti (bs), Ferrando; Stanley Riley (bs), Old Gypsy; Ambrosian Opera Chorus; New Philharmonia Orchestra, Zubin Mehta, cond. RCA Red Seal LSC 6194, $17.94 (three discs).

SHOSTAKOVICH: Symphony No. 13, Op. 113. Tom Krause, baritone; Male Choir of the Mendelssohn Club of Philadelphia; Philadelphia Orchestra, Eugene Ormandy, cond. For a feature review of this recording, see page 77.


Whether or not an old dog can be taught...
new tricks, it’s certainly possible for a veteran artist to make quite radical changes in his approach to some of the oldest works in his repertoire. Ormandy has been playing Strauss waltzes inef-fably since his earliest concert and re-creating them—well, with the highly mixed results of great mass-published, for example, and interpretative heavy-handedness. As one of his adverse critics on these points, I’m glad to welcome significant signs of change in what is apparently the first of a new Strauss/Ormandy series.

The selections here are not the stereotypical ones, but include four fine waltzes never before recorded by the Philadel-phians under Ormandy—among them my personal favorite, the far-too-seldom heard or recorded Where the Lemon Trees Bloom. The present Tchaikovsky from the Vienna Woods does include the zither solo, although I must complain that Toni Noch’s molto espressivo playing is miked larger than life. But in general, the performances are done with obvious care as well as affection, and the recording is expansively big and open, if with less acoustical warmth than this kind of music demands. And if there is no real challenge to the casual grace, infectious geniality, and unexpectedly catchy lift of the interpretations most highly esteemed by Viennese-tradition connoisseurs well, Rome wasn’t rebuilt in a day.

R.D.D.


Tchaikovsky’s output for solo piano has never been rated very highly. Most of it is of the salon variety, short ABA structures with such typically fanciful French titles as Revive, Veuillets d’album, Chanson sans paroles, and Chanson triste. In those bygone days when every parlor was incomplete without the family up-right occupying a place of honor, many of these charmers were favorites with amateur pianists. And for good reason, too—however slight this music may be, there’s not a piece in this collection that does not show the composer’s customary craftsmanship and ingratiating melodic inspiration. I see no reason why a few of these works could not profitably be slipped into a recital program to balance off compositions of weightier intellectual import.

Amid the trifles, there are several items here of substance that certainly deserve more (frequent) attention. The Sonata in G, despite the sprawling structure and the rather doggedly earnest nature of its musical content (“dry and complex,” was the composer’s verdict), still offers effective moments of sweeping lyrical grandeur when tackled by a sympathetic pianist. Also worthy of note is the sparkling Dumka, Op. 59; the attractive variations worked out Theme and Variations, Op. 19, No. 6; and the ingenious Op. 21, a little suite of six studies on one theme.

Except for the Dumka, all the music on these generously filled discs was written before Tchaikovsky’s fortieth year. Although the collection is not designated as volume one, there are enough works for a companion Vox box—the Children’s Album, Op. 39, The Seasons, Op. 37b; the early C sharp minor Sonata, Op. 80; the Opp. 51 and 72 sets; plus numerous short unnumbered vignettes. Michael Ponti might well surprise us, though, for he seems to have a prodigious learning capacity, judging from the amount of obscure Romantic music he has recorded for Vox over the past year or so. His technical equipment is mightily impressive—most of this music is by no means easy to play—and he has no difficulty in tossing off all the tricky virtuoso passages.

An overly sentimental approach would be a mistake; it does seem to me that Ponti’s secco tone and rather unassuming interpretations often miss out on much of the charm. The familiar tune of the Chanson sans paroles in F sounds a bit mechanical under his objective fingers, and many other graciously shaped phrases pass by in a similarly unaffectionate fashion. Still, Ponti is a thoughtful musician, consistently alert for the detail that might well escape another pianist; he traces the adventures of the Op. 21 theme with exceptional clarity and manages to tame the Sonata into a convincing and, at times, even pianistically exciting statement.

The notes with these discs, by R. D. Darrell, are a gold mine of information on Tchaikovsky, his piano music in general, and the recorded selections in particular; also included is a helpful chronological chart spotlighting the composer’s keyboard oeuvre in relation to the main events of his life and the major symphonic and operatic works. Except for some loss of quality towards the center of the discs, the reproduction is entirely adequate.

R.G.D.


Judging from the cover of this disc—a “camp” montage of period illustrations from the 20s and 30s—Columbia is pushing Randall Thompson’s Symphony No. 2 as a piece of quaint Americana. Well, perhaps that’s not so far from the mark. When Thompson penned this fresh, optimistic music in 1930, the so-called American symphonic tradition was reaching a high noon of thrilling activity, with such composers as Piston, Copland,
and Harris just hitting their stride. Coda in the traditional four-movement sequence, the Symphony speaks with an unmistakably nationalistic accent; jazz syncopations, uninhibited sentiment, and "open-air" harmonic melodic directness. Even when bogging down in the expansive rhetoric of the final pages, it's hard not to feel well disposed toward such a nostalgic reminder of America's age of musical innocence.

Bernstein plays the score affectionately, probably remembering that this was the first symphonic piece he ever conducted back in 1940, with a student orchestra at Tanglewood. It's a rather objective performance, but then Thompson has always been a composer of aristocratic Ivy League detachment. (I well recall during a theory course at Harvard, while G. Wallace Woodworth played an earlier recording of this very work for his music appreciation class, how Thompson became irritated, slammed the door shut, and remarked sternly, "It's very difficult to teach modal counterpoint with your own Symphony in F minor glaring away in the next room!"

Oddly enough, William Schuman's "To These Old Cause" on Side 2 sounds far less vital, even though this "evocation" was inspired by recent contemporary tragedy: the assassinations of Dr. Martin Luther King and Robert F. Kennedy. Many time-honored theorety clichés are brought into play here—the plangent oboe solo, astringent brass chorales, and final consoling consonance. For all the good intentions, though, the piece seems very secondhand and not nearly as sincere and immediate as Thompson's enjoyable from-the-heart remembrance of things past.

P.G.D.

VIVALDI: Juditha Triumphans, Margit László (s), Abra; Zsuzsa Barlay (ms), Juditha; Jozsef Dene (t), OZias; Josef Reti (t), Vagans; Zsolt Bende (b), Holofernes; Budapest Madrigal Choir; Hungarian State Orchestra, Ferenc Szekeres, cond. Qualiton LPX 11359/60, $11.96 (two discs).

Don't let the designation mislead you for a moment: Juditha Triumphans may be the only surviving oratorio by Vivaldi (he wrote one other); but if you chose to ignore the source of the text and called it an opera, you would be stylistically very close to the mark. And as a piece of literature, the story of Judith from the Apocrypha, is as secular as they come—a combination of sex, seduction, and gore. The story, having gone through the hands of Hollywood and Sophia Loren, scarcely needs retelling: Judith journeys forth from her defeated people to approach the conquering Holofernes in his camp; he orders up a banquet and rapidly succumbs to the noble widow's charm; she plays it cool and at the appropriate moment slices his head from his shoulders and departs for home toting her capital gains in a bag.

Vivaldi les little of this go unappreciated. Holofernes within earshot is transformed from a militant general to a tender suitor; the assembled army, though rarely heard, is beautifully warlike (this is one of the two Vivaldi scores calling for timpani); and when Judith's award descends to its mark, you know it. Vivaldi's pictorial gifts, so familiar in the Four Seasons, are totally appropriate to this operatic setting—when Holofernes sings of a swallow "tossed by treacherous winds," we know we are listening to the composer of the storm music in the Opp. 8 and 10 concertos. And Vivaldi, who wrote concertos for great variety of instruments, summons a similar variety here to accompany certain of the solo arias: viola d'amore, oboe, mandolin, cello. In short, Juditha is a lovely and a lively work, and I wonder how much longer we must wait before someone discovers that the forty-odd operas would be worth exploring too.

And now, the problem. Vivaldi wrote this oratorio for his female charges at the Ospedale della Pietà and all the solo parts, therefore, were originally taken by women. A year or so ago RCA Victor brought out a version which adhered to that circumstance, and in reviewing it I found that after an initial adjustment I was perfectly willing to accept the militant gentlemen—Holofernes and his servant Vagans—as portrayed by two militant mezzo-sopranos. It seemed, in fact, a good idea to stick to the original conditions of performance. Now, I am not so sure. The Hungarian forces on this Qualiton set make a good case for the contrast of men's and women's voices, and carry...
the argument a step further by having created a more operatic Juditha in general. The tempos are in most cases considerably slower than those in the rather streamlined RCA performance, and the soloists have time to make their dramatic points at greater leisure. In addition, the men are all impressive, and the Holofernes of Zsolt Bende represents a better job of singing than the female counterpart on RCA. Still, it is not a clear-cut choice: Qualiton's Judith is not bewildering; she employs her rich voice with too much care, letting each note slip forth as a distinct entity and seldom allowing the melodic line to gain the forward impetus which is so necessary. The parts of Abra, Judith's handmaiden, are more nearly equal, though RCA's wins by a nose.

And just to throw another handful of dust into the buyer's eye, Qualiton provides no text or translation, as does RCA, and the brief notes are fascinating more for their type-size (roughly flea-height) and the originality of type-setting than for any information contained therein. Unless your Latin is fresh, it is really quite ridiculous to listen to a work of this kind without the aid of the printed word. And so, which is it to be? I would say, if you are buying your first Juditha, get the RCA and you will not regret it; if you are adding a second to the collection, the Qualiton makes a most interesting comparison. S.F.

WAGNER: Wesendonk Lieder—See Mahler: Kindertotenlieder.


**recitals & miscellany**

"BAROQUE CHAMBER MUSIC." MUFAT: Ciaccona for Harpsichord. FROBERGER: Capriccio II for Harpsichord; Suite VI for Harpsichord ("Auff die Mayorin"); Ricercare VII and Toccata XII for Organ. HOTTERERE, J.: Sonata for Oboe and Harpsichord. HOTTERERE, L.: Suite for Two Flutes, in B minor. Zoltán Jeney and Attila Lajos, flutes; Péter Pongrácz, oboe; János Sebestyén, harpsichord; Gábor Lohotka, organ (St. George Cathedral, Sopron, Oedenburg, built in 1633). Qualiton LPX 11325, $5.98.

The beautiful and historic organ recorded on this disc is located in the nearest big town to Haydn's Eszterházy Castle, and it is efficiently played by Gábor Lohotka. The Mufat and Froberger pieces are delightful: the Suite Auff die Mayorin, based on a popular folk song of the period, is especially winning. I find the Mufat piece wildly overregistered in this performance: in early eighteenth-century Vienna, Italian or Italian-type harpsichords with one manual and two eight-foot registers were the rule. Even supposing a big ruckers had been imported, it is very doubtful that these instruments would have had a sixteen-foot stop and impossible that the performers would have changed the registration as much as János Sebestyén does here—a pity, because he is a very good player. Froberger probably had a much bigger-sounding instrument at his disposal—perhaps something like the enormous, organlike Haas harpsichord now in the Yale collection; thus Sebestyén's big treatment of this composer is not so out of place. The Hotterere family were primarily noted as French flute players; I rather shuddered at the idea of a piece for two flutes, but this suite turns out to be quite charming. H.C.R.L.

VICTORIA DE LOS ANGELES: "Songs of Catalonia." Victoria de los Angeles, soprano; Orquesta Ciudad de Barcelona; Lamoureux Orchestra, Antonio Ros-Marbá, cond. For a feature review of this recording, see page 79.


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Sylvia Geszty was the Zerbinetta on Angel's recent Ariadne auf Naxos and her performance there was impressive enough to leave one speculating on her effectiveness in other roles. This recital, I'm afraid, gives some rather negative answers. The voice per se is not an especially beguiling one, a bit wavy around the middle register and becoming even more acidulous in the upper extension. All the notes are there, right up to high E. and she does manage the considerable coloratura challenges of these arias with reasonable caution and agility. But apart from sheer vocal quality (which is, after all, partially a question of taste), Miss Geszty's principal failing is interpretive dullness.

Zerbinetta's aria, barring a few smudged scales before the "Als ein Goit' Rondo" and some uncomfortable yodels later on, goes smoothly but without a hint of the character's capricious charm. She certainly isn't helped by Kurt Masur's ploddingly unimaginative accompaniments—a serious liability throughout the recital—but the performance on the complete set is generally superior in most respects and suggested a far more ingratiating personality. After an unpleasantly thin and pinched "Der Holle Rache," the picture clears briefly with Constanze's "Ach, ich liebe" where the voice seems a bit fuller and intent on projecting the aria's wistful pathos. Also rather well done is Rosina's "Una voce poco fa," which even sparks occasionally. The rest ranges from the nondescript "Caro nome," Oscar's two little ditties from Ballo) to the disasterous (a choppy phrased, coldly impersonal "Qui la voce"). With Sutherland, Sills, and Caballé dominating the present coloratura market, any new challenger is up against stiff competition. On the basis of this collection, the variable Miss Geszty simply doesn't measure up.

P.G.D.

ERZSEBET HAZY: "Opera Recital." Erzsebet Hazy, soprano; Orchestra of the Hungarian State Opera House, Miklos Erdelyi, cond. For a feature review of this recording, see page 79.

SYNTAGMA MUSICUM: "The Seraphim Guide to Renaissance Music." Seventytwo vocal and instrumental works from the thirteenth to the seventeenth centuries; music by Perotin, Tassin, Richard Coeur de Lion, D'Aigncourt, Alfonso el Sabio, Adam de la Halle, Machaut, Jacopo da Bologna, Landini, Lorenzo da Firenze, Gherardello da Firenze, Dunstable, Dufay, Legrand, Paumann, Isaac, Watther, Sachs, Othmayr, Resi- narius, Cornyshe, Henry VIII, Sandrini, Jan van Lublin, Ortiz, Guilelmuus, Encina, Valderrabano, Ganassi, Facoli, Gastoldi, Pesenti, Ockeghem, Josquin des Prez, Obrecht, De la Rue, Susato, Turnhout, Sweelinck, and Anon. Syntagma Musi- cum of Amsterdam; Mary Macrow and Johannes Collette, fiddle; Ben de Ligt, viol; Gusta Goldschmidt, lute; Sven Berger, one-handed flute, lute, kortholt, cow's horn, and cornett; Kees Otten, dir. Seraphim SIC 6052, $7.47 (three discs).

Here is a marvelous grab bag of all kinds of prizes and surprises ranging from an anonymous trouvère melody played on a cow's horn to a delightful protobaroque trumpet concerto called Gagliarda and published by Martino Pesenti in Venice in 1645. It is of course necessary to ignore the title for this set—any guide who claims to present a "Renaissance, and one without any choral music" is surely not conducting a reasonable tour. But these discs are an excellent showcase for the talents of a young and very exciting group who call themselves Syntagma Musicum after the famous treatise on music written by Michael Praetorius.

The regular ensemble consists of six performers, here assisted on various numbers by five additional instrumentalists. Like most small groups, the members of Syntagma Musicum double on other instruments, and Marius van Altena also plays the crumhorn; Barbara Miedema is responsible for a variety of keyboard instruments as well as crumhorn and recorder. The string department is admirably handled by Ingrid Taggart; it is impossible to give due credit for many individual performances as the notes never indicate who is playing what, but I assume most of the slippery fiddle playing and the warm fat tone on the Ortiz Ricercar are hers. Director Kees Otten and Leo Meillink share a pool of wind instruments including the recorder, shawn, and crumhorn. Anyone keeping track will notice that I have listed five of the six members and only one of them is a singer—an obvious holdover for an ensemble dedicated to a repertoire which is primarily vocal. The final—or perhaps first—member of Syntagma Musicum is contralto Will Kippersluyts, and what a find she is! This is one of the most mar- velous voices I've heard in a long time, rich, dark, and smooth, a true contralto without a trace of hootiness, and to top it all off, one with both the mind and the method to sing this beautiful and rewarding repertoire. Her version of Dufay's Flos florum alone should become a model of its kind.

The music on these discs follows the somewhat unorthodox make-up of the ensemble. The progression is roughly chronological through the fifteenth century up to the middle of Side 4. Here we arrive at a point where the standard repertoire demands more singers than Syntagma Musicum has at its disposal, and their answer is to split off a new group for an encore of German, English, French, Spanish, and Italian music culminating in an entire side devoted to the music of Syntagma Musicum's Flemish countrymen.
I think my favorite of the thirteenth-century selections is the one identified only as Chanson played on the cow’s horn. It doesn’t sound very beautiful, but as Dr. Johnson might say, it is remarkable that it is done at all. Another melody, this one from the Canzona of Alfonso the Wise, is played on a gemshorn, another natural instrument whose soft, hollow flutelike tone is delightful. Sacred music of this period really requires a vocal ensemble, and although these works are adequately performed, I would really rather hear a group like the Capella Antiqua of Munich in this repertoire, Miss Kippersluyys gives a sensitive reading to the magnificent unaccompanied lament of the Virgin, Lasse que devienrai je. The later thirteenth-century motets and instrumental selections are expertly done but lack, I think, the special quality that would make them truly memorable. The same is true of the fourteenth-century French music, though it is nice to have recorded versions of works like the lusty Contre le temps from the Reina Codex.

It is with the lyric outpouring of fourteenth-century Italy that the Syntagma Musicum really begins to show what can be done. The melodic subtlety and the vocal style here are akin to the bel canto of Bellini and expert singers are required to do the music justice. But whereas Bellini wrote for sopranos (an estimated eighty-five per cent of women’s voices are naturally soprano), composers from Jacopo da Bologna to Dufay wrote lines which hover just above middle C, a nightmare for sopranos. Not so for Kippersluyys and Van Altena who are, as I have suggested, an extraordinary duo. They negotiate the elaborate coloratura of Jacopo da Bologna or Lorenzo da Firenze without a qualm. In Landini’s bouncy spring song Echo la primavera they dart along phrasing as a single voice; and equally beautiful, on disc 3, is Dunstable’s classic Santa Maria.

The German works taken from the Glogauer Liederbuch are amusingly done, as befits these cheerful little pieces. An exception is the poignant Ich suche cyna manche wo the alto matches her tone to the haunting sound of the gemshorn. The later repertoire—Isaac, Walford, etc.—has never appealed to me, except Isaac’s Innsbruck of course, which is beautifully done. In fact, all the performances here should please the most critical listener.

Side 5 is largely devoted to instrumental music, but first I should mention the exquisite little song O my hart by M. van Eyck, VIII which is splendidly sung. The instrumentalists give a bit of a chance to show off in the keyboard and violin works, even if one is never sure who is performing. Despite the expertise of the musicians, I found some of the pieces rather dull, notably Ganassi’s instructive ricercar for the violin, the four-square lute pavan, and Facoli’s odd little keyboard arias that don’t seem to go anywhere at all. Very different are Gustold’s infectious duet for two recorders and Premontré’s gloriously martial galliard which brings us right into the baroque

Syntagma Musicum dedicates the final side of their survey to their fellow Netherlands. Considering that this includes such familiar figures as Ockeghem, Obrecht, and Josquin des Prez, it is most remarkable that the real gems are by two lesser masters and one who is almost totally unknown. Compósito a vita is a masterpiece, a superbly elegant chanson whose text I presume is drawn from the Flemish devotional poetry of the sixteenth century. Little is known of its composer, Gerhard van Turnhout, who was active in Antwerp in the 1560s and later spent eighty years in the service of Philip II of Spain. Pierre de la Rue’s lovely Mijn hert altijt heefft verlangen was also new to me. I suspect that the formidable appearance of the Dutch and Flemish languages might have something to do with discouraging would-be singers. At any rate, the album is worth the price for these two items alone. The dynamic duo, Altena and Kippersluyys, finish off the collection with a virtuoso performance of Sweelinck’s spirited bicinium Marcibus qui transverat, whose lively runs give a foretaste of Handelian coloraturi.

The sound on the whole is excellent, though a few of the quieter instruments—the clavichord and the portative organ for instance—have been recorded so close that they make a great clanking and wheezing as they play. The notes are sketchy at best—texts but no translations, which is particularly unfortunate for the many works in archaic forms or unfamiliar languages. Nevertheless, at Sera-Phim’s bargain prices—or at any price for that matter—no lover of early music should fail to own this set.

S.T.S.


The “new world of sound” referred to by the Ars Nova-Ars Antiqua disc is the result of the recent expansion of instrumental possibilities brought about by some of our younger composers and performers, creating a new kind of virtuosity concerned primarily with the exploitation of novel timbral effects. Almost all instruments have been affected by this development, and this disc shows its application to the contrabass. The principal performer, Bertram Turetzky, a bassist who has been almost single-handedly responsible for the extended technical possibilities now available to his instrument. He has commissioned over 100 pieces and has

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worked in conjunction with the composers to widen considerably the range of possible effects.

The variety of sound may well surprise you if you are accustomed to thinking of the oboe in traditional terms. First of all, Turetzky very wisely mixes his combinations. With the Ars Nova disc, only two of the pieces included are for solo oboe (those by Childs and Lombardo); there is also a trio for three basses (the Erickson), a duet for bass and flute (the Felciano), and a quartet for bass, flute, clarinet, and percussion (the Diemenc). Then too, the varied assortment of compositional styles to be found in the pieces indicates that Turetzky is far from doctrinaire in his choice of material. But finally, it is the variety of sound he evokes from the double bass that sustains interest and makes this disc so fascinating.

To my mind the most successful original work to exploit these new devices is Robert Erickson’s Ricercar d 3, a brilliant study for three basses, two of which have been prerecorded and are performed on tape. Erickson makes particular use of the pizzicato tremolo, creating a surprisingly continuous quality almost lyric in effect. The influences are also prevalent: simple melodic types are utilized within a static, essentially diatonic pitch field, frequently expanded through microtonal inflections. There are also glissandos, drone effects, and purely percussive sounds created by striking the wood of the instrument. Also impressive is Richard Felciano’s Spectra, which explores the color possibilities of combining the bass with the three instruments of the flute family: piccolo, flute, and alto flute. Especially interesting is the section with piccolo: the two registral extremes of the orchestral spectrum give rise to a highly unusual but most effective textural pattern.

Each composer provides helpful notes for his own composition, and in addition to the liner notes, a sheet is included with comments by Turetzky himself on some of the new techniques he utilizes in these works.

Less successful is the Nonesuch entry, where the length of the pieces (the shortest of the three lasts ten minutes) and their less varied sound palette tend to create an over-all impression of monotony. This is most strongly felt in John Cage’s 36’ 1/4” for a String Player. Despite the fact that the total duration is some ten minutes shorter than the twenty-six indicated by the title (thanks to the fact that certain portions of the piece were recorded on two separate tracks and then superimposed so that they are heard simultaneously), the sameness of it all is enough to drive one to distraction. Much better is Pauline Oliveros’s charming, if lightweight, Outline, an improvisation for flute, percussion, and bass according to a loosely defined chart of indications supplied by the composer. Finally, Ben Johnston’s Casta Bertram seems totally pointless to me in recorded form since, judging from the score, it depends almost entirely upon visual events for its effect. Furthermore, one of the main aspects of the piece is that portions of the performance are to be recorded “on the spot” and then played back later as an “accompaniment” to the continuing live performance. The effect, of course, is completely lost on disc.

Another feature is the use of a type-writer fitted with contact microphones. There may still be a few not-yet-jaded concertgoers around who could get a visual kick out of this, but from a purely sonic point of view, it is unspeakably dull.

R.P.M.

WOUND-UP OPERA: "A Music Box Recital." Operatic selections by Bizet, Gounod, Mascagni, Meyerbeer, Mozart, Rossini, Thomas, Verdi, and Wagner as played on antique music boxes from the collections of Rita Ford and Murtagh Guinness. Columbia MS 7338, $5.98.

Music-box fanciers, an avid breed, are likely to rush off to buy this record upon my simple assurance that it contains not only a Pleriodienmiel item, but also several cuts from a Malagnon that plays only the six bars from a Nicole Frères programmed for nothing but Verdi. Nonfanciers, however, may want a little more information.

Like the cuckoo clock and the nut-milk chocolate bar, the music box began life in Switzerland a couple of centuries ago. In the age that spans Mozart and Wagner, the boxes grew in number and sophistication, spraining their atrial perfume through countless bourgeois drawing rooms in Europe and America. The peak came in the decade or two before the phonograph appeared, when the playing time of the cylinder and the ingenuity of its maker had reached a zenith. The music box, often lavishly decorated, then held an honored place as the standard storage-and-retrieval system for the particular kind of music the household preferred.

In this disc, producer Steven Paul has set out to capture two intersecting fields of interest and because of his ingenuity and technical clarity he deserves to succeed. This record should fetch not only the music-box enthusiasts but the opera lovers too, though the latter will sometimes wince at what the plunks and plinks do to some very familiar tonal intervals. But they are more often likely to marvel at the sensitivity and musically stored up in these boxes. There are flourishes here which Melba might have envied, bits of inventive decoration that stagger and delight. You will find rubatos and ritardandos, but they are not the impulses of a stage performance: each note comes from a separate pin tapped into precise position on the face of a cylinder by an artisan. And the evidence shows that many of those long-dead, horsey-handed tinsmiths knew a lot more about music than some famous performers know today.

The source of each hand is identified, and the sleeve notes give a lot of information (within the limits of the space available), a few pictures and a
The Fresh Appeal of Bidú Sayão

by George Movshon

A DELICATABLE RECORD. Rarely does a recital disc capture the persona, the artistic soul of a performer—but this is one of the happy exceptions. The four Manon arias convey in an almost photographic manner the things that were special about her portrayal of the role, and few listeners who care at all for this opera (and none who heard Sayão in it) will fail to succumb at once to her utterly individualistic projection of both music and character.

Sayão has not sung at the Metropolitan for nearly twenty years, nor on any stage since 1937. She lives in her native Brazil, and occasionally sends a talented pupil to New York for a recital debut. Her greatest years were those in which these records were made—during the war and immediately afterward. The voice was never a large one, but because of exceptional purity and clarity it reached into every corner of the big house: nobody ever had any trouble hearing Sayão. She partnered Pinza (as Susanna and Zerlina) when the basso took on the Mozart roles in New York. She excelled in such bel canto parts as Rosina, Norina, and Adina (though today we might want more than she gave in the way of decoration and display); she was a moving Violetta and a captivating Juliette.

One of the qualities that shine so brightly here is freshness. This Manon is, believably, an adolescent right through from the convent school. Her Verdi and Mozart bear no trace of the heavy dramatic-soprano waves that wash in so often from our Violettas or Countesses. It is all poised, well formed, gentle, youthful, and infinitely appealing.

I own a few of these items in their original 78-rpm form and comparison shows that the Odyssey reissue sounds better than the originals ever did. Some of them date from the bad old wartime days of shellac shortage and make do, but in the present reincarnation, they shine better than new. This is most specially true of the Bachianas excerpt, the 1945 original recording (with Villa Lobos himself directing the eight cellos) of a composition that went on to achieve great popularity. The Cantilena is of course only one of the movements, albeit the most memorable, but it is enough to remind us how she shaped the long phrase of her compatriot with infinite piacry and sympathy.

BIDÚ SAYÃO: "Songs and Arias."
BELLINI: La Sonnambula: Ah! non credea mirarti. MASSENET: Manon: Je suis encore tout etourdie; Voyons Manon; Adieu, notre petite table; Gavotte; Ooeiisons quand leur voix appelle. MOZART: Don Giovanni: Batti, batti; Le Nozze di Figaro: Porgi amor; Deh vieni, non tardar. VERDI: La Traviata: Ah! fors' e lui... Sempre libera. VILLA LOBOS: Bachianas Brasileiras No. 5: Cantilena, Bidu Sayão, soprano, various orchestras and cond. Odyssey 32 16 0377, $2.98 (mono only, recorded in 1942-50).

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<table>
<thead>
<tr>
<th>Key No.</th>
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<tbody>
<tr>
<td>1</td>
<td>101</td>
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<tr>
<td>2</td>
<td>6, 7</td>
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<tr>
<td>3</td>
<td>41</td>
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<td>15, 73</td>
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<td>122</td>
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Zabaleta, like his compatriot Segovia, is virtually unique among virtuoso soloists for his ability to deal authoritatively with both very old and very new musical repertoires. Indeed, the harp is perhaps the most extraordinary of the two, possessing an astounding capacity for varied tonal and interpretative stylistic differentiations. For example, there is little here of the subtle coloristic nuances Zabaleta brings to modern impressionistic works—rather a gracious simplicity and grave straightforwardness in the sixteenth-century pieces, and a brisker, more frankly brazen virtuosity in those from the seventeenth century.

Some of these pieces were first made known to American listeners in Zabaleta's earliest international recordings for Alejo/Consort and Period in the '60s, but others here are new—a few of these nearly forgotten composers have possibly never before been represented on discs. Besides the relatively well-known Cabezón and Mudarra, the earlier generation represented here includes Francisco Fernandez Palero and Luys Alberto. From the seventeenth century there are (besides one "Anonimo") Lucas Ruiz de Ribayas, Diego Fernandez de Huceto, and Jorge Rodriguez. The fact that all these men are now generally considered to be of only historical interest (and in some cases they do not even warrant a listing in Grove's) should not delude any listener into thinking that their music cannot command immediate and delightful attention. In fact, most of these composers are genuinely unique individuals with distinctive personalities.

It would be supererogatory to catalogue all the attractions here—including the silent surfaces, superb engineering, and detailed notes (including musical sources) by Zabaleta himself. R.D.D.
in brief


DEBUSSY: Suite bergamasque; Danse; Deux arabesques; Pour le piano; La plus que lente; L'isle joyeuse; Masques. Tamás Vásáry, piano. Deutsche Grammophon 139458, $5.98.

DVORAK: Symphony No. 9, in E minor, Op. 95 ("From the New World"). London Symphony Orchestra, Sir Colin Davis. Philips SAL 3762, $5.98.


SCHUBERT: Rosamunde: Incidental Music, D. 797. Olusala Sowiak, soprano; Philharmonia Vocal Ensemble; Philharmonia Hungarica, Peter Maag, cond. Turnabout TV 34330, $2.98.


The juxtaposition of the vigorous, occasionally stolid Oistrakh and the immeasurably nuanced, sometimes overly finicky Richter was a calculated artistic risk. The Brahms is strong and assertive, with a lot of free-wheeling rubato. The Franck is played along similar lines, but seems rather more poetic and less prone toward muscularity. Part of the problem, I fear, is the sound of Melodiya's on-the-spot Moscow Conservatory recording, which is hardly flattering to either performer. Oistrakh's fiddle is husky and strident, with a wolf whistle on high tones and general sourness below; Richter's piano is rather jangly and penetrating and without resonance in the bass. Was he using an inferior instrument? H.G.

This is accomplished and musical playing—if not perhaps exceptional in its imaginative understanding of Debussy's coloristic inventiveness, still almost always alive to the rhythmic dimension of the music. Vásáry injects no mannerisms into his performances and as a result, they can be heard without continual nervousness about the possibility of abrupt and meaningless alteration of dynamic and rhythmic details. I find only one point worth complaining about: the failure to double the tempo for the final bars of Pour le piano—but otherwise the pianist lets the composer have his say, to very good effect. The recorded sound is excellent. D.H.

This is a decidedly old-world view of the New World, with liberal tempo changes (the third subject of the first movement and second theme of the Scherzo, for example, are both drastically lingered over), hefty, warm-hued sonorities, and a rather free-wheeling approach to rhythm. Rowicki, like Bernstein, Dorati (on London Phase 4), Klemperer, Kertesz (his later version), and one or two others, observes the first-movement repeat. He also secures cultivated, detailed playing from the London Symphony and has been recorded smoothly. H.G.

Here is Haydn at his folksy, crowd-pleasing best, especially in the popular D major Concerto (a friend of mine insists that the second theme of the slow movement sounds like a not-quite-remembered hillbilly song: try singing it to the words, "Won't chy you come to yer winn-dow...,"). Veyron-Lacroix plays all three concertos with zip, dash, splash, and, above all, rollicking good humor. He is given rich-toned, utterly precise accompaniments by Ariacabome and the Toulouse Chamber Orchestra. The music and the performances are so much fun that I hardly noticed the rather restricted frequency range of the recording and somewhat less than beautiful sound produced by the harpsichord. C.F.G.

Serious collectors of chamber music are more likely to want complete editions—all the Mozart quartets dedicated to Haydn, all of the Haydn Op. 77—rather than individual works such as this. But one must add, ruefully, that these are not vintage years for the production of chamber music recordings. The Drolc performances are somewhat dry in sound as recorded here and equally reserved in manner, with results that are tasteful and craftmanlike but not terribly exciting. But for a $2.49 record, it's a fair measure of music by any standard. R.C.M.

"The Philharmonia Hungarica," to paraphrase Mr. Belvedere's immortal words, "has much to be modest about"—scrappy strings, wheezy winds, and uncertain brass. But these instrumental forces are trying, fervently, to make music. The credit, I think, must go to the director Peter Maag who deserves more assistance than he gets here. The overture (the standard Zaubertafeleone, needless to say) is smoothly paced, full of nuance and spry dotted rhythms, and the separate selections are suitably lyrical or, in dramatic accord, modestly affecting. Sowiak displays a rich voice, but she sometimes scoops uncomfortably and shows imperfect breath control. The chorus, like the orchestra, is so-so, but they try. H.G.

Ramon Ybarra, a Venezuelan, plays his instrument in a deft, clean, workmanlike manner that is hard to quarrel with, except that it is a bit of a bore. He employs a very moderate palette of colors, and he can tick off a Sór étude or snap out a Sanz ornament with perfectly respectable poise. It is all very sober, very exact, rhythmically, and avoids any distinguishing marks of individuality. S.F.
BACH: Cantata No. 208, Was mir behagt ("Hunt"). TELEMANN: Ach weh, ach weh, ach weh ("Canary Cantata"). Annelies Kupper (s), Erika Köth (s). Fritz Wunderlich (t), Dietrich Fischer-Dieskau (b); St. Hedwig's Cathedral Choir; Berlin Symphony Orchestra, Karl Forster, cond. Seraphim S 60121, $2.49 [from Odeon ASD 534, 1962].

BACH: Cantatas: No. 211, Schweigt stille, plaudert nicht ("Coffee"); No. 212, Mer hahn en neue Oberkeet ("Peasant"); Lisa Otto (s), Josef Traxel (t). Dietrich Fischer-Dieskau (b); St. Hedwig's Cathedral Choir; Berlin Philharmonic Orchestra, Karl Forster, cond. Seraphim S 60139, $2.49 [from Odeon ASD 457, 1960].

Fischer-Dieskau is the featured artist on these two discs of baroque musical comedy. Perhaps the best item is Telemann's amusing (if rather overlong) solo cantata lamenting the death of a pet canary at the paws of the family cat. The little chamber group plays with delightful comic point and Fischer-Dieskau gives a deliciously dead-pan performance until the final explosion of rage.

The three Bach Baroque cantatas are enjoyably handled on the whole, although Forster's pacing is a shade deliberate and pompous for such happy material. Again Fischer-Dieskau shines with his supple, characterful singing, but all the soloists are really quite exceptional. The sonics are bright, clean, and forward, and English texts (no German originals, however) are printed on the jackets.

BEETHOVEN: "Happy Birthday Ludwig." Various soloists, orchestras, and cond. Columbia MS 7406, $5.98 [from various Columbia originals 1960-68].

I'm not sure in what spirit Ludwig might have received this birthday tribute from Columbia—a sense of humor was not exactly one of his strong points. In fact, I'm not sure what useful purpose the record serves at all. unless there's something out there dying to hear in succession the first movements of the Fifth Symphony (Beethoven), the Pathétique (Gould), and Moonlight sonatas (Scherin): Für Elise (Entenstein); the Turkish March Minuet in G, and Ninth Symphony choral finale (Ormandy). Of course there's Leonid Hambro's cute variations on Happy Birthday intertwined with familiar Beethoven themes. Perhaps we can all do Ludwig a favor and forget about the whole thing.

BELLINI: Norma. Joan Sutherland (s), Marilyn Horne (ms), John Alexander (t), Richard Cross (bs), et al.; London Symphony Chorus and Orchestra, Richard Bonynge, cond. London OSA 1394, $17.94 (three discs) [from RCA Red Seal LSC 6166, 1965].

Having received the Sutherland/Horne/Bonynge Norma with modified rapture on its first appearance five years ago, I find myself rather embarrassed to confess that the performance has not worn especially well during the interval. The more one listens to Bonynge's elegant, self-effacing, at times even limp presentation of the score, the less convincing it sounds. (Even at that the recording is immeasurably better than the devitalized reading the conductor gave last season at the Met where the entire opera was trivialized beyond recognition.)

Still, one must be impressed by the lovely quality of Sutherland's voice and the security of her technique, while respecting the blandness and unimaginative exploitation of the role's explicit nobility and tragic potential. Unfortunately the ideal Norma is just as elusive today as it ever was. Marilyn Horne's expressive Adalgisa remains the chief joy of this recording—the contributions from the male contingent are dependable but hardly in any way remarkable. London's new pressings show no marked difference from the original RCAs—full-bodied, conservative sound, a bit too reverberant and not without occasional patches of pre-echo.

LEONCAVALLO: Pagliacci. Victoria de los Angeles (s), Jussi Bjoerling (t), Paul Franke (t), Leonard Warren (b), Robert Merrill (b), et al.; Robert Shaw Chorale: Vctor Symphony Orchestra, Renato Cellini, cond. Seraphim IB 6058, $4.96 (two discs, mono only) [from RCA Red Seal LM 6106, 1953].

More operatic bounty from Seraphim. This is the most acrostically sung Pagliacci on disc: some may even find the prevailing ladies-and-gentlemen atmosphere a bit tepid for such an earthy melodrama. But no opera ever suffered unduly from superb vocalism, and the four principals here are unquestionably major voices in the peak of condition.

De los Angeles' creamy-smooth tone and fragile femininity is especially appealing as Nedda, although one occasionally wonders how this nice lady ever got mixed up with seedy traveling theatrics. Let alone a clandestine extramarital affair. Bjoerling too seems only mildly piqued by his wife's infidelity, but the sheer beauty of the voice and his natural musicality are certainly preferable to the ridiculous histrionics indulged in by most Canios. As Tonio, Leonard Warren sings with his customary unstinting generosity, and he colors some of his lines—the snaky aside to Canio just before "Vesti la giubba" for instance—to fine dramatic effect. The casting of Merrill as Silvio is a welcome bonus. All told, a feast of first-rate singing, not to be missed.

SIDE 4 gives us more of Bjoerling in the verismo repertory—seven arias by Puccini, Mascagni, Leoncavallo, Cilea, and Giordano—taken from Angel's deleted "Beloved Bjoerling" series. Perhaps someday Seraphim will release these three indispensable discs to the catalogue in toto.

MARTIN: Le vin herbé. Soloists; Members of the Winterthur Symphony Orchestra, Victor Desarzens, cond. Music Guild MS 6210, $5.96 (two discs) [from Westminster WST 232, 1962].

For his singularly individualistic treatment of the Tristan and Isolde legend, Frank Martin went back to the medieval sources, via Joseph Bédier's novel Le Roman de Tristan et Iseut and fashioned a remarkably beautiful three-part oratorio. It's a resourcefully economic setting with twelve soloists, who serve both as chorus and principals, accompanied by string sextet, double bass, and piano (played here by the composer).

The musical idiom is in Martin's own personal chromatic language, tonal in effect but with a free application of serial techniques. The drama is all here, understated, subtly shaded, and lovingly performed by a group of intelligent, sensitive Swiss musicians. There are a few gray patches of noise weaving along the way, but this is a decidedly major statement by a contemporary composer of elegant melodic gifts and technical refinement.

THOMAS: Mignon. Janine Micheau (s), Genevieve Moizan (ms), Libero de Luca (t), René Bianco (bs), et al.; Chorus of the Théâtre de la Monnaie, Belgian National Orchestra, Georges Sébastian, cond. Richmond RS 63014, $6.94 (three discs, mono only) [from London A 4309, 1953].

Anyone who requires Thomas's once-popular Mignon will have to make do with this ancient, heavily cut recording—no other is currently listed and it hardly seems likely that a rival will appear in the near future. The most serious detriment to the performance is Sébastian's conducting: the many passages of lightly scored recitative are most clumsily handled and the accompaniments stumble along with scarcely a trace of gracefulness that might give the whole affair a leaning semblance of period charm. While the sonics are understandably faded, there is still a lively sense of theater about the production (early Cusack?); unfortunately, the original tapes have been carelessly edited and spices are heard at every turn.

High Fidelity Magazine
There's enough vocal promise here to regret the lackluster direction and engineering. Genéviève Moizan sings the title role quite nicely, bringing a healthy mezzo with a solid soprano extension, a fresh youthful appeal, and the perceptions of an experienced diva to her work. Janine Micheau labors a bit as Phline, but a sound technique and sheer professionalism carry her over the rough spots. The men are more variable—especially the awkward Wilhelm of Libero de Luca, the tenor who bulldozed his way through so many of London Records' early French operas.


Unlike some conductors who begrudgingly lend their names to a potpourri of potboilers: for quick sale in the supermarkets, Bernstein is quite clearly having the time of his life with these pot-concert overtures. The familiar tunes are lovingly shaped; the zestful, high-stepping finales have rarely sounded more exhilarating; and the Philharmonic, barring a coarse moment here and there, plays splendidly. If you missed these discs in their single formats, here they all are, boxed, budget-priced, and sounding like a million dollars. Perfect summer bandstand music for outdoor listening.

JASCHA HEIFETZ: "Three Great Violin Concertos." Works by Brahms, Mendelssohn, and Tchaikovsky. Jascha Heifetz, violin; Chicago Symphony Orchestra, Fritz Reiner, cond. (in the Brahms and Tchaikovsky); Boston Symphony Orchestra, Charles Munch, cond. (in the Mendelssohn). RCA Red Seal LSC 2129, 1958; $6.98 (two discs) [the Brahms from RCA Red Seal LSC 1903, 1956; the Mendelssohn from RCA Red Seal LSC 2314, 1960; the Tchaikovsky from RCA Red Seal LSC 2129, 1958].

Few records promise more safety of investment than these two bargain-priced discs. How could anyone go wrong? Heifetz is a marvel of precision, conjuring up his typically satin-smooth tone and fiery warmth on this trio of violinistic warhorses. A decided bonus is Reiner's poised, magisterial accompaniments to the Brahms and Tchaikovsky; Munch supplies rather vehement, even raucous support in the Mendelssohn, but even that hardly fazes Heifetz' honeyed reading. All these performances originated during RCA's golden years when impeccably engineered sessions were the invariable rule—the Chicago recordings especially belie their years with rich, immediate, full-ranged stereo sound. This is a superb set, a cornerstone for any collection. PETER G. DAVIS

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Musical Living Room. Whither the open reel? Owing to the spectacular growth of the new 8-track cartridges and musicassettes, this once standard tape format now shows a definite slowing-down in production and promotion. Like every veteran tape collector, I keenly lament this unjustified and I hope only temporary slump, for despite the valuable utility and special rewards of the cartridge/cassette, the open reel, technically and artistically, remains the best suited for truly serious musical experiences. My credo is that there should be ample. Leutenraum for every worthwhile avenue of approach to fine music and that none of them—all at least of the widest, most accommodating, and most familiar ones—should be neglected or closed.

Open-reel tapings are still unmatched for the reproduction of "big" works and "big" sonics. Take, for example, the series of Gabrieli programs recorded by Columbia in the Basilica of San Marco in Venice where most of the works were first performed. Like the initial choral-and-instrumental volume reviewed here in May 1969, the present unaccompanied choral Vol. 3 of "The Glory of Gabrieli" is invaluable not only for its magnificent music, but for the thrilling stereophonic sound which soars and reverberates in a spacious ambience. Yet because Gabrieli conceived his music with this cathedral's long reverberation period in mind, this special acoustical quality enhances rather than blurs his cunningly interwoven sonic patterns. The well-chosen selections (four psalms, three antiphons, three Mass movements, and a hymn to St. Mark) and the eloquent performances by the Gregg Smith Singers and Texas Boys Choir would be mightily impressive wherever or however heard. But no cartridge or cassette reproduction could possibly approach the grandeur of the present 7½-ips open-reel edition (Columbia MQ 1229, $7.98).

Home Sound Stages. Another musical arena in which open-reel tapings would be superior is that of large-scale stage works. Cartridges are entirely debarred here, and while multiple-cassette complete operas have begun to appear, they are likely to remain technically somewhat immature for at least a few years. So it's especially fortunate that reel production continues to feature full-length operas and oratorios. The memorable 1962 Nilsson/Solti Salome for London is now challenged by RCA's version which is shrewdly calculated to proffer distinctively different attractions. Like many others who have never seen Montserrat Caballé in the Richard Strauss shocker, I never would have imagined her in the title role. Yet she not only sings it superbly, but persuasively demonstrates what a wealth of lyricism there is in a work usually noted for its powefullly dramatic, even melodramatic, qualities. The supporting cast is generally good; Leisnord elicits a fine performance from the London Symphony Orchestra; and the stereo sonics are richly lucid (RCA Red Seal TR3 5045, 3½-ips reel, $10.95; notes and libretto leaflet enclosed). I can't deny that the older, more expensive two-reel 7½-ips London taping now shows its age a bit, and that its theatrical sound effects will never be approved by some conservative opera connoisseurs. Yet while I find much to admire in the new version, I still relish the older, more frankly exciting performance. There is room for both, not only separately for collectors of markedly different individual temperaments and tastes but together for more catholic collections.

Archive's release of Handel's great oratorio Samson also competes with an earlier taping, the 1964 Abravanel/Vanguard performance. Ironically, I find myself preferring the newer version despite its flaws. Vanguard's effort never was very satisfactory, and in any case it is now apparently out of print. Archive's edition is far more complete and more distinctively performed: Alexander Young takes the title role with a mixed British/American supporting cast and the Munich Bach Choir and Orchestra under Karl Richter (Archive/AmpeX EX+ Y 8464, three 7½-ips reels, $33.95; notes and text leaflet enclosed). With such promising forces, this should be a definitive version, but Richter's failure to enliven the dramatic, orchestral aspects of the music and his inability to achieve any genuine stylistic authenticity are drawbacks here. The otherwise impressively robust and expansive stereo sonics are slightly marred by the rather thick bass-heavy quality of the reproduction. But most of the vocalizing and playing is attractive, if by no means idiomatically Handelian, and the occasional arid stretches in the music itself are entirely forgotten when the many great ones arrive.

From "The Spacious Firmament on High." I have not yet experienced American Airlines' Astrosecho programs in actual flight—the inadequately earphone arrangements, I am told, leave a good deal to be desired. But heard at home they certainly are of heavenly length, and the so-called classical examples are of inexhaustible programmatic variety. Whether 225's here too merely as classical background music or as appetizing samplers of various manufacturers' record catalogues (often representing works or performances not otherwise available on tape), these tapes offer definite attractions. Three such musical cornucopias have reached me since my last Astrosecho notices (December 1969): AMPex CW 223, 224, and 225; 3½-ips reels, $23.95 each.

The first includes, with a few exceptions, familiar orchestral selections from the Deutsche Grammophon catalogues, mainly featuring relatively recent releases by Von Karajan, Kubelik, and pianist Geza Anda. Also represented are Claudio Abbado conducting a movement from Tchaikovsky's Second Symphony, violinist Edith Peinemann and conductor Peter Maag (in Ravel's Tzigane).

The second, CW 224, contains fifteen selections of a more varied nature from the Vanguard catalogues, which are particularly praiseworthy for the inclusion of complete works rather than isolated movements only. Among these is the Bach Cantata No. 80, Mozart's Flute and Harp Concerto and one of his organ sonatas, trumpet concertos by Torelli and Vivaldi, the Vivaldi Guitar and Viola d'Amour Concerto, a Pergolesi concertino, and a Rossini sonata; plus shorter pieces by Mozart, Haydn, Schubert, J. Strauss, and Barber.

There are even longer complete works from the Mercury/Philips catalogues in CW 275. Here too the repertoire is predominantly drawn from the baroque and classical eras: a Bach Unaccompanied Cello Suite, Telemann's Suite for Flute and Strings, a Devienne flute concerto, Mozart's Piano Concerto No. 21 and an organ sonata, and Berioz's A minor String Quartet, Op. 132; plus, for novelties, a Carvalho harpsichord toccata and a Seixas organ sonata drawn from the "Portugal's Golden Age" album.
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A Modest Proposal

Jonathan Swift once made what he called a Modest Proposal: since the Irish could not grow enough food to feed themselves but had no trouble producing babies, he suggested that babies should be made the prime Irish export (perhaps served as a table delicacy in England). There were those who thought he meant it. Perhaps, in a bitter and angry way, he did.

I wish to make a Modest Proposal myself. It relates to two serious contemporary problems: narcotics addiction and overpopulation. I feel that it is incumbent upon me as a man who makes his living from the record industry to offer this proposal. For the record industry is as responsible as any sector of our society for the growing number of deaths from the use of heroin and other drugs.

Now don't be hasty in condemning them. They've done no more than other industries have. Detroit finds 40,000 deaths a year in crashworthy cars at an acceptable price for profits. Why shouldn't the record industry too be allowed to kill its quota of people for profit?

Ten years ago I devoted an issue of Down Beat to the drug problem. At the time only a few music-business people thought addiction was an important issue. A Negro singer I know said to me recently, "Nobody gave a damn about it when only black kids were dying in the doorways of Harlem. Nobody gave a damn until the well-to-do middle-class white kids started dying." Touche.

There is a great deal of criminal money invested in the music business, both in groups and in some record labels. Rock groups began pushing drug use. The kids bought it. The kids are dying. The underworld is making money on it. This is all coincidence, right? Oh sure.

Drug education in the schools is only going to make the problem worse, I am convinced. It will increase fascination, or even cause it, among youngsters who had never even thought much about using drugs. Watch it happen in the next two years.

And so I have come around to another view of the matter. I modestly propose that to all our other welfare programs we add free narcotics for the kids, including heroin. If you're a parent, this may shock you. But it shouldn't. You have been permitting your kids to take dope intellectually for years—from Bob Dylan, the Jefferson Airplane, the Lovin' Spoonful, the Beatles. When your five-year-old was wandering around the house singing, "I get by with a little help from my friends," I get high with a little help from my friends," didn't you say, "Isn't that cute? He's singing a Beatles song." All right, so now he's a few years older, and you're startled at the circulation of drugs in his school, and fearful that he'll start using them. (Maybe he's already started.) Why? You permitted it.

Now the main thing wrong with junkies is that they steal. Sometimes they go farther than that: in desperation for money, they kill and steal. This is a great social inconvenience, tying up the time of all kinds of policemen whom we need for such things as messing up traffic.

If I get my way, and the government subsidizes addiction the way it now subsidizes lethergy, all this will stop. It is useless to tell young people that the Beatles and heroin are bad for them. It simply is not so: the kids have told us this. And they are the wisest and most honest and idealistic and decent and loving and unprejudiced and well-informed generation of Americans in history. We know it because they have told us this too. And the advertising industry and Marshall McLuhan have confirmed it. Who in his right mind would doubt the combined wisdom of Marshall McLuhan, the advertising industry, and our wonderful young people?

Now, if we supply them with all the heroin they can use—and I am talking about the pure, uncut stuff, not the powdered sugar that's floating around in many places these days—it will have immediate and far-reaching social benefits.

First, they'll stop rioting. Heroin makes you terribly passive. They'll start nodding out all over the place, and this will permit the police to catch up on their sleep in parked cruisers.

Then a lot of them will start dropping out of school. This will reduce the overload on our schools and universities. It will stop the building program, thus braking the felling of trees which give us our oxygen. Our air will improve.

Third, it will increase the food supply, since junkies don't eat much even when they can get it.

Fourth (and here is the real genius of my plan), ultimately the program will end the population explosion. One junkie I know told me that he and his strung-out wife hadn't had sexual relations in two years. Heroin produces profound sexual indifference, and impotence. But then isn't the end of it? Junkies die. In the late 1940s and early 1950s, a great many jazz musicians were on heroin. None of them are now. They are either in their graves or they are off drugs. There is no middle road, apparently.

Kids constitute nearly fifty per cent of the population. The population explosion, then, is them. Now since anyone forty years old is going to be around only for another thirty years or so tops, they're not going to be much of a problem. The kids are starting to do and risk it to make enough money for their kids to buy the Doors' records and acid and junk. But that eighteen-year-old over there—man, he's going to be around breathing air, using up food, making garbage for another forty or fifty years. Even a kid can grasp that he himself is the real enemy.

Now when we begin the widespread free distribution of drugs, this group will start dying like flies. And still more benefits will accrue to society as a whole. Junk music will die, too. There won't be so many cars on the highway, and those that are there won't be in such steady use. Air pollution will be further reduced. Since we won't need so many highways, the grass and trees will grow and get more oxygen. Drug use, incidentally, including acid, is becoming as common a cause of traffic deaths as alcohol. So we get a bonus here too.

I know there are those out there in Readerland who will write me letters telling me I've got it all wrong—like the people who wrote me letters telling me New York is not dying. They'll say my proposal is heartless and cruel. But it isn't. I assume you. We have given the young what they want until now. Why should we draw the line at death?

To young people I would say this: don't believe old squares when they tell you that drugs, even grass, are damn dangerous. Don't believe the reports that the grass available now is often spiked with heroin to hook you on hard narcotics. Don't believe those who tell you that heroin is evil stuff. You know all those people are just trying to keep you from having a hip kind of good time.

And don't think about death. Think instead how you will be reducing the pressures of population on the rest of us. Think what a noble deed you'll be doing. Think Zen thoughts about eternity and the continuum of consciousness and about astrology and how mortal existence is a mere passing cloud. Think not of going into a valley of blackness. Think instead how you are going to join the great All-Consious, best ever in nirvana. As you sit there, listening to John and Yoko with a needle in your arm, reflect not on the dying you're about to do. Just think how high you're going to be as you go. And to the record industry I would say: keep up the good work, gentlemen. You've done a hell of a job thus far.

Gene Lees

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CIRCLE 35 ON READER-SERVICE CARD
JONI MITCHELL: Ladies of the Canyon. Joni Mitchell, vocals, guitar, keyboards, and arr. (Willy; Blue Boy; Conversation; nine more.) Reprise 6376, $4.98. Tape: $ 4RA 6376, $5.98.

It is a peculiar fact of today's music that those who perform best also tend to write the best songs. Witness the Beatles, Simon and Garfunkel, Crosby/Stills/Nash/Young, Laura Nyro. Today's product is intensely personal, wedded to itself. Of the many remarkable self-contained talents, Miss Joni Mitchell soars highest. While all of her gifts are superb, I suspect that no one part would work without the others.

There is no producer listed on the album because Miss Mitchell has produced it herself. I once wandered into one of her recording sessions by mistake. No one was there but Miss Mitchell and her sympathetic engineer-adviser, Henry Lewy. She even painted the album cover, which includes a simple, accurate, line-drawn self-portrait.

The music is also all Joni Mitchell—melodies, lyrics, voice, guitar, keyboard, arrangements. A few tracks include a touch of the outside world—a clarinet here (and I wish he'd listen to the lyrics instead of jazzing up his moment), a cello there, and one tune that uses a few friends as a background chorus.

This is Miss Mitchell's third album, and the first on which she plays piano. By some mysterious process, she makes it sound like a guitar. Her playing is equally dramatic, strange, and uniquely harmonic on both instruments.

In the interest of balance, a few inconsequential imperfections may be noted. Miss Mitchell's otherwise crystal voice wobbles a bit on high notes, and a couple of songs—Morning Morgantown and Circle Game—must have been written some time ago, before full flower. But then, early Mitchell suffers only when compared to prime Mitchell.

This young lady has never been more in her prime than when she wrote the incredible Woodstock, in which she plays a Fender-Rhodes electric piano. The song captures all the dreamlike beauty one likes to think must have existed in that quite real weekend in the country last summer. Another song, unmistakably autobiographical, tells of Miss Mitchell as she comes upon a street-corner musician playing his clarinet, ignored by passersby. "Now me I play for fortune and those velvet curtain calls. ... And I play if you have the money or if you're a friend to me. But the one-man band by the quick lunch stand, he was playing real good, for free." Other gems: The Arrangement, Big Yellow Taxi, The Priest.

Miss Mitchell is available, unfettered, on Reprise. I can't recommend anyone more highly. M.A.

RUTH BROWN: Black Is Brown and Brown Is Beautiful. Ruth Brown, vocals; rhythm accompaniment. (Yesterday; Lookin' Up; Ain't I Happy; This Better Earth; four more.) Skye SK 13, $4.98. Tape: $ 813, $6.95; $ 513, $6.95.

ARETHA FRANKLIN: This Girl's in Love with You. Aretha Franklin, vocals; instrumental accompaniment. (Son of a Preacher Man; Let It Be; Ain't It Fair; The Weight; Call Me; five more.) Atlantic SD 8248, $4.98. Tape: $ 8248, $3.75 ips, $5.95; $ 48248, $5.95; $ 88248, $6.95; $ 58248, $6.95.

The new albums by Aretha Franklin and Ruth Brown provide a study in contrasts. Franklin, of course, is the reigning queen of soul; but back in the '50s Ruth Brown was one of the most important and one of the best female r & b vocalists. Yet it is "This Girl's in Love With You" that sounds tired and old-fashioned and "Black Is Brown and Brown Is Beautiful" that is fresh and immediate.

Franklin's thing is gospel power, and she often can bring a new dimension to a song just by the application of her by now familiar formula. For example, a tune as emotionally neutral and musically vapid as This Girl's in Love With You comes alive here. And with material that is easily adapted to a gospel context—like the Beatles Let It Be, she is a powerful and expressive performer, though it is surprising how little she adds to Son of a Preacher Man which should be a natural for her. Conversely, she can be appallingly insensitive to material—especially lyrics—that doesn't suit her; she all but destroys the subtle, romantic Dark End Of the Street here.

Ruth Brown made her name in the harsh scrapping world of '50s r & b. Known then as Miss Rhythm, she demonstrates on her new album that she has lost none of her rhythmic skill in the intervening decade. With her original format mercifully forgotten—"50s r & b was pretty stark—she is able to choose the setting that she wants: Herbie Lovelle, drums; Eric Gayle and Billy Butler, guitars; Chuck Rainey. Fender bass; Richard Tee, organ; with arrangements by Gary McFarland. And she has chosen a wide variety of the songs she likes: This Better Earth, Please Send Me Someone to Love, the Platters My Prayer, a blues of her own based on Hey Schoolgirl and Going Down Slow, and on up to the Beatles Yesterday. Her approach puts her somewhere between Billie Holiday's sardonic bitterness and LaVern Baker's exuberance—in spirit she reminds me most of Dinah Washington, but almost any comparison is unfair because her approach is really her own. More than any other soul-oriented vocalist I have heard lately, she pays careful attention to every nuance of the lyrics. The program is heavy in blues and blues-ballads, but a rousing,
It's kind of a dumb-looking thing, but the ear is still the best listening device around. Which should tell you something about the shape of a Yamaha speaker.

True, the ear receives sound and a speaker reproduces it. But the basic principles of physics and design are essentially the same. There is a place in the middle through which the sound travels. Surrounding it are planes of varying dimensions. There is no symmetry.

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GUY LOMBARDO: Is That All There Is?
Ty Lemley, Tony Cointreau, and others, vocals; Guy Lombardo and the Royal Canadians. (High Society; Jean; Somewhere My Love; eight more.) Capitol St 340, $4.98.

Nowhere does musical time stand quite so splendidly still as with Guy Lombardo and the Royal Canadians. Not one musician in this group has been in touch with the music scene for forty years, not even the youngbloods. Guy Lombardo is pure and untouched.

This album was created "live" in the beautiful Blue Room of the Tropicana Hotel in Las Vegas, and the audience is having a terrific time. Hearing this record, mixed in with the month's rock releases, brings an insane joy. Most of the rock albums were standard or poor, but this is good Lombardo. When you go out to hear Lombardo, folks, you hear Lombardo!

The unquestionable sockeroo of the set is the Lieber/Stoller hit, Is That All There Is? You know you're in for something snazzy as the old showman himself mis-announces the tune: "Here's a number that was made popular by Peggy Lee. . . . Ty Lemley sings our vocal chorus: That's All There Is." Mr. Lemley, singing with all the sincerity of a hairless charlatan, gives his utmost. His spotless reading of the line, "Let's break out the booze and have a ball," must be heard to be appreciated.

Almost equally priceless is Carmen Lombardo's saxophone solo on Coquette, cleverly superimposed over Kenny Gardiner's, vocal on Winchester Cathedral. Tiny appears again later, incidentally, this time superimposed over Auld Lang Sync. Really.

Buy this thing and add the proper touch of madness to your day. As your sewing machine sticks your thumb and the car collapses into carefully scheduled obscurity, buy this and support an institution that never fails. Guy Lombardo, you old devil, we love you.

TONY BENNETT: Tony Sings the Great Hits of Today.
Tony Bennett, vocals: Peter Matz and Dee Barton, arr. (Here: Is That All There Is?; Sunrise; Sunset; eight more.) Columbia CS 9980, $4.98.

In production and concept, this album is contemporary soul tune. Try Me and See, is included for contrast. Gary McFarland's arrangements are the best she has ever enjoyed.

A clear example of the difference in the way they handle voices, is provided in the Beatles' tunes. Ruth Brown gives yesterday a reading that enhances its meaning, that carefully and simply plumbs the song to its depths. Franklin, on the other hand, assaults Eleanor Rigby, not only by failing to provide a new point of view but by simply ignoring its meaning.

J.G.

COLUMBIA'S. It is only incidental that Tony Bennett is the singer. Bennett at least has arranger Peter Matz in his corner, and his charts soar. Gene Orloff conducted an orchestra of more than forty of New York's finest players for the date; and since he is a first-rate violinist, the string section is an exceptionally good one.

But one thing was overlooked. Something so basic that it should be taken for granted: a good mix. The mix on much of this album is careless, shoddy, muddy. You can't hear what Matty really wrote; you are forced to guess.

Columbia has launched an extensive promotion campaign in support of this album. And when it sells, the brass will no doubt justify its concept with, "See? People don't want to hear good songs."

But they do, they do.

It's time the company put some faith in Bennett. He's one of our great singers of popular music. If you want one of Tony's albums, I wouldn't suggest this one. Buy instead any in the long line of excellent Bennett discs still available: The Movie Song Album. "Tony Makes It Happen," or "I Heard the Rain." You'll be doing him, yourself, and music more good.

F.B.

VAN MORRISON: Moondance. Van Morrison, vocals and guitar; instrumental accompaniment. (Stoned Me; Crazy Love; Caravan; Everyone; Glad Tidings; five more.) Warner Bros./7 Arts 1835, $4.98. Tape: 4 WA 1835, $5.98.

JAMES TAYLOR: Sweet Baby James.
James Taylor, vocals and guitar; rhythm accompaniment. (Sunny Skies; Steamroller; Country Road; Blossom; Your Lip on Me; Suite for 20G.) Warner Bros./7 Arts 1843, $4.98. Tape: 1843, $5.98.

JOHN DENVER: Take Me to Tomorrow.
John Denver, vocals and guitar; instrumental accompaniment. (Isabel; Follow Me; Aspenglow; Amsterdam; Molly; six more.) RCA Victor LSP 4278, $4.98. Tape: PPS 1564, $6.95; PK 1564, $6.95.

Second albums, like second novels, are important, because they indicate, sometimes definitively, whether the first album was a flash in the pan or something more. This month's second releases indicate that we have gained three permanent additions to the pop library.

Of the three, John Denver is the most disappointing. His first album, "Rhymes and Reasons" (RCA), may have been the best folk-rock LP of last year. The material included Denver's Leaving, on a Jet Plane and several other good compositions of his own, as well as a number of fine songs from other pens. And Denver's performance was warm and easy. The new album has a greater concentration of his own tunes, none of
them as good as the songs on the first album. Nor, with the sole exception of James Taylor's "Carolina in My Mind," which receives a harsh rendition, are any of the songs by other writers especially noteworthy. Denver's singing has developed a hard edge since the first album and the whole record feels very tense.

James Taylor is one of the best songwriters around, but like Harry Nilsson he is an even better performer. His first album was the initial release from Apple, the Beatles' company, and though it was brilliant, it received no promotion and never sold. Warners has given Taylor a bigger push and recently he was packaging them into the Gaslight (at $4 a head) in his first appearance in New York. Although the new album includes several first-rate tunes (especially the title song and "Sunny Skies"), it is Taylor's simple, straightforward, folk-pop delivery that makes the album. He is a remarkable performer.

Van Morrison is out of a totally different bag. If he weren't so good he could be called a blues imitator; but although he is firmly grounded in r & b, he uses the soul influence to his own ends beautifully. In contrast to an essentially camp performer like Randy Newman, Morrison's originality as a blues-based singer is nearly self-evident. He also shows a greater appreciation for jazz than is usual for a pop performer.

Both Taylor and Morrison receive excellent support from their sidemen. Taylor's helpers include Danny Kootch and Carol King, who made up most of last year's excellent unheralded group called City). In fact, the only possible objection I see to either album is that both composers have accepted most of the male-supermacist attitudes of their sources, especially when they are writing close to an influence from black music. Pop musicians have never been able to lift forms without also getting content. That aside, however, these are two of the most enjoyable and satisfying albums of the year.

KATHY McCORD. Kathy McCord, vocals; Don Sebesky, arr. (Jennipher; For You, Child; Baby James; seven more.) CTI 1001, $4.98.

When arguing that quality records can be profitable, the name most often used in support is Creed Taylor, who successfully produced five albums by such artists as Wes Montgomery, Stan Getz, Astrud Gilberto, and Herbie Mann.

This album, presenting singer/musician Kathy McCord, says as much about Taylor as it does about Miss McCord, and both stories are worth noting. The album is the second album with which Taylor has been associated recently. The fact that Miss McCord is in the contemporary world makes it clear that Taylor is shifting his sights from jazz to current pop—which is fine news for pop.

Miss McCord wrote all but one of the songs here. While she is not similar to Laura Nyro, one could say that her talent lies in that direction. Her songs are young, searching, poetic, often weak and often strong. Among the best are "The Love Flower" and "Candle Waxing" (the latter sensitively set by arranger Don Sebesky, with Ed Shaughnessy on tabla). Several tunes are given a country flavor which doesn't quite fit. A communication problem seems to have occurred on "Yell Smile," whose sweet if light-hearted lyric is fighting an inappropriate good-timey music background.

Miss McCord's voice is low, soft, velvety, a little shy. Capitalizing on her elements, Taylor has captured her essential sweetness.

For all its flaws, this is an album I'm happy to see. If Taylor is going into the rock business, rock must profit by it, even as Kathy McCord has. M.A.

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WILLIE NELSON: Both Sides Now. Willie Nelson, vocals; rhythm accompaniment. (Crazy Arms; Wabash Cannon Ball; I Gotta Get Drunk; Everybody's Talkin'; One Has My Name, the Other Has My Heart; five more.) RCA Victor LSP 4294, $4.98.

CHARLIE RICH: The Fabulous Charlie Rich, Charlie Rich, vocals and piano; instrumental accompaniment. (I Almost Lost My Mind; Sittin' and Thinkin'; July the 12th 1939; Bright Lights, Big City; Raggedy Ann; A Picture of You; five more.) Epic BN 26516, $4.98.

Waylon Jennings, who won a Grammy this year in country-and-western, is back with an excellent new album. His departure from RCA to A & M hasn't hurt him in the least; in fact, there is a looseness about "Don't Think Twice" that is often missing from the well-tailored products of RCA's Nashville assembly line.

Jennings has made a consistent effort to broaden the range of material available to him. But unlike other country artists who have attempted the same thing, he doesn't rely heavily on big pop hits. Here, for example, he not only goes back to "Don't Think Twice" but also gives a warm humorous reading of Dylan's more rarely performed I Don't Believe You. Included are Twelfth of Never, the B side of Johnny Mathis' first hit; Kisses Sweeter Than Wine; and the lovely Four Strong Winds. Jennings has a clean, unaffected style, open and direct. The arrangements are unobtrusive: his voice and the lyrics are the whole story.

Willie Nelson's "Both Sides Now" attempts to use the same formula, but the song choices are more predictable and less inspired (besides a truncated version of the title tune, Nelson offers Everybody's Talkin'—this season's By the Time I Get to Phoenix). On the other hand, though, he doesn't have an especially attractive voice. Nelson takes his work seriously and manages to give new life even to clichés like Wabash Cannon Ball and One Has My Name, the Other Has My Heart. Although he doesn't have the originality of Jennings (or Jerry Reed or Nat Stuckey), Willie Nelson is a promising addition to the progressive c & w roster. His next release should be interesting.

If Jennings and Nelson fit into the Nashville sound, then Charlie Rich surely comes out of the same Memphis tradition that produced Elvis Presley and Jerry Lee Lewis. In fact, Rich sounds quite a bit like Presley, only more tasteful than Elvis is apt to be, especially on ballads. Most of the arrangements on "The Fabulous Charlie Rich" are excessively ornate, with strings and a choir, but Rich manages to dominate the proceedings anyway. Like Nelson, he mixes some warhorses in with the newer material and he is similarly able to make most of it sound fresh. Included is his own hit, Life's Little Ups and Downs, which shows every indication of becoming a warhorse itself. This is a good album, although I can't help but think it would pale next to an LP of Rich and his piano alone with a rhythm section (Jerry Lee's customary format). In the meantime, though, Rich shouldn't be missed.

J.G.

LIZA MINNELLI: Come Saturday Morning. Liza Minnelli, vocals; Dick Hazard, Michel Colombier, Bob Thompson, and Peter Matz, arr. (Love Story; Where fore and Why; Nevertheless; eight more.) A & M SP 4164, $4.98. Tape: OR 4164, 3 1/2 ips., $7.98; 8T 4164, $6.98; CS 4164, $6.98.

Liza Minnelli used to irritate me. She sang strenuously and flat and she came on too strong. But now she has truly stolen the show in the film Sissi, The Red Menace, and released this delightful album one of which was recorded ove r a year ago while she was working on the film. Miss Minnelli showed us her potential several seasons back on Broad way in Flora, The Red Menace, and as I noticed were the flaws. And they are there. This is not the voice of the century, nor would the lady win an intonation contest with Mel Tormé. But, a always with true talent, the machine doesn't matter much.

Producer Larry Marks has done whi

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all album producers attempt to do: provide a situation in which the artist can most perfectly express herself. The material is not only tasteful and timely, but totally appropriate to the singer. The arrangements, most of them by Dick Hazard, are superb. Presumably, Mr. Marks had a hand in these things. But more important, he provided the most important intangible for good producing: the atmosphere, (that allows people to work with pride.

It appears that with this album Miss Minnelli has found out who she is as a singer. Her sound is more restrained, thus prettier and yet more powerful than before. The title tune is from her film The Sterile Cuckoo and includes a wishful spoken segment. "Leavin' on a Jet Plane" is a folktish hit tune whose lyrics have never really been interpreted until now. The same applies to the chart tune "Don't Let Me Lose This Dream." Liza's mood and Hazard's easy-rock arrangement are so fine that one can forgive Miss Minnelli for losing her grip on the tempo from time to time. Simon, written by Liza's husband, Peter Allen, is a lost little girl's love song, intimately tailored and movingly executed. Peter Matz has written an interesting and highly successful arrangement of "Slow Boat to China," revolving around the relative minor key of the song, sung with slow ease by Miss Minnelli.

Liza Minnelli has tradition in her blood. She is in the mainstream of entertainment, as her mother was, but she is still a product of her own young generation. An interesting blend, and a lovely talent. Sorry I was so slow to notice.

M.A.

LULU: New Routes. Lulu, vocals; instrumental accompaniment. (Feelin' Alright: Dirty Old Man; Is That You Love; Mr. Bojangles; Where's Eddie; six more.) Atco SD 33-310, $4.98. Tape: M 8310, $6.95; M 5310, $6.95.

DUSTY SPRINGFIELD: A Brand New Me. Dusty Springfield, vocals; instrumental-arrangement. (Lost; Joe; Let Me in Your Way; Silly, Silly, Fool; Let's Talk 'Til Over; five more.) Atlantic SD 8249, $4.98. Tape: M 88249, $6.95; 4 58249, $6.95.

A year or two ago, Atlantic brought British pop singer Dusty Springfield to Memphis to blend her mellow soul-based vocalizing with the raunchy instrumental work of that city's studio men. The result was a successful, artistically as well as financially, that the company is using the same trick again with Lulu. It works.

Lulu's past claims to fame are the hit single "Tell Me With Love" and a reputation for exuberance (she was once described as the British Brenda Lee). In the new album she retains the clarity of her earlier efforts, while eliminating the cuteness. For the most part, she stays close to the melody, although on Dave Mason's "Alight she proves she can break it rhythmically if the occasion demands.

The record is held together by an excellent small group that includes Eddie Hinton and Duane Allman. The production is by the same team that did "Dusty in Memphis": Jerry Wexler, Tom Dowd, and Arif Mardin, with the latter presumably contributing most of the charts. Practically all the material is well chosen, with Marley Pire Drive being especially good.

Dusty Springfield, meanwhile, has moved on to a new production team, Gamble/Huff, the Philadelphia-based outfit that produces Jerry Butler—perhaps the best, certainly one of the most intense singers in the whole soul-ballad field. So it is a disappointment to report that "A Brand New Me" is much less exciting than her previous Atlantic outings. For one thing, her style has changed to reflect the more sappy rhythms of Jerry Butler. For another, the sound of the whole production—the voice, background, and rhythm section—is muffled and indistinguishable to the point where a switch in modes from stereotype to mono hardly diminished the quality of the sound at all.

In addition, it seems to me that it is almost always a mistake to base a whole album on the songs of one writer or team, no matter how brilliant—and Kenneth Gamble, Leon Huff, and company are certainly among the best—because all writers develop little mannerisms and techniques that work in isolation but can become tiresome if repeated too frequently. Almost all Gamble/Huff songs are structured similarly, and when given the same arrangement and performed by the same vocalist—even Jerry Butler—they
jazz

* BUD FREEMAN: The Compleat Bud Freeman. Bud Freeman, tenor saxophone; Bob Wilber, clarinet and soprano saxophone; Ralph Sutton, piano; Bob Haggart, bass; Gus Johnson, drums. (Dinah; Exactly Like You; Uncle Haggart's Blues; nine more.) Monmouth Evergreen 7022, $4.79.

Dick Gibson's formation of the World's Greatest Jazz Band has had two rewarding side effects: the rediscovery of Bud Freeman's talents and the emergence of Bob Wilber as a major jazz musician. Freeman's return to eminence gave him the opportunity to make this record, the finest demonstration of his gift yet produced.

Since the days of The Eel (1933) there has been a tendency to take Freeman for granted, largely because—at least since World War II—he has had no steady base of operations from which he could be heard until the World's Greatest Jazz Band came along. Here he shows that, while not too many people were listening, he has been polishing, honing, and developing the talent that had set him apart from other tenor saxophonists forty years ago.

On one side of this disc, accompanied by Ralph Sutton, Bob Haggart, and Gus Johnson, he plays a set of standards, decking them out with fascinatingly different nuances—delicate little twists, sturdy yet swinging phrases, unexpected turns and variations—all accomplished with a tone that has both the polish and texture of good Scotch tweed. On the other side, Bob Wilber joins Freeman for some magnificent duets on several ear-catching originals by Bud. Out of My Road, Mr. Traid and That D Minor Thing are riff-based pieces that ought to go into everybody's repertoire, while Song of the Dove is a superb example of Freeman's lyrical creativity.

They also perform two purist standards. On Ain't Misbehavin' Wilber and Freeman build the kind of ensemble riffs that brought jazz to greatness. And then there's the mad chase through Just One of Those Things—their specialty with the World's Greatest Jazz Band. For Freeman's work alone, this is an essential record, but Wilber matches him at every appearance, Sutton gets in a few of his sturdy passages, and Haggart and Johnson are impeccable. This is one that will really last.

J.S.W.

GENE MAYL's DIXIELAND RHYTHM KINGS: Swinging Saloon Dixie. Didi Baars, cornet; Bootie Wood, trombone; Pat Patterson, clarinet; Clarence Hall, piano; Gene Mayl, bass; Shannon Bell, drums; Monte Tabbert, vocal. (Swee Georgia Brown; San Antonio Shout; Blues for Tiny; six more.) Jazzology 6, $5.98. Available from Jazzology Records, P.O. Box 748, Columbia, S.C.

If you identify Gene Mayl's Dixieland Rhythm Kings as one of the more stodgy revivalist bands of the early Fifties, this disc should come as a shock. This version of the DRK, recorded in 1963, is loose, swinging group that, barring somewhat idiosyncrasies on the part of clarinetist Pat Patterson, is solid all the way down. A particularly fortunate choice is that of the singer Monte Tabbert, who not only does not make you cringe but also po...
senses a very strong, positive vocal quality and a free, forthright way of using it. He has on two numbers and comes out quite differently on each one. On Backwater Blues he does a remarkable job of building into the Joe Williams pattern, while on After You've Gone he sounds like a vitalized Clancy Hayes.

Dick Baas's cornet is consistently everything that it ought to be—a strong, clean lead on ensembles, imaginative and individual on both open and muted solos, sensitive in his accompaniments to Tabbert, Bootie Wood, once an Ellington trombonist, has that Bukish way with a plunger; and Clarence Hall is an old-time romping pianist who builds out of the blues.

Patterson's attack on clarinet changes from piece to piece. Sometimes he affects a tight chocked sound, while at other times one hears the hollow quality that Bob Helms used quite effectively (Patterson less so). And there are ghosts of Pee Wee Russell floating around, too.

It is unfortunate that the record is called “Swinging Saloon Dixie,” which suggests that it is the customary schlock that usually comes from would-be traditionalist groups. This is a jazz band and a damned good one. I hope it still exists.

JOHNNY ALMOND MUSIC MACHINE: Hollywood Blues. Johnny Almond, tenor and alto saxophone, flute, vibes, and organ; Hadley Caliman, tenor saxophone and flute; Curtis Amy, tenor and soprano saxophone; Vi Redd, alto saxophone; Charles Kynard, organ; Joe Pass, guitar; Ray Neapolitan, bass; Joe Harris, drums. (It's the Water; Blues for Helen; Hot Rod; five more.) Deram 18037, $4.98.

Johnny Almond was introduced to the American jazz world last July at the Newport Jazz Festival. There he appeared as a member of John Mayall's quartet, a group that impressed even those jazz fans who were most estiblished by the pile-up of rock groups that produced George Wein inflected on them. With Mayall's group, which played bluesier and more contemporary folkish material, Almond's saxophone and flute playing showed discipline, grace, and a firmly positive tone. On this disc, he is thrown into the company of assorted West Coast jazz musicians in a standard jazz recording session. In these surroundings, less interesting than those with Mayall, Almond shows a strong, surging, singing attack on both alto and tenor saxophone that brings brightness and body to several pieces.

In a gentler fashion, these same qualities come through in his work on flute and vibes. As an organist, however, he is unimpressive. One purpose of the disc, apparently, was to show that this twenty-three-year-old Englishman could hold his own with such American musicians as Curtis Amy, Vi Redd, and Hadley Caliman.

Now that he has done it, I hope he'll be able to use his talents for something more interesting than such tired devices as trading fours with another saxophonist.

in brief

SIR DOUGLAS QUINTET: Together After Five. Smash SRS 67130, $4.98. Tape: SC4 67130, $5.98; SC8 67130, $6.98; SCR4 67130, $6.98.

The Sir Douglas Quintet is what happens if you blend cajun stomping, Mexican folk, and Texas raunch into one sound. Doug Sahm is one of the best writers of rock songs, and this third album shows that the band keeps getting better.

REDBONE. Epic EGP 501, $4.98.

Redbone is a rock group made up of four young American Indians. It's a nice gimmick, but the best part is that Redbone is a highly musical and entertaining group. Good luck to them.

THE MAGIC CHRISTIAN. Commonwealth United CU 6004, $4.98.

Badfinger, who performs the hit single Come and Get It from this soundtrack, sounds remarkably like Paul McCartney, who wrote and produced the song. I am assured by people who should know that he isn't. Beatle fans will want it anyway, though there isn't much else worthwhile on the record.

JUDITH DURHAM. A & M SP 4240, $4.98.

This album says more about A & M than...
ADVERTISING INDEX

is on page 108 in this issue.

Reader Service cards appear on both pages 19 and 109.

When you can't find some remembered review from a back issue of High Fidelity, consult The Index to Record Reviews Compiled by Kurtz Myers

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CIRCLE 39 ON READER-SERVICE CARD

it does about singer Judith Durham. It says that A & M had better be a little more careful. Miss Durham is nice and all that; she probably sounded great in someone's office. But later, things fell apart. It's just another singer in another directionless, expensively orchestrated package. The singer sounds young, scared, and amateurish. Oops.


Despite the presence of good sidemen—especially harmonica player George Smith—this live album is not quite as good as Big Mama Thornton's debut on Mercury a few months ago. But it is a solid entry that blues enthusiasts won't want to miss.

HUGO MONTENEGRO: Colours of Love. RCA Victor LSP 4273, $4.98. Tape: $5.95. P8S 1522, $6.95.

Montenegro works very well in this setting, performing the best market tunes and featuring a group of superb young L.A. studio singers headed by Ron Hicklin. One chart particularly knocks me out: Good Mornin' Sunshine, using the same infectious time feeling as that on Joe Cocker's hit, Feelin' Alright. The singers are a gas. This album goes on the middle-of-the-road shelf, but it's well worth owning.

LYNNE HUGHES: Freeway Gypsy. Fontana SRF 67611, $4.98.

Lynne Hughes was once part of the legendary Charlatans, then formed her own group, Tongue & Groove, who had a strong first record last year. If you can ignore her obvious debt to Bessie Smith, "Freeway Gypsy" is an entertaining album. Some of the tunes are outdate.


As the notes say, "There's freedom here." Miss Sands is a fine, fresh, flowing young singer with a sunny quality. She sounds especially nice in the morning.

JIMMY CLIFF: Wonderful World, Beautiful People. A & M SP 4251, $4.98.

Tape: $1.00 OR 4251, 3/4 ips, $7.98; MCR3 4251, $7.98; MCR4 4251, $4.98; MCR2 4251, $5.95; MCR1 4251, $6.98; MCR5 4251, $6.98.

Jimmy Cliff sings mostly his own material warmly and vibrantly on this, his first release. If there were such a thing as good-time soul, this would be it. Happy, happy.

MEL TORME: Raindrops Keep Fallin' on My Head. Capitol ST 430, $4.98.

Mel Tormé, still one of the country's best singers, is making a valiant effort to tune into the revolutionized pop music scene. Kids won't like it, but I do. Tormé performs an absolutely definitive reading of Jim Webb's moving song, Requiem: 820 Latham.

CARL OGLESBY: Vanguard VSD 6527, $4.98. Tape: $6.95. VSD 6527, $6.95; VSD 6527, $6.95; VSD 6527, $6.95.

Budding singer and songwriter Carl Ogleisy, former SDS president and longtime movement heavy, proves once again that politics are his forte. J.G.

LIVERPOOL SCENE: Bread on the Night. RCA Victor LSP 4287, $4.98.

Liverpool Scene is a talented, brash, ambitious, pretentious, politically sophisticated, musically unpolished hard rock quintet. They take a lot of chances, but sometimes really connect. The Entry of Christ into Liverpool may be a bit too British for the States. But the next time you're OD-ing on white blues, try this antidote: I've Got Those Fleetwood Mac Chicken Shack John Mayall Can't Fail Blues.

J.G.

GENE ESTES BAND: Westful, Nocturnal NRS 701, $4.98.

This is a love album. Studio drummer/percussionist Estes has gathered the best studio players in L.A. for a big-band album full of fun. Pertinent, no—entertaining, yes.

M.A.

OTIS SPANN: Cryin' Time. Vanguard VSD 6514, $4.98. Tape: $6.95. VSD 6514, $6.95; VSD 6514, $6.95; VSD 6514, $6.95.

Otis Spann is the best piano player on the Chicago blues scene and one of the best ever to play the blues anywhere. Many of his performances, especially with Muddy Waters, are classics. Not this time: the tracks are never less than competent, but neither do they really catch fire.

J.G.

JAMUL. Lizard 20101, $4.98.

Jamul, a hard rock quartet, apparently wants to give the impression that they are tough guys, a la Steppenwolf. They're not. In happier days they might have been a good dance band. Now they're just harsh.

J.G.

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