Lab/Listening Reports

- Bertagni Model D-120
- Cizek
- Jennings Vector One
- Koss Model 2
- Phase Linear Model III

How to Shop for Speakers

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Linear Magnetics,
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Harmonic Distortion: No more than 1.7% (0dB)
Wow and Flutter: No more than 0.07% (WRMS)
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John Borwick. Gramophone. United Kingdom 1977

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BACKBEAT begins on page 107
If your cartridge is more than three years old, don’t replace your stylus!

Don’t get us wrong. There is nothing worse than playing your records with a worn stylus. And no better way to restore your old unit to its original glory than a new diamond.

But frankly, there have been significant strides made recently in the phono cartridge field. And the new cartridges of today stand head and shoulders above even the finest of a few short years ago.

Here’s the choice: Get fresh—but outdated—performance with a replacement stylus, or enjoy all the benefit of modern cartridge research and developments for just a few dollars more. You’ll find that you can update your system for far less than you might imagine. It’s probably the most dramatic single improvement you can make.

For instance, Audio-Technica offers Universal™ cartridges equipped with a genuine Shibata stylus and our uniquely effective Dual Magnet™ system beginning at just $75.00 list. Or you can replace your present cartridge with a fresh new Audio-Technica cartridge with highly-polished elliptical tip for as little as $45.00 list.


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DiscTraker greatly enhances the performance of fine record playback systems, another example of Discwasher's leadership and innovative technology.
COMING NEXT MONTH
With windows open in July, you hear the cries and commotion of the neighborhood kids' street games, with them closed, you have to put up with the air-conditioner's dull roar. So who needs noise intruding on your pleasure when you finally retreat to your listening room for some Beethoven or Bonnie Raitt? Next month our audio editors bring you an update on noise-reduction devices—De-Hissers and De-Clickers. We continue our recording-centennial celebrations with R. D. Darrell's The Electrical Era, Jim Jonson's color acrylic rendering of the period (third in the series "100 Years of Recording"), and W. R. Moran on Nellie Melba's Farewell Concert. Flurgh correspondent John Culshaw reports on "Bali Hoo!", Gene Lees on another ethnic strand in "Music USA." Plus Backbeat, five test reports, and more.

SOLUTION TO HIFI-CROSTIC NO. 24

LESLIE BAILY: Gilbert and Sullivan [Their Lives and Times]

In America pirates were making fortunes from Piranofers of infinite variety. One interpolated a song about a new fashion in trousers, another the Hallelujah Chorus. Characters were interpreted with un-Gilbertian freedom, as when Little Buttercup was played by a man seven feet tall.

EDISON LABS
I want to thank you for "The Life and Labs of Thomas A. Edison" [January]. The National Historic Site is indeed an interesting place. I've had the privilege of visiting there for a couple of the annual programs held in October. I understand that you had the assistance of Mrs. Wallace Butler in gathering the materials for the Edison article.

John A. Potty
Rutherfordton, N.C.

We are glad you called attention to our oversight in not mentioning Leah Burt's involvement with the Edison article. But the experts did have their points. We regret very much that Stanton Magnetronics' cartridge line was unintentionally identified two JVC turntables, Model JL-F35 and Model JL-F45, as changers. They both, in fact, are automatic single-play units.

Choosing Components Revisited

The letter from Thom Jakowczyk [March] playing the experts on their component choices in your December 1976 issue is typical of certain audio dealers I have met. They would apparently rather score a putdown of a prospective customer than to be removed from that issue, the remainder would be spurned instead.

Boston Broadcaster

"Boston: Hub City of American Audio" by Michael Riggs [March] was really informative and well organized. But Riggs somehow missed one name that has come to symbolize the best in FM programming for some 250,000 music-loving listeners throughout New England.

Robert J. Lutesema has worked several days a week for seven years now at WGBH to make his Morning Pro Musica a living model of what FM broadcasting can and should be: a carefully planned, warmly human, wonderfully imaginative presentation—from 7:00 a.m. to noon daily—of the best recorded and live music available. The fact that his efforts are largely supported by voluntary contributions from people of all ages, occupations, and income levels is solid evidence of today's demand for quality on the air.

Edward E. Androuette
Pembroke, N.H.

Record-Playing Buyer's Guide: Addenda and Corrigenda

We regret very much that Stanton Magnetronics' cartridge line was unintentionally omitted from the 'Directory of Turntables, Tone Arms, and Cartridges' in our April issue. Stanton's elliptical stylus 680EL ($90), 681EEE ($90), and 681EEE ($90) is recommended for disco use and comes with an extra stylus. Other elliptical-stylus models include the 680EL ($65), 680EL ($65), and 680EEE ($89). Stanton's discrete four-channel cartridge, with a "Special" stylus, is the 780/4Q ($125).

In the turntable section of the guide, we identified two [VC turntables, Model LF-153 and Model LF-145] as changers. They both, in fact, are automatic single-play units.
We believe that precision is the most important factor in turntable design and performance. Which is why we've built such a high degree of precision into our advanced new line of turntables. So you'll need a whole new set of reasons to choose the one that's right for you. And when it comes to value, all seven will play second to none.

Take our new QL-7 Quartz-Locked and JL-F50 Fully Automatic direct drive, shown above. They're both unusually close when it comes to some important specs, but what will surprise you most is that they're also both in the same price range.

For instance, the JL-F50 checks in with 0.03% wow and flutter (WRMS), 70dB signal-to-noise ratio (DIN B), and it offers a host of convenience features as well, with most controls up front so you can operate them without lifting the dust cover. Its fully automatic operation gentles your favorite records, and lets you repeat them from one to six times, or infinitely. A built-in strobe makes speed adjustments easy and accurate. And the JL-F50's looks are in keeping with its precision design.

The QL-7's looks are equally great. And in its electronic heart, it's a tiger. All business, with the incredible accuracy only a Quartz-Locked machine can boast. Truly for a perfectionist, the QL-7's wow and flutter measures only 0.025% (WRMS), S/N is more than 74dB (DIN B). Figures that no other QL turntable we've seen in its category can touch. It's totally manual, with strobe speed indicator, and priced less than any other QL machine on the market.

The way we see it, you're left with a superb decision: our JL-F50 at less than $250*, with all the convenience and performance most people could ever want, or our QL-7, the finest under $300* turntable available today for the discriminating audiophile.

Either JVC you choose, you'll have made the right decision. JVC America Company, Division of US JVC Corp., 58-75 Queens Midtown Expressway, Maspeth, N.Y. 11378 (212) 476-8300. Canada: JVC Electronics of Canada, Ltd., Scarborough, Ont. For your nearest JVC dealer, call toll-free (outside N.Y.) 800-221-7502.

*Approximate retail value.

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AIWA's AD-1250 is so beautifully built it makes the other decks look flat. Its new ultra-modern slant backed deck with its 20° angle stands out in a crowd. And up. So you can see what you're doing. And of course underneath all this streamlined beauty lies the pride and joy of our AIWA engineers. The technical genius that has made AIWA famous for quality worldwide. Our built-in Dolby* and interlocked Dolby-MPX filter switch have a 60dB S/N ratio. The 30Hz to 16kHz (Fe-Cr tape) frequency response insures vividness and clarity of sound. The oil-dampened cassette elevation and ejection feature pioneered by AIWA, handles your cassettes with kid gloves. The AIWA AD-1250. The body beautiful.

Dolby is a Trademark of Dolby Laboratories. Inc.

ducting a Brahms program and a glorious Bruckner Eighth has been followed by two summers of magnificent Tanglewood programs and a return to Symphony Hall this year in renewed triumph. Tennstedt is quite simply the greatest conductor we have today of the Viennese classics.

A native of East Germany, he escaped from that country in 1971 and is now musical director in the city of Kiel, Germany. This year he will be conducting many of the major American orchestras. Let us hope that the wide exposure his work is getting on the radio broadcasts from Boston (and from Chicago, New York, and Philadelphia too) will prompt the record companies to make a move in his direction.

Tennstedt's recent Schubert Ninth Symphony performances in Boston match the high standard set by Toscanini's Philadelphia Orchestra version and, indeed, surpass it in some particulars. Such miracles should not be lost to the wider public, which does not have access to concert halls of the major music centers.

Arthur S. Leonard
Cambridge, Mass.

Tennstedt is scheduled to record with the London Philharmonic this summer for EMI.

Text Case
In his excellent review of Jose Carreras' aria album [March], Dale S. Harris states that Philips provided no texts. This appears to be an isolated oversight. Texts were included in the commercial album I bought. Furthermore, they were printed on heavy glazed paper that should far outlast the cheap paper on which such texts are often printed.

John Clarke Adams
Syracuse, N.Y.

Edison Discs
In Dale S. Harris' review of the Claudia Muzio reissue [March], he refers to the orig-

HIGH FIDELITY MAGAZINE
The First Ionisation

Robert P. Morgan's discography of Edgard Varese's music [February] fails to mention the very first recording of *Ionisation* (Orion 7150), made under the direction of Nicolas Slonimsky. Personnel in the orchestra included Henry Cowell, Paul Creston, Roy Harris, Wallingford Riegger, Carlos Salzedo, and William Schuman. As Maestro Slonimsky put it: “Only an orchestra of composers could understand the music.”

Gideon Cornfeld
Orion Master Recordings, Inc.
Malibu, Calif.

The discography was confined to stereo discs. The recording Mr. Cornfeld cites was, however, mentioned by Louise Verèse in her reminiscence of the composer in the same issue.

June 1977
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short list of composers who have not given up on music: Phil Glass, Charles "Bobo" Shaw, Julius Hemphill, Oliver Lake, Steve Reich, Richard Landry. Send Gene to see them: he has been listening to too much music in elevators.

Fred Krughoff
New York, N.Y.

Horenstein Discography

As an adjunct to the Jascha Horenstein discography compiled by Jack Diether and published in HIGH FIDELITY [October 1973], the Beecham Society has recently published a listing of noncommercial recordings by the late conductor, together with appreciative articles. Interested readers may wish to contact the editor of the Society's organ "Le Grand Baton," Box 6381, Cleveland, Ohio 44101. (A $2.00 contribution to the Beecham Society is requested to offset costs of printing, postage, and handling.)

Peter Horenstein
South Hempstead, N.Y.

"The Medieval Sound"

Pursuant to Susan Sommer's review of recordings by David Munrow [February], it might be of interest to readers to know that Munrow's Oryx recording "The Medieval Sound" has been available domestically as MHS 1454 through Musical Heritage Society, and at half the cost. Also for early music lovers, MHS has begun releasing some of the Clemencic Consort's Harmonia Mundi recordings, including Vol. 1 of its Carmina Burana.

Not only are they fine recordings, but the Society's pressings have been consistently among the best of any label, imported or domestic.

Rudy Ising
Chicago, Ill.

One Lump or More?

As a singer in the Lancaster Opera Workshop's recent production of Britten's Noye's Fludde, I read with particular understanding John Culshaw's "Lump in the Throat" [March]. Can he imagine how many lumps resulted from attendance at many rehearsals? And, true, the audience's singing produced greater lumps—and even chills—and was exceeded only by the glories of the Tallis canon.

I appreciated especially Mr. Culshaw's suggestion that a hymn or chorale can form a metaphysical underpinning and stabilizing force "in a world of seemingly endless violence and cruelty and ugliness."

Phyllis Goodman
Lancaster, Pa.

Musical Pen Pal

I am a collector of LP records, magazines, and posters. I would be interested in exchanging these items with a pen pal abroad. Those who might wish to do so can write me at J. Krala 1276, Puchov 02001, Czechoslovakia.

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Puchov, Czechoslovakia

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But just as important, Technics knows that to achieve phase linearity as well as a wide and flat frequency response is also to achieve the ultimate in high fidelity: waveform fidelity. With it the output waveform of any component or speaker will be a mirror image of the waveform put into it. And that sounds better than good. It sounds live.

And if seeing is believing, look at the waveforms. On top is the oscilloscope reading (the fingerprint) of a live piano waveform. The other, the piano as reproduced by Technics Linear Phase SB-7000A. That's waveform fidelity you can see, as well as hear.

How did we do it? By designing a crossover network that would provide an overall linear phase characteristic for the entire speaker system, while simultaneously compensating for the different acoustic pressures of the individual drivers.

When we finished we ended up with a unique phase-controlled crossover network consisting of 6 dB and 18 dB/octave cut-off slopes. It not only eliminates "audible dip" at the crossover frequencies, but also assures excellent localization of the original sound source within the acoustic field.

But as important as the crossover network is in achieving linear phase, so are the individual driver units. That's why we designed and manufactured the speaker drivers with the flattest amplitude, widest frequency response and lowest distortion possible. A goal we achieved only after exhaustive amplitude and phase studies in anechoic chambers.

Our final step was aligning the acoustic center of each driver in precisely the same vertical plane. But it took more than anechoic chambers. Technics had to develop a new time-delay system using BBD (Bucket Brigade Device).

Only then could we locate the optimum acoustic position for each driver. In addition, each unit is positioned vertically for the best horizontal dispersion and then spaced as
closely as possible for the best vertical dispersion of all audio frequencies. What’s more, after alignment each unit is fine-tuned to assure precise linearity.

The result, with the SB-7000A for example, is an overall phase response, linear between $0^\circ \pm 45^\circ$ between 100Hz and 15kHz. A figure that's virtually flat and definitely unsurpassed by any other multi-range speaker system.

As the graphs prove, even staggered speaker systems with seemingly “linear phase” characteristics show moderate to severe phase shifts at different frequencies. But as you can see, the Technics SB-7000A has an unprecedented flat amplitude/frequency response and linear phase response.

But we don’t expect you to buy any speaker system based on how good it sounds on paper. Audition the world’s most linear phase speaker systems: the Technics SB-7000A, SB-6000A, SB-5000A. You’ll find out just how much more there is to Technics Linear Phase than staggered speakers.

Technics
by Panasonic
The Scala Norma:
Televised Opera's Self-Inflicted Wound
by John Culshaw

MILAN—Some little time ago, the La Scala production of Norma was televised live from the stage and, according to the handout, was seen simultaneously by viewers in twenty-four countries. In terms of technical ingenuity and coordination it was quite a feat; but it was also an artistic disaster on such a scale that I think it has set back the cause of opera on television by twenty years. For those who like opera it must have been infuriating, while for those who switched on out of curiosity it must have been at best a bewildering and at worst a bore.

I wonder why Norma was chosen in the first place, and especially in this static, stylized production. Then it has to be said that Montserrat Caballé is not the most televised of personalities, and on this occasion she was not in her best vocal form. The rest of the cast was adequate: the conducting by Gianandrea Gavazzeni was mostly dull. Thus, from the musical and scenic aspects, this Norma was hardly the ideal visiting card for La Scala to present to twenty-four countries, but the way in which it was presented just about eliminates all other considerations.

First of all, there was the word—a single word in huge carved letters mounted on the footlights immediately opposite the conductor. It said: NORMA. Now since the opera had been carefully introduced before it began, the sign served no purpose at all and brought to mind the irresistible thought that it was there to remind the conductor which work he was performing, lest—perhaps at "Guerra, Guerra!"—he should think he was leading Aida by mistake. From the television aspect it was a dreadful eyesore, because it commanded the screen in every wide shot taken from the front of the house.

The television direction was by Mauro Bolognini, who had also been responsible for the stage production. Superficially that sounds like a good idea, because there are stage producers—Zeffirelli is an obvious example—who can direct brilliantly for television, but that it is not always so was devastatingly demonstrated by Signor Bolognini. He was wary about close-ups, no doubt on the grounds that singers in full voice are often not a pretty sight at close range. Television is, however, a close-up medium, and it's impossible to sustain dramatic interest when all you can see is a vast stage on which a few meagre units appear to be standing about. The issue simply cannot be dodged, and if the idea of a singer in close-up is considered inadmissible, then so too is the whole concept of televising opera from the stage.

There was one exception. The close-up that appealed very strongly to Signor Bolognini was of the conductor. There is nothing new in that; of course: it is a fairly standard practice to show the conductor during any overture. But once the curtain is up and the action has started, it is intolerable to cut back to the conductor, as Bolognini did time and time again, when there was a short orchestral phrase with no vocal line. It was doubly unfortunate because on most such occasions Maestro Gavazzeni was so not so much conducting as mopping his brow.

Yet there was an even worse idea in store. Every now and then the director superimposed a close-up of the conductor over a wide-angle shot of the stage. This produced one of two results: It was either grotesque or hilarious. Into the latter category came the moment when Norma and Pollione were standing at opposite extremes of the stage, which, in terms of a wide-shot television picture, put one of them on the right edge and the other on the left. A subtitle reading "Something has come between us" came up on the bottom of the screen—and at that very moment there appeared, between them, a superimposed Gavazzeni, who was of course mopping his brow again.

I would not pretend for a moment that it is easy to televise opera from the stage, or that it can ever aspire to be more than good reportage of a worthwhile event. Over the years it has been done very skilfully by the BBC, and I have seen some interesting experimental tapings made at the Metropolitan. But it is reportage. In the sense that a ball game is television is reportage, which can be either well directed or not. The object of the exercise is simply to relay, as clearly as possible, an event that is taking place before a few thousand people to a potential audience of millions and not pretend that it is anything other than it actually is.

A day or two ago I heard that it is unlikely that Norma will be screened in the U.S.A. and I hope that information was accurate. It is hard enough to promote opera on television without self-inflicted wounds like Norma. Rai (Italian television), La Scala, and Eurovision, whose joint effort it was, should think a long time before their next attempt; and they should hire a director who knows the difference between a relay and a specially mounted production in an electronic studio. That's where you start.
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Real Life Rated™ While traditional laboratory measurements provide a good relative indication of receiver performance, they simply don't tell you how a receiver will sound in your living room in actual operation.

For example, in the lab, each receiver component is tested separately. At home, you hear them together as a single unit.

In the lab, distortion is measured at full-rated amplifier output. At home, you rarely, if ever, use the amplifier's full-rated power.

In the lab, power and distortion measurements are made with the volume control at maximum. At home, maximum volume would be painfully loud to listen to.

In the lab, noise and distortion are measured separately. At home, you hear them together.

Clearly a new standard is needed for evaluating overall receiver performance under real life conditions. Yamaha's new standard is called Noise-Distortion Clearance Range (NDCR). No other manufacturer specifies anything like it, because no other manufacturer can measure up to it.

We connect our test equipment to the phono input and speaker output terminals, so we can measure the performance of the entire receiver. We set the volume control at -20dB, a level you're more likely to listen to than full volume. We measure noise and distortion together, the way you hear them.

On each of our new receivers, Yamaha's Noise-Distortion Clearance Range assures no more than a mere 0.1% combined noise and distortion from 20Hz to 20kHz at any power output from 1/10th watt to full-rated power.

Component-by-Component Excellence. By all conventional laboratory standards, as well as Yamaha's more stringent standards, the CR-2020 offers a new level of receiver performance.

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What's more, Yamaha's patented use of special ceramic and LC filters (developed for our revolutionary CT-7000 tuner) provide the highest selectivity and lowest distortion available.

Built-In Moving Coil Head Amp. Today, more and more people are discovering the superior performance of the moving coil phono cartridge. While
start playing catch-up. Again.

other receivers require an expensive preamplifier or step-up transformer, which can compromise sound quality, the CR-2020 already provides for it—the same solid-state device first developed for our superlative C-2 preamplifier.

Input/Rec Output/Pre Out Selectors. Here’s extra convenience for tape recording enthusiasts. Record any source while listening to another. For example, copy a tape or disc at the same time you’re enjoying an FM program. When you’re in the mood to play recording engineer, you can use all the tone controls and filters to compensate for poor quality sound sources.

Fast Rise, Slow Decay Power Meters. The CR-2020's large, accurately calibrated power meters, with fast rise, slow decay characteristics, make accurate readings possible from 1/10th watt to 200 watt peaks without switching ranges.

Multi-Function Signal Quality Meter. When tuning, the right channel power meter automatically converts to a signal quality/strength meter. Needle oscillation indicates the degree of multipath present, while the meter calibrations indicate the strength of the signal. After tuning, the needle automatically reverts to power reading.

Optimum Tuning System. Yamaha takes the problem of inaccurate tuning out of human hands. After you manually locate the desired station, OTS automatically fine tunes it to the single point that gives maximum stereo separation and minimum distortion. A defeat switch is provided for special applications.

Built-In Equalizer. Think of the CR-2020's tone control circuitry as a small multiband equalizer. Feedback bass and treble controls have selectable turnover frequencies. A midrange presence control adds more flexibility. Two-position low and high filters have 12dB/octave slopes. For the purist, a defeat switch removes the effect of the tone control circuitry entirely.

The Best Is Yet To Come. Now that you know about Real Life Rated, you’ll want to hear a real life performance. At your Yamaha Audio Specialty Dealer, you’ll find uncommon dedication to faithful music reproduction and genuine customer service.

If your Yamaha Audio Specialty Dealer is not listed in the local Yellow Pages, just drop us a line. Along with his name, you’ll get complete details about this unprecedented receiver.
At first glance, the Tannoy appears to be a loudspeaker. **It is more.** It is in fact a completely integrated loudspeaker system. Sound is reproduced, phase coherent throughout the entire audio range, from one transducer matrix. The high frequency (HF) tweeter and low frequency (LF) woofer are combined within a single, powerful magnetic structure. Sound is collected by a unique multi-throated phase compensating unit and fed into a short exponential horn. The curvilinear LF diaphragm ensures wide dispersion of high frequencies and an unbroken audio spectrum. The LF diaphragm acts as a true piston from the lowest bass up to 1kHz. The tweeter handles frequencies from 1kHz to beyond 20kHz. The crossover network ensures smooth transition between the woofer and horn-loaded tweeter. A superb, level response curve is achieved throughout the low, mid-range and high frequencies by an ingenious combination of the extended LF direct radiator, crossover network and wide range HF driver. A dynamic balance and roll-off control is incorporated for adjustments to personal taste or room acoustics. The Tannoy is exceptionally efficient. It can handle high powered amplifiers with ease, yet can be driven to high levels by moderately powered units. Equally important, music can be played at low volume without any compromise of musical quality.

Tannoy has been engaged in continuous research and production of high quality transducers for half a century. From the outset, its products were adopted as a listening standard by broadcasting and recording companies all over the world. By 1968, the term, "Tannoy" was in the Chambers English Dictionary as synonymous with the art of sound reproduction. The Tannoy was introduced into North America more than 26 years ago, but modest facilities and painstaking standards of production permitted only limited distribution. Now...new techniques, materials and expanded facilities have made Tannoy systems available to many more listeners. The Tannoy integrated speaker system is the crowning achievement of generations of acoustic consultants, researchers, designers, sound engineers, and produced in the best traditions of British craftsmanship. The hand of the master cabinetmaker is immediately apparent in the system's exquisitely finished enclosure. The Tannoy will provide the maximum quality your electronic equipment is capable of delivering.
On November 22, 1963, Woody Herman and his orchestra were recording an album for Philips at the old A&R recording studio on West Forty-eighth Street. When I arrived, the expressions on the faces of the musicians, the engineer, and Woody himself told me they had heard the news that John F. Kennedy had been shot. Woody listened to a playback of a take, decided he did not like it, and ordered another. The band reassembled and played the arrangement, an instrumental treatment of "A Taste of Honey." When it was completed, he said it was futile under the circumstances to continue.

That last performance of "A Taste of Honey" was included in the album that Philips eventually issued. There is something in that recording that is missing from any of the band's live performances of that arrangement: an overwhelming melancholy, a mournful, ineffable despair that makes the track one of the most moving—and also disturbing—experiences I have had in music. It is in the tone, the sound, the phrasing of the band. What the musicians felt that day went into the music.

Jazz, in common with other popular music, can respond to emotional and social stimuli with an immediacy and fervency not possible to the same extent in classical music. Aaron Copland says that he has spent about six months writing a symphony, which does not seem an unreasonable length of time. When a classical composer is moved to express in music an intense personal experience, as in the case of Fauré's poignant Requiem, written after the death of his father, the work is likely to take considerable time. Getting a commitment from an orchestra to perform it takes more time, as do the copying and rehearsal of the music. When Bill Evans composed a memorial on the death of his father, he performed it a matter of days later in Town Hall, and Verve recorded and issued it shortly thereafter.

The social conditions in which black Americans have had to live have been documented or portrayed in news reports, articles, histories, novels, and movies. What is little realized by the average white American is that the average black American has lived all his life on the periphery of violence and in the fear of it. Blacks are the primary victims of crime, and they are aware that all too many law enforcement officers take the attitude, "Let them kill each other off, who cares?" An old black taxi driver in New York, having said that he kept a .38 under the seat, added: "I'd rather the cops caught me with it than they caught me without it." This hovering presence of violence is something that affects the musician as deeply and constantly as any other black. It is the reason some of the musicians, particularly the older generation, carry switchblade knives: not to commit crime, but to protect themselves from it.

Clark Terry, one of the towering figures in American music, related that he and a friend were chased through the streets of Jacksonville, Florida. They ran onto the construction site of what would later be the Duval Building and lay in a trench of mud and rainwater until their pursuers grew tired of the sport and gave up the hunt. Dizzy Gillespie told me of dragging his friend Charlie Parker from a nightclub after a group of whites had set upon him and smashed him over the head with a bottle. That Terry, Gillespie, and other black musicians (and, for that matter, nonmusicians) are able to be civil to whites, much less maintain close friendships with whites (which both men do), is an achievement in tolerance that few whites could emulate.

But the feelings generated by such experiences inevitably get into the black jazzman's music, as emotions get into handwriting in ways that the trained graphologist can detect. Not that the expression of these feelings is intentional (it may be occasionally, as in the music of Charles Mingus). On the contrary, it is because the musician is revealing emotions that he might consciously wish to conceal that the work of black musicians has been socially so prophetic. To anyone who heard jazz sensitively in the late 1950s and early 1960s, the Watts, Harlem, Detroit, and other riots came as no surprise.

One could hear accumulating anger even in musicians whose civility inhibited them from expressing it in words. One could hear it in the playing of the late Cannonball Adderley, the late John Coltrane, Wayne Shorter, Sonny Rollins, Junior Cook, and so many others.
The $395 Dahlquist and the $1100 Infinity use this midrange driver.

So does our $200 Phase II.

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the late Eric Dolphy, and many more. Since some of them were in all ways gentlemen, their largely unintended revelation of deep private emotions was the more arresting.

This anger, in the cases of the aforementioned musicians (all saxophonists, by the way), emerged as a hard, strong tone and a generally fierce approach to musical phrases. It was the essence of what the critics called the "hard bop" school of playing. For many critics, indeed, this was the only sound, and they dismissed as inferior the work of white musicians who did not have—and had no experiential reason to have—the same emotions as their black colleagues. When Adderley wanted to hire pianist Victor Feldman for his quintet, he first played a recording by Feldman for the other black members of the group. Only when they all said they would be delighted to have such a player join them did Adderley tell them that he was white. And English, at that. And Jewish.

This division, polarized (inaccurately) as the East Coast or hard-bop and West Coast or "cool" jazz, was exacerbated by the jazz critical establishment. Some critics—the Frenchman André Hodeir, for one—went so far as to suggest that no white musician ever contributed anything of importance or originality to jazz. This is in contradiction of Lester Young's statement that he was influenced by Frank Trumbauer; of Miles Davis' statement to me that he had listened a lot to Bobby Hackett; of Jack Teagarden's pioneer work in developing a high-speed trombone technique that became the norm among trombonists after the 1940s bebop revolution; and of the fact that almost every fine jazz pianist in the U.S. today has been influenced by Bill Evans, who was influenced by Sonny Clarke, Nat Cole, Bud Powell, the twentieth-century French composers, and even Scriabin.

Nonetheless, the strongest impetus in the creation of jazz came from the blacks. Jazz is the triumphant achievement of a people living in a form of exile, under ghastly conditions, that is as much clue to their ordeal as in spite of it.

It is the minorities that make American music so incredibly rich. Although black Americans have claimed credit for their great musical contribution, the Jews have been conspicuously reticent about theirs. But in both popular and classical music, their contribution has been one of the most brilliant and important, and this I will discuss in the next issue.
The first turntable that's as steady as a rock.

Turntables shouldn't cause howling and screeching through the night. But that's exactly what happens, thanks to mechanical and acoustic feedback caused by loudspeakers vibrating an insecure turntable.

Since most turntable bases have been made of laminated plywood, beech, die-casting or plastic, howling has been a problem that just wouldn't go away.

Until today. That is.

Announcing the Optonica RP-3636 Direct Drive Turntable. We built the ideal turntable, literally as solid as a rock because it's built on 158 pounds of Mikage granite stone. Which means that vibrations from the speakers are absorbed, reducing acoustical feedback and maintaining maximum signal to noise ratio.

The Optonica RP-3636 also features a highly sensitive S-shaped tonearm. Which means that the stylus will pick up subtle sound signals as accurately as the cutter stylus that recorded them. And an oil-damped cueing control that gently lifts and lowers the tonearm so your records will be protected from damage.

We invite you to test the Optimum turntable at one of the select audio dealers now carrying the full line of Optonica stereo components. Call toll-free 800-447-4700 day or night (In Illinois dial 1-800-322-4400), for the name and address of your nearest Optonica showroom, where you can see the complete Optonica line and pick up your free copy of our catalog. Or for further information, write Optonica, Dept. T68, 10 Keystone Place, Paramus, New Jersey 07652.

From our unique turntable built as steady as a rock to our cassette deck that automatically finds your selections, find out why throughout Europe and Japan, Optonica is one of the fastest selling lines of stereo components on the market today.
At the moment I have a four-channel system that I am planning to modify into something better. The problem is what I should use for a preamp—the market in quad preamps seems quite limited. I am considering the Bose 4401. The phono overload is specified at 70 millivolts, which seems a bit low. Would I have any problems on phono overload using an Audio-Technica VM-35F cartridge?

Charles F. Taylor, Vierheim, W. Germany.

We doubt that you will have any difficulty in using the Bose 4401 preamp with an Audio-Technica VM-35F. The 70-millivolt figure is lower than some but should be adequate. To set your mind at ease, why not ask the dealer to demonstrate the combination for you?

I have been looking at the Akai GX-630DB automatic-reverse cassette deck and the Pioneer RT-1011 and RT-1020 decks. There is only a very small difference (less than $50) in the prices I have been quoted. The Akai seems to have more features for the money, but I have heard that automatic-reversing machines have an alignment problem with increased distortion as a result of the tape traveling in two directions and head alignment.

Which in your opinion is the best value in terms of quality, reliability, and faithfulness of sound reproduction?

Dan Rankin, Chester, S.C.

In auto-reversing decks with fixed, four-gap stereo heads, the performance loss is most likely to be in crosstalk (not distortion as such): in two-gap moving heads, or in transports that reposition the cassette with respect to the head for the second direction, alignment tends to be the problem—particularly when the deck no longer is new and critical parts are becoming worn. These problems are not insuperable, but they cannot be solved without incurring higher costs than are to be expected in a comparable monodirectional model. There has been an unfortunate tendency to cut corners in bidirectional decks to make up for this added cost. Since we have tested none of the decks about which you inquire, we can't tell whether they suffer from this approach or not.

In your test report of the Advent 300 [March] you mentioned that the receiver's phono preamp section has minimal impedance interaction with cartridges, resulting in cleaner sound. Can you tell me of any other preamps or integrated amps that have this type of phono section? I would be specifically interested in the Dynaco PAT-5 since I am considering purchasing it.—Michael S. Lasky, Kansas City, Kan.

The Advent design is proprietary. The best thing to do is to try the Dynaco with one or more of your favorite cartridges.

I have a mechanical feedback problem with my Dual 1229 turntable. I have tried changing the positions of my wall-mounted speakers, and I've installed low-capacitance cables. (The latter move helped the most.) Is there anything else I can do? Would a new turntable work any better? Turning down the bass helps control the feedback, but it ruins the sonic balance.—Kenneth Balog, Tarentum, Pa.

We are curious about your comment on low-capacitance cables. Is there no reason why they would help a mechanical feedback problem. What you need is a means of de-coupling the turntable from the speakers. If all are mounted on the same wall, the wall itself doubtless is the coupling medium. Try putting the turntable elsewhere in the room. Isolating mechanisms of various kinds are available. We reported on the Audio-Technica Insulators in an April test report and on the Kenwood "stone"-based turntable in May. It is hard to predict which measures will prove most effective in individual cases. But the cheaper alternatives you might want to try first are the Audio Technica and Netronics products for isolating turntables and/or speakers.

I have been a tape enthusiast for many years and have a sizable collection of recorded cassettes, many containing chromium-dioxide tape. My present deck, purchased not long ago, is a Nakamichi 600. I have heard that Nakamichi recommends against the use of chromium-dioxide tape because its abrasiveness causes excessive wear of permalloy heads. This makes a large part of my tape library virtually useless. Is there anything I can do?—Michael Dalton, Eugene, Ore.

We have good news for you. Nakamichi has revised its position regarding chrome tape. Having found that head-wear characteristics are about the same with either chrome or premium ferric-oxide formulations. Du Pont, which developed chromium dioxide, has conducted tests in which a ferric-based tape was found to cause more wear than chrome—though in our experience the results of such tests depend more on the precise manner in which they are conducted than on the oxide used. In any event, don't worry about playing your chrome tapes.

I have acquired an SME tone arm (at a bargain price). In looking about for a suitable turntable that won't cost an arm and a leg, I find the Thorens TD-160 with an SME cutout (at about $150) a good buy. But my local dealer (who wants to sell me a Technics SL-110A at twice the price) says the Thorens isn't worth of my arm. What do you say?

Also, the stylus of my Ortofon VMS-20E cartridge is due for replacement. Would I be better off to apply that $30 to the purchase of a new Shure V-15 Type III, Pickering XSV-3000, or equivalent cartridge?—Klaus J. Hansen, Kingston, Ont.

Even without considering the merits of the two turntables, we would say that your dealer is giving you the hard sell. There could be perfectly legitimate factors that make the Technics the better buy for you; but if your dealer has some legitimate idea of that sort in mind, he evidently has done a poor job of expressing it. The Thorens at half the price sounds like a good deal to us.

If your question concerning the Ortofon VMS-20E means that you have doubts about it or are dissatisfied with it, the Dolby cartridge is certainly in order, and that, in our opinion, are good candidates. If you're not dissatisfied with the Ortofon, we see no reason to switch.

I recently bought a Teac A-400 cassette deck. With the new Maxell UDXL-II cassette, the manual says to set the bias and equalization switches to Position 1 (high-level bias, 70-microsecond equalization). When I play back the recorded tape, however, A/B it with the original, eq. Position 1 sounds a bit too dull, and Position 2 sounds better but a bit too bright. Is this an incompatibility between the tape and deck, or is the deck malfunctioning? Is there really any difference in recordings made on this deck with Maxell UD, UDXL-I, and UDXL-II? I can't detect any.—David Foss, Pawtucket, R.I.

We have repeatedly mentioned the minor Dolby tracking problems that can occur when a "chrome-compatible" ferric oxide tape is used with CrO_ settings of bias and equalization and no adjustment is made for the extra sensitivity of these tapes. Since the symptoms described for Position 1 are just the opposite of what such mistracking would cause, we suspect that your deck is malfunctioning. (We would have considered dirty heads as a possible cause except that Maxell cassette leaders are designed to clean the heads automatically—as long as you let them run past the head in the PLAY mode.)

It would be a good idea to have the deck checked—and, while you're at it, adjusted for the tape you intend to use. When all three Maxell tapes are used correctly, you should find that you can cram a little more level onto UDXL-I than onto UD before encountering audible signs of overload, while UDXL-II will have audibly less hiss than the other two because of the 70 microsecond equalization that it is designed to accommodate.

I have a Pioneer TX-9500 tuner with test tone for FM recording. My cassette deck (a Technics) has a Dolby-FM mode, and I'd like to record Dolby-FM broadcasts directly—without decoding and re-encoding. Where should I set up the test tone on the deck's meters?—Mario G. Donetti, New York, N.Y.

Our advice is that you're better off decoding and re-encoding. The peak power level for FM broadcasting is defined as 50% modulation—that is, 6 dB below maximum allowable modulation. Unless the station is losing away some 6 dB of its dynamic range (which would mean that the broadcast is noisier than necessary), the peaks may overload your tape. By decoding, then adjusting gain, and re-encoding, you can set the levels for optimum dynamic range and distortion.
ARE YOU BLAMING YOUR TAPE RECORDER FOR PROBLEMS CAUSED BY YOUR TAPES?

Every day people all over the country go into hi-fi dealers with complaints about their tape recorders. When in reality what they should be complaining about is their tapes. Because the fact is, a lot of the problems that plague tape recorders can be attributed to bad tape.

HEAD WEAR IS CAUSED BY YOUR RECORDER. OR IS IT?

If you have to clean your tape heads more than usual, for example, it could be your tape doesn't have a special nonabrasive head cleaner. Maxell has one.

If your recorder jams, it can be any number of things. Maxell does something to prevent all of them. We make our cassette shells of high impact polystyrene. And then so they won't crack.

JAMMING IS CAUSED BY YOUR RECORDER. OR IS IT?

even after years of use, we finish them to tolerances as much as 60% higher than industry standards. Inside, we use free rolling Delrin rollers so the tape doesn't stick. And finally, we screw instead of weld everything together because screws make for stronger cassettes.

If your recorder frequently suffers lapses in sound, it could be the tape is of inferior quality. And nobody's bothered testing the tape for dropouts before it leaves the factory.

DROPOUTS ARE CAUSED BY YOUR RECORDER. OR ARE THEY?

Maxell tape is made of only the finest polyesters. And then every step of the way it's checked for even the slightest inconsistencies.

So if you're having problems with your recorder, try a Maxell cassette, 8-track or reel-to-reel tape. You might find there's really nothing wrong with your tape recorder, just with your tape.

POOR TRACKING IS CAUSED BY YOUR RECORDER. OR IS IT?

MAXELL THE TAPE THAT'S TOO GOOD FOR MOST EQUIPMENT.

Maxell Corporation of America 130 West Commercial Ave. Moonachie, New Jersey 07074
Striking Back at CB Interference

If your music system is bringing you "good buddies" with your Brahms or reports of Smokey Bear with your Miles Davis, you need not sit by in helpless frustration. The abuse of the airwaves by some CBers has prompted the Federal Communications Commission to beef up its enforcement activities, and it is possible that you can help to silence the offenders—who are subject, incidentally, to fines and imprisonment in addition to confiscation of illegal gear.

Many of the instances of interference with other equipment by CB radios stem from the use of transmitting power exceeding the legal maximum—chiefly the addition of so-called linear amplifiers to transmitters' output stages. (The FCC is studying a proposed ban on the manufacture of linear amplifiers that can be used with CB.) It is possible, however, for legally operated equipment to cause interference too, so your complaint will be most useful if you can give information that will help both in pinpointing the source of the interference and in determining the likelihood of legal operation at that source.

First, if you have any idea whose transmission you are unintentionally receiving, try to contact him directly. Some operators will cooperate with you in trying to alleviate the problem (although those transmitting illegally probably will not). Second, note carefully which pieces of your equipment are affected and how they are affected. In particular, see if reception on television Channels 2, 5, and possibly 9 is impaired at the same time as interference appears in your audio, since the harmonics of the CB frequencies fall within these channels. Then send the information to this address: Federal Communications Commission, 1919 M St. N.W., Washington, D.C. 20554. Att: Field Operations Bureau.

A little bit of work on your own behalf may make it possible for you to listen to music undisturbed. It may also help to head off legislation that could require audio equipment to contain bypasses and other RF suppression devices that might limit its basic performance. Indeed past experience with the FTC's notorious "warmup" rule suggests that such legislated solutions probably would inhibit designers to the point of compromising performance.

Of Shakespeare, Valves, and Audio Hot Rods

The worst thing about Tube or Not Tube, a Modification Manual for Vacuum Tube Electronics, is the title—that and the price ($25). But once you get by those, the book is chock full of goodies, particularly if you are into state-of-the-art tubed circuitry. H. L. Eisenso and the staff of Audio Dimensions, Inc., present an in-depth look into the hows and whys of vacuum-tube amps and preamps, mostly in clear language that ordinary people—not just engineers—can understand. Included are step-by-step instructions for upgrading and customizing such veterans as the Dynaco PAS and Citation I, as well as some circuit variations that are scheduled to appear in Audio Dimensions products.

But if you're convinced that solid state is the way to go, there is a lot of interesting philosophy and many suggestions as to how an already fine system can be fine-tuned for even better performance. This is a provocative book that should delight the advanced audiophile, even though he may take heated difference with some of its more opinionated statements. Audio Dimensions is located at 8898K Clairemont Mesa Blvd., San Diego, Calif. 92123.

Audio in the Classroom

We are often asked by young readers how to go about getting started on a career in audio and recording technology. Adding to the items we have already published in these pages on the subject, a new source of information has come to our attention. The Journalism Communication Department of the University of Bridgeport is now offering a minor in audio studies. The 21-credit program includes courses in audio techniques, audio production and direction, field sound recording studio technology, and audio engineering practices. A nine-week summer session is also offered, to be held in a professional recording studio. Interested readers should contact Dr. Howard B. Jacobson, Department of Journalism, North Hall 214, University of Bridgeport, Bridgeport, Conn. 06602.

We are planning fuller treatment on degree programs and courses in audio engineering for our Backbeat section in a forthcoming issue.

Feature-laden receiver from GTE

GTE Sylvania's Model 2600 stereo receiver features built-in Phase Q4 matrix for simulated four-channel ambience, tape-monitor switching for two decks, three-way (bass, midrange, treble) tone controls, and two-stage FM muting employing a noise amplifier that is said to kill interference noise without affecting FM sensitivity. Diode indicators on the front panel light when the amplifier section is driven into clipping. Continuous power output is rated at 80 watts (19 dBW) minimum per channel into 8 ohms from 20 Hz to 20 kHz with no more than 0.1% total harmonic distortion. The price of the Model 2600 is $599.95.

CIRCLE 136 ON READER-SERVICE CARD
Stereo Review went on to explain that this exclusive circuitry "uses...a low power and a high power output stage operating together...At low signal levels the lower power stage drives the speakers. The transition to the more powerful output transistors...takes place smoothly at the point where it becomes advantageous to do so."

The point they're talking about, of course, is where certain portions of the music you listen to demand more than the rate output to sound like they should. (Rated output on the Hitachi SR/903 is 75 watts continuous power per channel, both channels driven into an 8 ohm load, 20 to 20,000 Hz with no more than 0.1% total harmonic distortion.) So when your music really gets thrilling, Class G cuts into a standby amplifier. Then, for just a moment, the SR/903 can pump out a lusty 160 watts per channel—without clipping.

One look at comparison wave forms will show you what we mean. See how the sound from the conventional amplifier has the top of its natural arc clipped off. That's when you'd get clipping distortion. But the same musical peak graphed on the Hitachi SR/903 is complete. So the sound you'd hear would be clean and crisp.

As a wrap-up, Stereo Review said Class G delivers "much higher overall efficiency than a conventional device, and this brings immediate dividends...in reduced weight size and power consumption."

All they neglected to mention was that Class G doesn't cost you any more.

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Hitachi SR/903
Typical Specifications

<table>
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<th>Amplifier</th>
<th>Rating</th>
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<td>Power, minimum RMS, at 3 ohms, 100 to 20,000 Hz</td>
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<tr>
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<td>74 dB</td>
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The Cerwin-Vega S1 is the most elegant and exotic shelf speaker currently available. The rare Yucatan rosewood facade only hints at the marvels inside. A sophisticated sixth order Butterworth vent tuning, integrated with an active equalizer filter, increases the effective bass performance to surpass much larger enclosures. The wave of the future in quality shelf speakers surely will be such a system.

Even this is not good enough for the S1. We have developed an elegantly simple improvement in bass enclosure technology; we call it Thermo-Vapor Suspension. By filling the S1 cabinet with a soft, inert gas which is more compressible than air, a lower system response and more controlled damping is achieved. The drivers are precision aligned die-cast units having the highest magnetic motor drive efficiencies in the industry. The low crossover of 300 Hz to a 6" midrange driver assures low intermodulation at loud levels. A damped dhorm, high frequency unit (moving mass, .1 gram), operates at a low pressure density extending response to 20 kHz with vanishing coloration.

The S1 has impeccable technical credentials too numerous to detail here so write Cerwin-Vega for full performance specifications or see it, hear it, feel it, at a selected dealer.
Titan-ic speaker introduced

One of the new speakers in Kustom Acoustics' line is the Titan Labyrinth. This enormous (each speaker weighs 325 pounds) three-way system employs two 12-inch woofers, two 5-inch midrange drivers, and two 1-inch tweeters. The Titan, whose power handling capacity is rated at 350 watts (25 dBW), can be biamped or triamped. Frequency response is rated at 24 Hz to 18 kHz, ±2½ dB. Impedance, at 4 ohms, is said to be very linear because of the tapered acoustical line design of the crossover. The manufacturer states that harmonic and IM distortion are both 0.5% at 1 watt (0 dBW) from 50 Hz up. Housed in a mirror-matched veneer cabinet, the Titan Labyrinth sells for $1,295.

CIRCLE 137 ON READER-SERVICE CARD

White Instruments' new equalizer

Each channel of White Instruments' Model 4100 stereo equalizer has ten bands on octave centers from 31.5 Hz to 16 kHz. Continuously variable controls provide 10 dB of boost or cut. Front-panel features include input level attenuators and overload indicators. Input impedance is rated at 40,000 ohms and output impedance at 100 ohms. The output circuits are said to drive loads as low as 600 ohms. A rear-panel accessory socket makes possible the use of low-level crossover networks for biamp systems. The Model 4100, which is furnished with a security cover and is available in a rack-mount model, costs $599.

CIRCLE 138 ON READER-SERVICE CARD

Modest power, price in Kenwood receiver

The Kenwood KR-3600 stereo receiver uses direct-coupled complementary circuitry at every stage in the amp section and a single in-line integrated circuit in the preamp section. The tuner section includes a junction-type FET in the front end; the FM multiplex demodulator is said to deliver 40 dB of stereo separation at 1 kHz. Power is rated at 22 watts (13 dBW) into 8 ohms, 20 Hz to 20 kHz, with no more than 0.8% distortion. Inputs are provided for two pairs of stereo speakers as well as for headphones. Negative feedback, high filter, and loudness compensation controls add to the unit's flexibility. The KR-3600 costs $250.

CIRCLE 139 ON READER-SERVICE CARD

Bidirectional cassette deck from Akai

Akai is marketing a bidirectional cassette deck, Model GXC-730D. This front-load design has three heads that permit bidirectional recording as well as playback. A reverse selector switch on the front panel allows three operating modes: one-way, out-and-back, and continuous play. Other features are Dolby circuitry, memory wind, and Akai's Automatic Distortion Reduction system. Front-panel tape bias and equalization switches (low-noise ferric, chrome, ferrichrome) can be fine-tuned for special tapes via rear-panel recording-level adjustments. A peak level indicator supplements the meters. The GXC-730D costs $500.

CIRCLE 140 ON READER-SERVICE CARD
Transmission-line speaker from Innotech

Innotech’s Model D-22 is a three-way speaker that combines a 5-inch cone woofer, 1-inch soft-dome tweeter, and 1-inch dome supertweeter. The plastic cone of the transmission-line design is said to give lower coloration because of its acoustically dead properties. The clustered drivers are front-mounted; the crossover has air-core inductors designed to prevent phase cancellation while minimizing transient distortion. Frequency response is rated from below 30 Hz to beyond 35 kHz. An externally connected subsonic filter, the SF-2, is said to roll off frequency response below 20 Hz by 12 dB per octave. The D-22 comes in an oiled-walnut veneer cabinet and costs $975 per pair.

CIRCLE 141 ON READER-SERVICE CARD

RAM Audio designs new amplifier

RAM Audio Systems is marketing a newly designed power amplifier, the RAM-512. This amplifier is rated at 180 watts (22½ dBW) per channel into 8 ohms, frequency response at ±0.1 dB, 20 Hz to 20 kHz, with IM and total harmonic distortion of 0.08% at rated output. The 5-inch power level meters cover a 43-dB range. Front-panel diodes indicate peak responses. The unit has no current limiters, and the propagation delay time is said to be less than 0.2 microseconds. The RAM-512 is priced at $1,150.

CIRCLE 142 ON READER-SERVICE CARD

Craig produces a receiver

The Craig Model 5503 stereo receiver can handle three pairs of speakers and has two tape-monitor channels. Turnover frequencies are selectable: 250 and 500 Hz in the bass, and 5 and 2.5 kHz in the treble. Speaker selection and five other modes are controlled by pushbuttons. A variable-bandwidth filter and tone defeat are provided. The receiver has a power rating of 50 watts (17 dBW) per channel into 8 ohms, 20 Hz to 20 kHz, with 0.1% maximum total harmonic distortion. Model 5503 comes in a walnut-veneer enclosure and costs $369.95.

CIRCLE 143 ON READER-SERVICE CARD

SAS speaker line makes its debut

The Spectrum I is a middle-of-the-line speaker from SAS Electronics. The bass-reflex system has a 10-inch woofer, 5-inch midrange driver, and 1½-inch tweeter. The crossovers occur at 1.8 and 5 kHz. Maximum power-handling capacity of the Spectrum I is rated at 55 watts (17½ dBW); SAS says it can be driven successfully with less than 10 dBW (10 watts) because of its high efficiency. The speaker is protected by self-resetting thermal breakers. The enclosure is of walnut-grain vinyl, and the system costs $175.

CIRCLE 144 ON READER-SERVICE CARD

CIRCLE 2 ON READER-SERVICE CARD
Introducing Accutrac.
The only turntable in the world that lets you tell an LP which selections you want to hear, the order you want to hear them in, even how many times you want to hear each one.

Sounds like something out of the 21st century, doesn't it? Well, as a result of Accutrac's electro-optics, computer programming and direct drive capabilities, you can have it today.

Just imagine you want to hear cuts 5, 3 and 7 in that order. Maybe you even want to hear cut 3 twice, because it's an old favorite. Simply press buttons 5, 3, 3 again, then 7. Accutrac's unique infra-red beam, located in the tonearm head, scans the record surface. Over the recorded portion the beam scatters but over the smooth surface between selections the infra-red light is reflected back to the tonearm, directing it to follow your instructions.

What's more, it can do this by cordless remote control, even from across the room.

The arm your fingers never have to touch.
Since Accutrac's tonearm is electronically directed to the record, you never risk dropping the tonearm accidentally and scratching a record, or damaging a stylus.
And, since it cues electronically, too, you can interrupt your listening and then pick it up again in the same groove, within a fraction of a revolution. Even the best damped cue lever can't provide such accuracy. Or safety.

What you hear is as incredible as what you see.
Because the Accutrac servo-motor which drives the tonearm is decoupled the instant the stylus goes into play, both horizontal and vertical friction are virtually eliminated. That means you get the most accurate tracking possible and the most faithful reproduction.

You also get wow and flutter at a completely inaudible 0.03% WRMS. Rumble at -70 dB (DIN B). A tracking force of a mere 3/4 gram. And tonearm resonance at the ideal 8-10 Hz.

The Accutrac 4000 system. When you see and hear what it can do, you'll never be satisfied owning anything else.

Its father was a turntable. Its mother was a computer.

The Accutrac 4000
ADC
Onkyo’s solid-state integrated amp

Onkyo’s A-7 integrated amplifier features a bus feeder ground and especially large capacitors, which are said to bring the equivalent series resistance as close to the zero-point as possible. With Class A circuitry for low distortion, the A-7 is rated at 70 watts (18.2 dBW) per channel into 4 ohms from 20 Hz to 20 kHz with no more than 0.1% total harmonic distortion. Frequency response is rated ±1 dB from 2 Hz to 80 kHz. The design offers tape dubbing and monitoring, bass and treble defeat, and subsonic filter at a cost of $370.

CIRCLE 145 ON READER-SERVICE CARD

IMF’s Monitor loudspeaker

IMF International has introduced a smaller version of its Reference Standard Mk. IV speaker. Designated the Monitor TLS 80 Mk. II, the new speaker has three drivers and transmission-line loading to simulate concert hall listening. A TILT control is provided to modify energy response. Supplied stands hold the speakers off the floor and angle their radiating surface upward. The power requirement range is rated at 40 to 100 watts (16 to 20 dBW), and frequency range is at 20 Hz to beyond audibility. Crossovers occur at 350 Hz, 3 kHz, and 13 kHz. The Monitor TLS 80 Mk. IIs come in mirror-image pairs and cost $850 apiece.

CIRCLE 146 ON READER-SERVICE CARD

Audionics’ Class A preamp

The RIAA input circuitry of the BT-2 preamp is said to isolate interactions between the phono cartridge and the electronics. Audionics claims that its BT 2 will drive loads as low as 250 ohms. Equalization accuracy is rated at ±1.5 dB, 20 Hz to 20 kHz; load impedance is 500 ohms. The unit can be rack-mounted and is available in either black-anodized or wood (rosewood or teak) cases, costing $350 and $399, respectively.

CIRCLE 147 ON READER-SERVICE CARD

Got your ears on?

For audiophiles who are being driven up the wall by interrupted FM reception, Electronics Specialists, Inc., has introduced an FM Interference Filter. The company claims that this filter will eliminate or greatly reduce CB, ham, or computer interference entering through the FM antenna. (For more on CB interference, see "News and Views" in this issue.) Sure to be welcomed by listeners who can’t handle the handles any more, the compact FM Interference Filter costs $8.50.

CIRCLE 148 ON READER-SERVICE CARD
Who said you can't see the quality of a speaker? Look closely at the Sansui SP series.

The SP-7500X

In a great speaker, quality can be seen as well as heard. When you look at the Sansui SP series—you'll see what we mean. Go to your Sansui franchised dealer and ask for the SP-7500X.

Let your salesman remove the handsome, hand-carved Kumiko grille. The size of the woofer is impressive—a massive 15"—for a rich and full bass. And for clean, transparent super-highs the SP-7500X speaker system features three tweeters—two 2" "super-tweeters" and an additional horn tweeter. Notice the unusually large 8" cone mic-range driver which adds a sense of presence and creates a smooth transition between the highs and lows. The four-way crossover network is built around a ferrite-core inductor with high-voltage capacitors to keep distortion way down over the entire audio range.

Now listen to the SP-7500X. Turn up the power. This speaker can handle lots of it. (130 watts peak). And always with unusually high efficiency.

The Sansui SP series is available in four models. One will certainly be ideal for your own budget and listening preferences.

A whole new world of beautiful sound

SANSUI ELECTRONICS CORP.
Woodside, New York 11377 • Gardena, California 90247 • SANSUI ELECTRIC CO., LTD. Tokyo, Japan
SANSUI AUDIO EUROPE S.A., Antwerp, Belgium • In Canada: Electronic Distributors
You may have noticed that few turntable manufacturers call your attention to the critical role of the tonearm in record playback. Dual is an exception. Whatever the shape, materials or mechanics of a tonearm, the goal is always the same: to maintain the cartridge in the correct geometric relationship to the groove, and to permit the stylus to follow the contours of the groove walls freely and accurately. Whenever the stylus cannot follow the groove undulations, it will gouge its own way. And as we have frequently reminded you, there is no way to repair a damaged record. Every tonearm designer should consider geometry, mass, balance, resonance, bearing friction, and the accuracy and stability of settings for stylus force and anti-skating. However, despite the simple fact that the shortest distance between two points is a straight line, some designers are more concerned with appearance. Hence, the curved tonearm, whose deviations between pivot and stylus simply add mass, reduce rigidity and increase the likelihood of resonance.

Dual engineers have always designed for optimum performance. The essential differences in approach and results are indicated below. You might keep all this in mind when you are considering your next turntable. Chances are you'll want it to be a Dual.

**Dual**

**United Audio Products,** 120 So Columbus Ave., Mt. Vernon, N.Y. 10553

Exclusive U.S. Distribution Agency for Dual

The curved tonearm may appear larger than the Dual tonearm, but both actually have the identical effective length and horizontal tracking angle.

Actual size of Dual "tube" A) and typical curved tonearm (B).

For the same effective length, straight Dual tonearm has lower mass and resonance, yet greater rigidity.

**Dual 1249.** Single-play/multi-play. Belt-drive. Fully automatic start and stop, plus continuous repeat. Mode Selector parallels tonearm to record in single-play; 6% pitch control; illuminated strobe; cue-control viscous-damped in both directions; multi-calibrated anti-skating. Less than $200.

**Dual 510.** Similar except semi-automatic. Lead-in groove sensor. Tonearm lifts automatically at end of play and motor shuts off. Less than $200.

**Dual 502.** Semi-automatic. Less sensor, strobe and pitch-control. Less than $160.

Specifications (DIN B): Rumble, $\leq 6 \mu B; \text{Wow and flutter}, <\pm 0.05\%.$
HiFi-Crostic No. 25

by William Petersen

DIRECTIONS
To solve these puzzles—and they aren't as tough as they first seem—supply as many of the Output words as you can in the numbered dashes following the Input. Unless otherwise specified in the Input, the Output consists of one English word. "Comp." means compound, or hyphenated, word.

Transfer each letter to the square in the diagram that bears the corresponding number. After only a few correct guesses you should begin to see words and phrases emerging in the diagram, which when filled in will contain a quotation related to music, recordings, or audio.

The words in the quotation are separated by darkened squares and do not necessarily end at the end of a row. Try to guess at these words and transfer each newly decoded letter back to its appropriate dash in the Output. This will supply you with further clues.

A final clue: The source of the quotation—the author and his work—will be spelled out by the first letters in Output, reading down.

The answer to HiFi-Crostic No. 25 will appear in next month's issue of HIGH FIDELITY.

C 1 J 2 D 3 O 4 W 5 L 6 K 7 Z 8 X 9 J 10 Q 11 D 12 H 13 U 14

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

INPUT
A. French composer of operettas (1848-1903): Les Cloches de Corinthe

B. Albee's creation

C. Oratorio by Haydn (4 wds.)

D. Songs of a trouvère

E. With Word P., English-German musician (1874-1925), authority on musical instruments

F. American violin prodigy: Zina, once Hellett's youngest pupil

G. Making a dull sound

H. Norwegian conductor/composer (1886-1959): The Skald of Norway; The Tides (full name)

I. Fruit peel

J. Japanese composer (b. 1907): adapted 12-tone techniques to popular Japanese modes (full name)

K. German musicographer (1813-69): four-volume biography of Mozart (full name)

L. With Word Z., marching band (3 wds.)

OUTPUT
A. 204 55 152 40 170 60 124 194 147 79

B. 182 116 202 140

C. 48 178 216 28 61 91 195 142

D. 72 118 103 1 166 19 83 186

E. 56 106 206 160 98

F. 113 126 86 148 162 185

G. 163 150 11 117 143 99 36 87

H. 42 82 218 31 127 209 169 13

I. 195 45 112 128 12 4 70 29

J. 55 106 206 160 98

K. 163 150 11 117 143 99 36 87

L. 163 150 11 117 143 99 36 87

M. American composer of hymns, anthems, and "bugling tunes" (1748-1800)

N. Foremost Dutch composer of the 16th century

O. Popular ensemble, recorded "Blue Pine Trees" on Capitol

P. See Word E.

Q. Note sounded by organist to give congregation the correct pitch

R. Tremolo effect on a drum

S. Variations for piano by Schumann, Op. 1

T. Slope; bias

U. Characteristic specimen

V. Canticle of the Virgin

W. Tenor saxophone player/band leader (b. 1926): Twilight Time

X. Richard Strauss's celebration of married life (2 Lat. wdhs.)

Y. German music scholar and composer (1823-94): songs, ballads, choral works (initials and last name)

Z. See Word L.

Solution to last month's HiFi-Crostic appears on page 6.

INPUT
111 190 59 20 200 213 37 134

193 108 57 18 171 43

102 139 198 3 81 154 66

159 98 174 35 17 129

101 32 144 152 22 85 123 109

173 184 132 119

181 38 212 149 34

97 73 192 136 214

169 44 105 199 14 89

90 205 137 47 217 115 65 100

172 77

5 130 80 63 179 30 201 157

203 9 167 160 78 131 168 52

39 110 161 68 175 27 151

46 94 141

138 210 92 58 16 74 121 26

88

211 156 8 122 76

33
You can't beat The System.
You can only change it.

The System, from Mitsubishi.
The only one-name, one-look, high-performance system with speakers as good as the amplifier. An amplifier as good as the pre-amp. A pre-amp as good as the turntable. A turntable as good as the tuner. A tuner as good as the speakers.

And no weak links.
So, no matter how much you care to spend on alternatives, you simply cannot improve The System. You can only make it different.

Consider the loudspeakers, for example. You could substitute other legendary names in the speaker business. But none are so legendary as Mitsubishi, whose speakers are noted for superb design, meticulous construction and testing, and absolutely faultless response.

Or amplifiers. You could substitute others. But none would give you the 80dB inter-channel separation of the Mitsubishi dual-monaural amplifier in The System.

Or turntables. You could substitute something else. But something else wouldn't give you the benefit of our 3 years’ exhaustive testing—covering all aspects of performance—that gave our Mitsubishi Logic Control Turntable its superb audio quality and foolproof operation.

So, what all other names do for music, the one Mitsubishi name does for music. Without the time and trouble of collecting 7 different components from 7 different manufacturers with 7 different warranties to confuse you.

And since The System comes from one company, with one design philosophy and one standard of quality—it has to look better than any diverse assembly of components. (One Mitsubishi equipment rack is worth a thousand words.)

Still, The System isn't inflexible. You can tailor one to your needs, and your available funds. At prices ranging from about $1,600 to about $3,000.

Your audio dealer will be happy to audition all the possibilities for you.
All-Mitsubishi.
Or partly Mitsubishi, and partly alternatives. And we think you'll agree. There aren't really any alternatives.

MITSUBISHI AUDIO SYSTEMS
For more information write Melco Sales, Inc., Dept. H, 3030 East Victoria Street, Compton, California 90221.
Phono-cartridge performance has come a long way in recent years, as can be judged from the 2000Z's measured frequency response. Including the effect of arm resonance in a typical tone arm, and combining the measurements from a couple of records, the response could honestly be described as ±1 dB from 15 to 20,000 Hz. This is comparable to the flatness of most amplifiers, especially if the tone controls cannot be bypassed.

"Finally the light dawned: This is a neutral cartridge—it's supposed to sound that way. The highs are not subdued; they are just smooth, rather than peaky and shrill. Instrumental timbres are reproduced in fine detail, but without being artificially pointed up. Thus one is able to hear soft inner voices and pastel shadings that are all but obscured by the bravura of some of the competition.

"The Empire 2000Z is truly impressive. It is well worth auditioning, even though that can't be done in a hurry if you are to hear—and savor—its quality."

"The Empire 2000Z offers extremely smooth response in the audible range and, even at the light tracking force (1.0 grams) at which our listening tests were conducted, never failed to track the grooves of even our most dynamically recorded musical test passages. Highs were silky smooth, never 'edgy' or raspy and there was not even a hint of 'peakiness' in the important 12,000 to 16,000 Hz range where so many other pickups often add distinct and easily identifiable coloration."

Frequency response was among the smoothest we have ever recorded for a stereo cartridge and actually did not deviate more than the plus or minus 1 dB specified over the entire audio spectrum. Resonance has been pushed way out beyond the audio range and we suspect that some of the stylus engineering developed for Empire's CD-4 (4000 series) cartridges has been brought to bear in this design to accomplish that feat.

For more information on the Empire 2000Z, and our free brochure "How to Get the Most Out of Your Records," write: Empire Scientific Corp., Department ±1 dB, 1055 Stewart Avenue, Garden City, N.Y. 11530.

CIRCLE 14 ON READER-SERVICE CARD
Cizek: A New—and Welcome—Name in Speakers


Comment: At a time when many loudspeaker designers are using vented “Thiele-alignment” systems, Cizek’s new two-way acoustic-suspension system seems to be looking slightly backward. Tradition is not the font of all knowledge, surely, but it usually has something to offer. In this case, the sealed box limits the excursions of the woofer cone on subsonic signals, an advantage not shared by vented systems. Furthermore, the trapped air provides a more linear restoring force for the cone than does a mechanical suspension—and that usually means cleaner bass.

The crossover network, which is innovative, uses an unusual configuration that Cizek claims combines the advantages of a first-order constant voltage-transfer network with those of higher-order networks. On that we can’t comment, but we can point to the exceptional flexibility of the crossover controls located behind the removable grille. Besides a more or less conventional high frequency level control that raises and lowers the entire response of the tweeter with respect to the woofer, there is a five-position high frequency contour control that introduces a gently sloping characteristic above 2, 3, 4, or 6 kHz. The fifth position produces nominally flat response. Finally, a two-position toggle switch sets the Q (a measure of the damping) of the woofer/enclosure system to either 1.0 or 0.6. In the latter position, the woofer is damped for best transient response at the expense of some low bass response.

Lab data taken at CBS Technology Center indicate an extremely smooth impedance curve, suggesting excellent power-transfer characteristics. The minimum impedance—our nominal rating—is 4 ohms at 115 Hz. A single pair of Cizeks should be easy to drive from any amp. (These data, and all CBS data, were taken with a Q of 0.6 and with the HFL and HFC controls in their FLAT positions. According to the manufacturer, the system impedance with a Q of 1 is 7¼ ohms.)

The efficiency is just a shade below average. A 0-dBW (1-watt) input of pink noise between 250 Hz and 6 kHz produces a sound pressure level of 86⅛ dB at 1 meter. CBS achieved an SPL of 107 dB at 1 meter, more than adequate for listening, with a 20-dBW (100-watt) continuous sine-wave input at 300 Hz. The distortion at this level is 2.8%. On 300-Hz pulses, the speaker shows no clipping at maximum amplifier power (29½ dBW, or 900 watts, peak), for a peak SPL of 116½ dB.

At more realistic levels, the harmonic distortion is very low, about 1% or better at 85 dB SPL with either 80- or 300-Hz signals. At 90 dB SPL, the 80-Hz distortion is a bit over ½%, and some buzzing was noted at the 95-dB level. At 300 Hz, an SPL of 95 dB is achieved at less than ¾% distortion, while at 100 dB SPL the THD still is under ⅛%.

Measurements taken in the anechoic chamber indicate that the HFL control reduces on-axis response at frequencies above 2 kHz by up to 3 dB. Going from FLAT to the C, position of the HFC turns the response at 15 kHz downward by about 4½ dB. The Q switch affects the bass response in the region be-

REPORT POLICY Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation’s leading research organizations. The choice of equipment to be tested rests with the editors of High Fidelity. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be considered as applying to the specific samples tested, neither High Fidelity nor CBS Technology Center assumes responsibility for product performance or quality.
low 100 Hz. In the 1.0 position, the response between 33 and 100 Hz peaks relative to that in the 0.6 position by a maximum of about 1 dB at 50 Hz. Below 33 Hz, the higher-Q system rolls off faster, as is to be expected.

The on-axis response shows a dip of about 6 dB in the crossover region (just above 1 kHz), indicating some phase cancellation between the drivers. The average front hemisphere response curve has a much smaller dip, and there is essentially none in the average omnidirectional curve. The latter, which we believe is more indicative of the overall response of a speaker, is very smooth (±3½ dB from 40 Hz to 16 kHz), especially so for a two-way system. With the exception of the dip near 1 kHz and a less significant one at 6 kHz, the three curves track well, indicating good dispersion.

For our listening tests, we placed the speakers with their backs against the wall, several feet above the floor and well away from the corners of the room. While the lab data showed that the controls have only a gentle effect on the response, we could hear definite differences in the music—and we had our preferences. For example, the tighter bass with Q set to 0.6. For pop and jazz, we liked the C, position of the HFC switch with the HFL set at ±2; for classical music, we turned up the controls to C, and ±1, respectively.

The transient response of the Cizeks is exceptionally good. The stereo imaging, though a bit lacking in depth, is also very good. The over-all listening-room response is strikingly wide, as indicated by vivid reproduction of brushed cymbals and well-defined (if slightly heavy) bass. We did note a certain harshness in the flute and piccolo as well as on violins in the upper register. This may be due to the dip in response at the crossover or perhaps to some distortion when the tweeter is driven hard in its lowest octave—a common characteristic of two-way systems.

And though the quality of its sound may lead us to forget the fact, the Cizek is a two-way system. In that league it rates high indeed. It's one of the best we've heard.

**Jennings Vector I: Phasing Virtues and a Foam Halo**


**Comment**: For years, the drivers of most loudspeaker systems have been mounted flush with the front surface of the enclosure. Not much thought was given to the fact that the tweeter cone is relatively large and deep while the woofer is small and shallow, which gives rise to a time discrepancy between the radiation from each if they are mounted on a common surface. This lack of time synchronization or phase coherence affects the transient response and clarity of the sound—or, at least, so the argument goes.

The importance of phase coherence in a live listening room is still the subject of technical debate and is likely to remain so for some time. We have heard demonstrations that purport to show the importance of acoustic phase coherence and, indeed, a distinctive change in sound character was discernible as the system was switched to and from its phase-coherent mode. In principle, it appears to us that assuring phase coherence at the loudspeaker itself is a step in the right direction, regardless of what happens after the sound is reflected from the walls of the room, since the direct sound field—that which reaches your ears before any reflections occur—plays a major role in establishing stereo imaging and transient characteristics.

In any event, phase coherence seems to be the "in" thing in 1977 and has given rise to some pretty wild-looking loudspeakers: front-projecting woofers with midranges and tweeters staggered backward to line up the "plane of radiation" of the different drivers. The Jennings Vector I accomplishes the same result in a more conventional enclosure. The 8-inch woofer is mounted flush with the front surface, but the tweeter is recessed behind the surface. To avoid the diffraction effect of sharp edges near the surface, but the tweeter is recessed behind the surface. To avoid the diffraction effect of sharp edges near the tweeter, an "integrated acoustic foam cone" surrounds the tweeter like a gray halo, absorbing any reflected radiation. The Vector I is a two-way system with a 1,750-Hz crossover. A two-position switch behind the removable grille sets the tweeter/woofer balance. A rear-mounted 8-inch passive radiator tunes the enclosure to extend the bass response. There is no protective grille over the rear-mounted radiator, and it might be very easy to damage the cone if suitable precautions aren't taken. That aside, the cabinet is above average in construction and nicely finished on four sides in oiled-walnut veneer.

The data taken at CBS Technology Center were, for the most part, accumulated with the tweeter switch in the increase position. The nominal impedance is 4.4 ohms (at around 130 Hz), somewhat below the manufacturer's 6-ohm rating. Above this minimum, the impedance rises quite smoothly to a maximum of 16 ohms at 20 kHz, so the average probably is 6 ohms or more. Nonetheless, some care should be taken in paralleling the Vector I with other speakers. (Even if we accept Jennings' 6-ohm rating for the Vector I, two in parallel would present a 3-ohm nominal load—below the 4-ohm minimum recommended for most solid-state amps.) The upper resonant point of the vented woofer system occurs at 60 Hz (for a 16-ohm impedance), while the lower occurs below 20 Hz.

The system's efficiency is a shade higher than average.
A sound pressure level of 88 1/2 dB was measured at 1 meter with a 0-dBW (1-watt) input. The maximum output level of the Vector I, both with continuous and with pulsed 300-Hz tones, also is a bit above average—quite an achievement for a system of this physical size. A continuous sound pressure level of 107 dB was achieved at 1 meter with an input of 18 dBW (64 watts), for a distortion of less than 6 1/4%; above 107 dB, the results were inconsistent. The lab measured 114 1/2 dB SPL with pulses having a peak power of 25 1/2 dBW (363 watts) before exceeding the excursion limits of the driver. At more reasonable sound levels, the THD of the Vector I is lower than average except for an increase in 80-Hz second-harmonic content at relatively low test levels (75 dB SPL).

With the tweeter sensitivity at normal, the on-axis response measurement exhibits substantial dips in the crossover region (1,750 Hz) and again around 4,600 Hz. Curiously, the dips fill in quite well (to about a 5-dB hole) when the tweeter switch is set to increase. Elsewhere, there is about 4 dB of change in high-frequency level depending on the switch position. The front hemisphere and omnidirectional response curves, which are more representative of perceived sound, do not exhibit this anomalous behavior. In fact, the omnidirectional response is quite smooth: within 4 dB of nominal (85 dB SPL) from about 45 Hz to 16 kHz.

To get the best performance from the Vector I, we’d strongly recommend a good subsonic filter in the recording chain. The system is tuned to a very low frequency, and the small woofer goes through some wild excursions without a filter—even when playing relatively unwarped discs. With the filter switched in, the woofer and drone cones calm down, and the sound is much cleaner. We’d also suggest that you experiment with placement. Stood on the floor, perhaps 10 inches out from the wall and well away from the room corners, the Vector I’s produced a prodigious bass output—too much for our tastes, so we preferred them raised several feet above the floor and moved out into the room. This reduced the apparent bass but provided better balance in our listening room. (Our test samples did not have the optional tilting bases.) We definitely prefer the tweeter switch in the increase position, with a slight treble cut in the preamp to avoid excessive brightness.

Set up as we describe, the sound character of the Vector I is very satisfying. Definition is good, and the stereo imaging is exceptional in both width and depth. Whether this can definitely be ascribed to the “linear phase coherent” design we can’t say, but we can attest to the superior performance of the Vector I in this regard; more likely than not, LPC has a lot to do with it.

CIRCLE 134 ON READER-SERVICE CARD

Bertagni’s Biggest “Geostatic”


Comment: For good or ill, Professor Bertagni’s fame and that of his speakers has preceded his product, making it unusually difficult to approach with an open mind. We find that listeners’ opinions are easily colored by the innovative principles of the drivers themselves (see Peter W. Mitchell’s article in this issue), by the Geostatic name and the resemblance of the D-120 to an electrostatic panel, and by the lackluster sound of plastic-foam panel speakers previously available on the American market. After extensive listening, we have come to the conclusion that, while there may be a modicum of meaning in all of these associations, each is more misleading than it is informative.

The panels are panels and therefore share with electrostatics some propagation properties. Since they deliver as much sound to the back as they do head-on, positioning takes some care if the back wave is not to be swallowed up by overly absorbent materials behind the speaker or, conversely, reflected in such a way as to roughen response (usually caused by the panel’s being too close to, and parallel with, the wall behind it). Barring obviously poor positioning choices, however, we did not find the D-120 to be particularly fussy; many changes produced little or no audible alteration in the sound.

Connections (via bared wires) are made at the back of the base, to spring-loaded, color-coded posts. Next to them are a circuit-breaker reset button and two rotary controls: for midrange and highs respectively. (Identify which is which while you’re tightening the two screws that hold the “foot” plate in place, with the speaker in working position, we had to lie flat on the floor to read the identifications.)

The CBS measurements show that the mid gives a total adjustment range of approximately 6 dB between about 1 and 5 kHz. The high knob has most effect above about 8 kHz, where the adjustment range is similar. The instructions suggest experimentation (always a good idea), starting with the maximum position of the mid control and half-way for high. At the end of the experiment we found ourselves back at ground zero and left the controls at these recommended positions for most of our listening. Bertagni also suggests corner placement if you like emphasized bass. Our experiments in this direction led us to concede that the bass is most natural (if not super-deep) when the speakers are kept out of the corners.
The efficiency is relatively low—approximately that of a typical acoustic-suspension system; an input of 0 dBW (1 watt) in the band between 250 Hz and 6 kHz produces a sound pressure level of 83.4 dB at 1 meter on axis in the anechoic chamber. Of course since dispersion is nearly omnidirectional in all planes (omnipolar, as Bertagni calls it) for most frequencies at which this test is made, more off axis energy is "lost" than is the case with typical bookshelf designs, so the relative in the room efficiency of the Bertagni is somewhat higher than a comparison of efficiency numbers might suggest. But it is not high. Bertagni recommends 250 watts (24 dBW) per channel to drive the D-120s. While this may lean a little to the other extreme—offering more power than most home users will actually need—it is by no means an unreasonable suggestion.

The speaker is rated for 20 dBW (100 watts) continuous input at 400 Hz; sure enough, at 20 dBW—and an acoustic output of 105 dB—the circuit breaker tripped in the 300-Hz test. Up to that point, 300-Hz distortion is very well controlled; above it, the lab was able to feed 300-Hz pulses into the D-120 until the test amplifier ran out of power at more than 28 dBW (630 watts) peak, for an output of 113 dB SPL, without untoward behavior from the speaker. At 80 Hz, with continuous tones, the distortion proves somewhat higher though still essentially well controlled, to above 95 dB SPL before buzzing begins. All this translates to excellent dynamic range for all purposes short of discotheque levels in large rooms.

Impedance, response, and dispersion—all of which are related, of course—are somewhat difficult to characterize because all are nonstandard with respect to conventional drivers. The swings of the impedance curve all are well within the range between 4 and 16 ohms, for an exceptionally flat over-all characteristic. (Bertagni rates the D-120 at 4 ohms; the rating point measures 5.5 ohms, giving some safety margin but requiring that the speaker be treated as if 4 ohms.) The impedance curve contains an unusual number of small peaks and dips, however—presumably reflecting the unusual modal behavior and consequent mechanical impedance of the diaphragms.

Nor is the response—whether considered on axis or "omnidirectionally"—particularly free of peaks and dips. Most speakers are relatively omnidirectional in the bass and become progressively beamy as frequency rises. Not so the D-120. At the sides there is the noticeable null to be expected at high frequencies in panel speakers; at other positions and frequencies the relationship between dispersion and response—that is, between seating position and coloration—is unusually complex. Again, we take this to be, at least in part, a concomitant of the diaphragm behavior inherent in the design.

Fortunately, most of the discernible coloration is minor. Probably the most noticeable is a tendency for female voices to thicken toward the top of their range—say, around 1 kHz. This appears to be related to the rapidly falling response in the overtone range for these notes (approximately 1.5 to 3 kHz); the lower "wall" of a broad dip in the lower treble. The effect is more difficult—and often impossible—to spot with instrumental music. It is difficult to characterize the dip involved because the dispersion characteristics and the action of the controls both are so complex. The fairest statement we can make about omnidirectional anechoic response is that it appears to be within ±5 db from the bottom limit of reliability in such tests (say, about 40 Hz) to beyond audibility, representing uncommonly broad, but not uncommonly flat, response.

The stereo imaging of the D-120 is excellent. Typically, for an omnidirectional radiator that depends heavily on room reflections, the image is big. With good program material it also can offer startling depth and the illusion that the music is being performed right in the listening room. This sometimes uncanny verisimilitude was judged by some listeners to be the most attractive feature of the system.

Again, this is not a speaker about which it is easy to keep an open mind. While our listeners—like our readers—are always enjoined to do so, we are all subject to our own predilections. There is enough difference between the propagation principles of the D-120 and those of other speakers that we would expect considerable differences of opinion about their merits, and we found them. But if you're at all interested in panel speakers, this is a model that you owe it to yourself to hear. It also is available in smaller, less costly versions (which we have not auditioned). It proves unequivocally that plastic-panel drivers have come a very long way since the last time we tested any, but it is not a speaker that will please everyone.

CIRCLE 132 ON READER-SERVICE CARD

Manufacturers' Comment

We invite rebuttal from those who produce the equipment we review. The comments printed here are culled from those responses.

Bang & Olufsen Beomaster 1900 receiver (March 1977): You state erroneously that the Beomaster 1900 is rated for an 8-ohm load. The specified load is, in fact, 4 ohms.

Your comments about the imbalance between phono and FM are well taken. In searching for the cause of this 8- to 10-dB difference between FM and phono outputs, we discovered that no such imbalance exists in Europe. This led us to a comparison of FM transmission there and in the U.S. As you know, 75 kHz is the maximum swing; most U.S. transmitters operate near this limit, however in Europe most transmitters modulate with a swing of approximately 25 kHz. This would seem to be the major cause for the difference.

As an immediate solution, phono output has been increased 3 dB and FM reduced 3 dB, which results in a difference of 3 dB or less. All servicing dealers and service stations are capable of modifying receivers already in the field should this imbalance prove to be annoying to the owner.

HARRY HORNING
Director of Training
Bang & Olufsen of America, Inc.

HF replies: We stand corrected on the matter of rated load imped. We note, however, that the unit makes rated power at low distortion into an 8-ohm load, exactly as stated in the report—which is more to the point when considering the Beomaster 1900 as a separate receiver. B&O uses the 4-ohm rating because that is the impedance of the speakers supplied with the receiver in the Beosystem 1900.
Koss Model Two

Turns the Tables


Comment: Traditionally, the vulnerable point of electrostatic loudspeakers has been in low bass response. The problem, while not of dimensions that would earn it the sobriquet "Achilles heel," has led many a designer to elicit aid from the dynamic camp in the form of a large woofer with which to underpin his electrostatic creation. But the Koss Model Two has changed all that, standing the conventional wisdom of loudspeaker design on its head in the process. This is a speaker with an electrostatic woofer and midrange driver topped off by a dynamic tweeter—and, if anything, it may have a bit too much bass for some tastes.

Rated by the manufacturer at an impedance of no less than 4 ohms from 10 Hz to 50 kHz, the Model Two shows a nominal impedance of 5.5 ohms at 200 Hz. The curve is somewhat peaky and rises twice into the neighborhood of 16 ohms, although it remains well above 4 ohms in the audios bandpass. The data (and our experience) suggest that a single pair of these speakers is a safe load for a solid-state stereo amp.

Testing by CBS labs indicates that the Koss, as might be expected on the basis of its design, is notably inefficient, producing an average sound pressure level of just under 79 dB when driven with a 0-dBW (1-watt) pink-noise input bounded by 250 Hz and 6 kHz. Power handling capability is such, however, as to allow plenty of dynamic range; a nominal impedance of 5.5 ohms at 200 Hz. The curve is somewhat peaky and rises twice into the neighborhood of 16 ohms, although it remains well above 4 ohms in the audio bandpass. The data (and our experience) suggest that a single pair of these speakers is a safe load for a solid-state stereo amp.

Installation of a pair of Model Twos should pose no great problem. Koss has provided clear suggestions as to placement, and hookup (via terminals that accept bared wires) is straightforward. Access to an AC power line (for the bias supply) is necessary at the speaker positions. The tweeter level control, which can shift the output of that driver 2 to 3 dB up or down with respect to the median setting, is effective between 2.5 and 19 kHz. Koss's diagram indicates a somewhat restricted preferred listening area, but the high frequency dispersion of the cone tweeter preserves acceptable listening quality somewhat beyond the recommended region.

The sound of a pair of these speakers is solid, clear, and—due to its hefty output in the midbass region—just a trifle somber. Generally the Koss seems happiest with orchestral music, which is especially well served by the life-size and detailed stereo image. Voices are very plausibly reproduced but tend to sound just a bit distant. To our ears, the best sound comes when the bass is rolled off a few dB via the tone control (although in another environment, the extra bass might prove welcome). The highs are all there, if a trifle hard-edged at times, and transient response is acceptably clear without being clinical. Over-all average omnidirectional frequency response, measured in the anechoic chamber, is ±3 ¾ dB (re 77 dB SPL) 45 Hz to 15 kHz.

What is uncanny about the Model Two, however, is its ability to suggest that there is space around the various instruments or voices and that they have particular locations in that space. The stereo image has an excellent sense of depth, rivaling at times the vividness of quadriphonic reproduction. And sound pressure levels approaching muscle à la disco are produced with no sense of strain.

We would expect that someone considering an investment equal to the price of two of these speakers will move cautiously and already have developed tastes in audio equipment. The Koss has a definite personality that may not suit everyone, but the personality is most engaging and gets along very nicely with music. So, fussy and perfectionistic though you may be, you will probably find that the time it takes to audition a pair of these "upside-down" electrostatics is time well spent.

CIRCLE 133 ON READER-SERVICE CARD
Phase Linear’s Master Illusionist

The Equipment: Phase Linear Model III loudspeaker system. Dimensions: 24 by 63 inches, 5 inches deep (panel); 22 by 22 inches, 18½ inches high (commode). Price: $1,185 per pair. Warranty: “limited,” three years parts and labor. Manufacturer: Phase Linear Corp., P.O. Box 1335, Lynnwood, Wash. 98036.

Comment: A single look at the Phase Linear Model III loudspeaker system makes clear that it is unique, but that look will give little clue to the extent of that uniqueness or to the sophisticated laws of design that govern the interaction of the twenty drivers that make up the two-channel system. It is, fittingly, the ear that first perceives that some electronic wizardry is afoot; the sonic impact of the Model III is simply amazing.

The system consists of four parts: two free-standing panels, a single bass commode containing subwoofers for both channels, and an Electronic Motion Control Module—a box that connects between preamp and power amp (or in a tape-monitor loop) and contains variable equalization and some other circuitry. The panels each contain five tweeters, two midrange drivers, and two woofers, and are crossed over to the commode at about 140 Hz, where sound propagation is essentially omnidirectional. The placement of the commode, therefore, is not critical. The design of the panels, with conical reflectors provided for the upward-firing tweeters, is aimed at omnidirectional dispersion—which, judged audibly, is very nearly achieved. Only at locations in and very near the actual plane of the panels are there any irregularities in the distribution of the middles and highs.

The on-axis sweep-frequency response measured by CBS from about 2.5 to 19 kHz would ordinarily be regarded as shockingly ragged, but (surprisingly) the succession of sharp peaks and dips that are in evidence are there by design. Phase Linear calls the effect “bounded ripple” or a “comb filter” and finds it useful in reproducing ambience, provided that the peaks and dips (which have a smooth envelope) are at different frequencies in the two channels. Actually, unusual effort has been expended on ambience recovery; the control module has a knob that can increase the level of out-of-phase information (derived from the program material by a special circuit) routed to the speakers, and the placement instructions suggest that the panels be set up where the back wave will reach the listener after a delay of 14 to 28 milliseconds. The effect of the control depends heavily on the room, the arrangement of the panels, and the program material. In our listening sessions (much of which were performed with the speakers further from the rear wall than suggested), we found the ambience unusually opulent—and convincing.

To the ear, the transient response of the Model III is extraordinarily fast and clean—and well damped to boot. The conflicting requirements of heavy damping and quick response are met in a new and ingenious way: by using a relatively slow and massive tweeter and “speeding up” the signal—via circuits in the control module—so that the tweeter output arrives on time.

The impedance curve of the system is smooth and without extreme peaks or dips. The nominal impedance is 5 ohms, but there is a broad trough between about 200 and 700 Hz, where the impedance falls below 4 ohms and could give some solid-state amps a problem. Actually, because of the extremely low efficiency of the system—a 0-dBW (1-watt) pink-noise signal, 250 to 6,000 Hz, produces a sound-pressure level of 74 dB at 1 meter on axis—we would suggest that an amp in the upper part of the range recommended by the manufacturer (17 to 25½ dBW, or 50 to 350 watts) be used. Most amps in this category will tolerate the impedance dip.

When sufficient power is available the dynamic range of the Model III is vast. A steady SPL of 98 dB is produced by an input of 20 dBW (100 watts) at 300 Hz with no sign of strain from the speakers, both the lab measurements and our extended listening tests suggest that higher SPLs are easily within reach. Similarly, the 105-dB peak SPL produced by a pulsed input at the same frequency exhausted the test amp, which had delivered a peak output of 27½ dBW (520 watts).

Quite frankly, the Phase Linear Model III is so special a loudspeaker that we find ourselves at something of a loss in trying to relate its frequency response to its performance. The total omnidirectional, anechoic curve is extended and reasonably smooth, but does not suggest the beautifully balanced sound of which the unit is capable. The 3-step equalization controls affect the bass (below 250 Hz), midrange (100 Hz to about 1 kHz), and highs (above 1 kHz) in steps of about 2 dB. Distortion is certainly low, right down to low frequencies, and this contributes to realism through a sense of utter ease. But if the Model III has any particular strong point, it is the spectacular stereo image—life-size, vivid, and with lots of depth. The system makes it seem as if the end of the listening room is open and abuts a concert hall, and when two more high-quality speakers are added to make a quadriphonic array, the effect is stunning.

We are quite certain that this loudspeaker system rates a place in the forefront of state-of-the-art design; we are equally certain that we did not get the best out of it—simply because we lacked the time to experiment at length with placement and, possibly, equalization. So novel a speaker takes time to reveal its personality, engaging as it is on first acquaintance. Its price is rather high, but when have superstars been cheap?

CIRCLE 135 ON READER-SERVICE CARD
To create a full featured cassette recorder at an affordable price. Well, our engineers outdid themselves. To them, advance meant creating our Exclusive Biaset feature. A continuously adjustable recording bias control that lets you set the bias best suited for the formulation of any cassette tape. From normal to chrome and ferrichrome tapes. As a matter of fact, Dokorder engineers built into this Biaset feature a setting for tapes that haven’t even been produced yet!

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CIRCLE 13 ON READER-SERVICE CARD
A New Version of This Country’s Most Popular And Most Imitated Speaker System.

The New Advent Loudspeaker.

Over the past few years, the Advent Loudspeaker has gone into more people's homes in the United States than any other speaker system. It has been imitated over and over, and has been used consistently as a standard of performance (even by salesmen and companies trying to sell other speakers). It has also prompted an almost incredible number of unsolicited praise letters from satisfied owners.

The new Advent Loudspeaker sounds very much like the original. It should, since the frequency balance, clarity, and neutral, "open" quality that contribute to the sound-character of a really excellent speaker shouldn't need much alteration—and shouldn't be subject to change for the sake of change.

But the New Advent Loudspeaker is audibly different at the high end of the frequency range. The change has been made possible, and worth making, by improvements in the high-frequency capabilities of tapes, broadcasts, and—most of all—records.

About Speaker Design.

Despite all the advertising to the contrary, it is not hard to design a good loudspeaker. The necessary knowledge and materials have been available for quite a while, and any of many design concepts can produce excellent sound.

But the trick, to our way of thinking, is to produce a balanced product. One that doesn't lead the customer to pay unnecessarily for an overelaborate design concept, or for a "solution" to a nonexistent problem. And one that sounds good not just under "ideal" conditions or in an artificial laboratory environment, but under the widest range of actual conditions in people's homes.

Knowing that complexity has often been a substitute for good design in speakers, and that a great deal of speaker design doesn't have all that much to do with the requirements for home listening, we designed the original Advent Loudspeaker to fit at the lowest possible cost into the “best” category in speaker performance in a home. Its success has been underlined for us not just by the number of original Advents sold (half a million), but by the kind of satisfaction people have continually reported—to us, and to their friends.
The Difference
And How It Came About.
A vital part of designing a speaker for use in the real world is to consider the capabilities and limitations of recording and broadcasting processes at a given moment. For most of the high-fidelity era, the most important limitation on actual usable performance in a speaker has been the high-frequency limits of recordings.

Almost twenty years ago, for instance, some of us now at Advent were involved in a live-vs-recorded test of an "ideal" tweeter design that could, and did, sound identical to the live source. But this same tweeter was absolutely unlistenable for playback of recordings, particularly for LP records. It mercilessly revealed the tremendous residual noise and distortion (from tape hiss, cutter limitations, vinyl imperfections, and other sources) present on records at high frequencies.

By the time we designed the original Advent Loudspeaker in 1969, tremendous improvements had been made in recordings and broadcasts. But there were still important limitations, and the total high-frequency energy output of the Advent was balanced to suit that reality and match well with the mixture of new, not-so-new and old LP's in most people's record collections.

In the 1970's, however, two very important improvements have been made in the high-frequency capabilities of recordings and broadcasts:

- The almost universal adoption of the Dolby® system and other noise reduction measures for recordings has reduced background tape hiss and residual "hash" at high frequencies by a tremendous amount.
- The entry of the Dolby system into FM broadcasting is also beginning to be felt.

A new generation of record-cutting equipment has made it possible to put more essentially undistorted output onto records in the 10,000 Hz region. And a new generation of phono cartridges has been designed to take advantage of the opening for cleaner high-frequency response.

These factors add up to more recoverable, usable high-frequency content in source material than ever before — more clean sound above the noise and distortion in the recording process.

With these improvements, and influenced by the fact that most people's record and tape collections now date mainly from the early 1970's onward, we decided to change the high-frequency capabilities of the Advent Loudspeaker. Also involved in the decision was the knowledge that we could make use of developments like ferro-fluid damping for the tweeter to come up with a higher-output design of the Advent Loudspeaker.

What Stays The Same.
Like the original Advent, the New Advent Loudspeaker is the best answer we know how to make to two fundamental questions:

- What is the highest level of performance that has real meaning for the great majority of truly critical, demanding listeners?
- How do you get that performance at a cost low enough to make it available to the widest number of people who would like it?

We realize that it is hard to believe, especially when speaker advertising consistently suggests that more dollars and more complexity and more novelty are the key to speaker performance, that a relatively simple two-way speaker system can really fit into the very highest performance category. Especially a speaker that costs only $129 to $159* (depending on cabinet finish and how far we have shipped it).

But it can and does.

The New Advent Loudspeaker has a useful frequency range as wide as that of any speaker at any price. It's bass response is approached by few speakers at any price. It will fill a large living room with a satisfying amount of undistorted sound. And it doesn't require a super-power amplifier or receiver.

It also has an all-important octave-to-octave tonal balance that's based on long experience with the performance both of equipment and of recordings in the real world. We don't have enough room left here to explain the full implications of that statement, and to explore the design of the New Advent Loudspeaker in full detail. But if you will send us the coupon, we will be happy to provide full information on what the New Advent Loudspeaker is and how it does what it does.

Thank you.

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To: Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139
Please send full information on the New Advent Loudspeaker, and a list of your dealers.

Name
Address
City
State Zip

Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139.

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OVER THE YEARS, standards have been established for testing just about all of the common high fidelity components. Of course, the standards may change from time to time as the state of the art advances—witness the recently updated FM tuner standard—and since multiple standards frequently exist (IHF, NAB, DIN, JIS, etc.), manufacturers and equipment reviewers may opt for one or another of them. And standards committees, moving as cautiously as they do, may not promulgate an updated version rapidly enough to suit the needs of, say, a reviewer. (For this reason, HIGH FIDELITY took the initiative in introducing the dBW concept of amplifier specification.) Nonetheless, standards do exist for most products so that communication among manufacturer, reviewer, and consumer can take place.

When it comes to loudspeaker measurements, there is little agreement among the engineering fraternity—and hence no standard. For many years, HF based its reports strictly on extensive listening tests, but in 1970 CBS Technology Center (then called CBS Laboratories) devised a set of measurements, and the methods for taking them, that serve to help us in our evaluation. Since then, we have used the data from CBS as the underpinning of our reviews. Manufacturers—and indeed other reviewers—employ different techniques. Thus our test data do not necessarily agree with theirs. (That is what happens when no standard exists.)

Our speaker measurements are made in an anechoic chamber in order to simulate a “free field” environment that avoids the reflections created at the boundaries of a “real” room—reflections that might color the measurements. While introducing certain limitations of its own, the anechoic chamber provides a common test situs. The loudspeaker’s impedance, frequency response, distortion, power handling capability, and sensitivity all are measured in these tests.

The loudspeaker’s impedance is a measure of the “load” it presents to the amplifier that is driving it. Although impedance is measured in ohms (like a resistor), the impedance of a loudspeaker system generally varies with frequency (that of an
The higher the impedance, the less effective load, it is important to know the effective impedance of the loudspeaker at different frequencies. The higher the impedance, the less power will be drawn from the amplifier. This is usually of no concern. But, at frequencies where the impedance is low, the speaker will draw relatively large amounts of current from the amp—possibly, at high volume settings, more than the amplifier can deliver safely. The automatic current-limiting protective circuitry that is built into many amps can, in this event, be triggered, creating distortion. Under extreme circumstances, the amplifier conceivably might be damaged.

Most amplifiers are rated to operate into load impedances down to 4 ohms, some into impedances even lower. But a loudspeaker rated at 4 ohms may actually exhibit less than a 4-ohm impedance over portions of the frequency band. Similarly, "8-ohm" loudspeakers often measure less than 8 ohms over much of the band. As long as they don't drop much below 4 ohms, you're safe in driving one set of them with an amp rated for 4 ohms. Many audiophiles hook up two sets of speakers, however, and are encouraged to do so by the speaker-selector switches built into their equipment. When both sets of speakers are driven simultaneously in parallel, the load on the amp drops further. If both sets of speakers are identical, the net load impedance is half that of a single set. Obviously, operating two sets of 4-ohm speakers is a bad idea with any amplifier not rated for a 2-ohm load. But pairs of 8-ohm speakers can also be a problem for many amps if their true impedance falls significantly below 8 ohms over much of the frequency range.

Impedance dips confined to narrow regions where little music power occurs are relatively unimportant, but if the impedance falls below about 6 ohms in the high power region (250 Hz to 6 kHz), it's reason for concern. Our reviews warn of this when appropriate.

Besides commenting on the suitability of operating parallel pairs of speakers, our review will tell you what the nominal impedance of the system is. We define the nominal impedance as the minimum impedance reached just above the system resonance. Typically, the impedance curve of a speaker system exhibits a peak at a resonance somewhere in the low bass. (There will usually be two peaks if the system is vented.) Above the system resonance, the impedance will fall to a minimum and then, usually, rise gradually as the test frequency increases. It is a characteristic of the woofer/enclosure combination, since the midrange and tweeter are not active in this region.

The impedance at higher frequencies depends on the midrange and tweeter and the associated crossover networks. The impedance may be higher or lower than the nominal value. But the nominal impedance should agree closely with the manufacturer's rating.

Intuitively, the frequency response of a speaker would be expected to reflect its listening quality strongly, but measuring and evaluating this parameter is not as straightforward as it might at first seem. Loudspeaker systems never have the smooth extended response of, say, an amplifier. Furthermore, the response varies with the position of the test microphone. The lower frequencies are generally propagated more or less uniformly around the speaker (and hence microphone position—at least in an anechoic chamber—is not critical); at higher frequencies, many loudspeakers tend to concentrate or "beam" the sound directly in front of the driver that produces it. With normal stereo placement in your listening room, such a system might change considerably in sound, depending on the listening position.

CBS makes separate frequency response measurements at a number of positions around the loudspeaker. One of these corresponds to an "on axis" measurement, 1 meter in front of the enclosure. ("On axis" here means directly in front of the center of the enclosure, not necessarily directly on the axis of any one driver.) The other measurements correspond to microphone positions equidistant from each other around the "surface" of an imaginary sphere, 1 meter in radius, with the speaker at its center. The data from these various response curves are averaged and normalized by a computer, which generates two curves in addition to that for on-axis response—an "average front hemispheric response" that tells us the average power response of the speaker toward the front, and an "average omnidirectional response" that measures the total power radiated in all directions.

We have found that the omnidirectional curve is the most meaningful in characterizing the frequency balance of a speaker in a listening room. But the comparison of the omnidirectional curve with the other two tells us a lot about the speaker's dispersion qualities. The more nearly parallel the three curves are, the more uniform the dispersion. If, however, the on-axis response curve lies well above the others in the midrange and highs, we can expect a very "beamy" speaker.

The bass response of these curves typically rolls off somewhere near 100 Hz when the speaker is measured in an anechoic chamber, since there are no reinforcements provided by reflections from the room walls and floor. (The reason for anechoic measurements is precisely to avoid room-induced reflections.) The audible bass response in a listening room generally is better than the anechoic curves would suggest. How much better depends upon the room, the speaker, and its location in the room.

What we look for in the frequency response data
is over-all smoothness. Slight dips in the curve are much more readily acceptable than peaks. (Peaks are easily heard in music, while dips often go unnoticed.) Given over-all smoothness of the omnidirectional response and reasonably parallel response curves, we look for the widest response we can get.

With all the hoopla made over cramming a few extra watts of power capability into an amplifier, we're frankly surprised that the industry does not attach the importance to loudspeaker sensitivity (or efficiency, if you will) that it seems to deserve.

One reason, surely, is that no standard method of specifying speaker efficiency exists, making this a difficult subject for manufacturers to write about intelligibly. Loudspeaker sensitivities—i.e., the relationship between the sound pressure level produced and the input power that produces it, as measured at a given distance in front of the speaker—easily vary over a 10-dB range. Thus a low-efficiency speaker may require ten times the amplifier power to produce the same sound level as a high-efficiency model.

Our measurements are based upon the average

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Ten Loudspeaker Shopping Tips

1. In conducting an A/B comparison test of speakers, be sure that both sets are made to play at the same level. Otherwise the louder set usually will sound better regardless of quality.

2. If the speakers you audition are a part of a display in which a great many are stacked against a wall, be sure that the candidates are in reasonably equivalent positions. A speaker at floor level will have a good deal more bass than one that is two feet off the floor.

3. Speakers that are designed to reflect off the walls probably will sound very different in the showroom, as compared with your listening room, especially if the former contains many models. Each speaker in the showroom that is not being driven sucks up acoustic power from those that are being demonstrated.

4. Bring your own records and/or tapes, preferably ones with which you are intimately familiar, to use in auditioning. If your choices are discs and you want to be really fussy, ask the dealer to play them with the cartridge model you have in your home system. An alternative is to use the cartridge model you intend to use with the new speakers.

5. If the speaker manufacturer has made specific recommendations about the positioning and installation of his product, be sure they are observed—both in the showroom and at home.

6. Unless you are sure that an FM station in your area does not limit or otherwise process its signal, avoid using FM for speaker evaluations.

7. When you find a speaker you think you like, listen to it for a fairly long time (half an hour should do) to check for long-term fatigue effects. Better yet, try to arrange for a home trial. The more prestigious audio stores often offer this service.

8. Try to test a prospective speaker with an amplifier at least similar to the one you plan to use. The speaker’s performance will avail you little if you cannot supply the power it needs. Damping factor of the test amplifier also should be similar to that with which the speakers will be driven if the test is to be valid.

9. For this reason, demonstration systems that adjust relative levels by way of attenuators between the amplifier’s output and the speakers may compromise performance of the more efficient models through loss in effective damping factor. Ask your dealer whether level adjustments are made at the input or output of the amplifier, if the latter—and particularly if you hear any boombiness in a relatively efficient speaker system—you may need to hear the speaker driven directly from the amplifier before you can assess it adequately.

10. Listen with an open mind.
efficiency, measured at 1 meter, in the frequency range from 250 Hz to 6 kHz, since that is where the bulk of the power in a normal music spectrum lies. CBS drives the system with a test voltage that would deliver 0 dBW into the nominal impedance of the speaker. (To the extent that the true average impedance in the range between 250 and 6,000 Hz is different from the nominal impedance, the measurement will be slightly off.) To get the most sound from the available amplifier power—assuming that you need to do so—you will want efficiency to be as high as possible. The "average" speaker produces a sound pressure level of about 87 dB at 1 meter in this test. A low-efficiency model might come in at 82 dB, while a really hot speaker might do 92 dB.

For high-quality sound reproduction, low distortion is a must. Fortunately, loudspeakers produce mostly "low order" distortion products—predominantly the second and third harmonics. Most listeners can tolerate a reasonable level of this type of distortion. We report on the second and third harmonics, using tones of 80 and 300 Hz at different sound pressure levels. Generally the distortion increases as the frequency goes lower and the sound level goes up.

At relatively low volume levels (75 dB SPL), the average loudspeaker might generate about 1/2% or less of the second harmonic and a shade more third harmonic—say, under 1%. At these levels, it is the inherent nonlinearity of the speaker that creates the distortion, and there won't be much difference between the 80- and 300-Hz measurements.

As the level increases, the second harmonic distortion predominates, especially at 80 Hz, where the cone moves through a relatively large distance. "Average" figures here might be up to 2% of the second harmonic, plus about 1½% of the third at 80 Hz, and somewhat lower figures (perhaps 1¼% second and 1¾% third) at 300 Hz. When we drive the speaker to 105 dB SPL, the 300-Hz averages might rise to 3% second, plus 1½% third. We find very few speakers that can deliver 105 dB SPL at 80 Hz without distortion in excess of 10%.

The distortion figures all need careful interpretation, however, because driving a speaker in an anechoic chamber is not the same thing as driving it to the same SPL in a room, and the relationship between the two will vary from design to design, particularly at 80 Hz, where room-boundary coupling has a major influence on response. For this reason HF no longer presents the distortion data in tabular form in its reviews.

To see what the limits of the speaker are, CBS measures the maximum continuous sound pressure level that is generated at 1 meter with a 300-Hz input and at a distortion of less than 10%. (If anything starts to buzz, we call it quits right there.) Typical figures might range from 100 dB for a small bookshelf system to better than 110 dB for a large one. Average is probably 105 to 106 dB.

These are severe tests—done as they are with a continuous-power input. Music is never continuously at levels this high but reaches them only for brief periods. To get an idea of the sort of acoustic levels that can be reached for short periods of time, CBS uses a filtered pulse, with most of the energy concentrated at around 300 Hz. Again the peak sound level is measured at a 1-meter distance. The limiting factor is visible distortion of the reproduced wave—or, as occasionally happens, running out of amplifier power. A good average speaker might deliver 113 dB SPL on this basis, and the lab has measured better than 119 dB.

When reviewing this data, you obviously want the lowest distortion and highest power capability possible. We like to see the low-level (75-dB SPL) figures down below ¼%. At 95 dB SPL, we'd hope for perhaps ⅛% or less. We especially look at the maximum peak power capability, for this is more indicative of the quality of music reproduction. Most definitely, the more the better, especially if you like to listen to your music loud. Shoot for perhaps 115 dB if you have a reasonably large room. For small rooms or for background music, you can get by with much less.

But whether you will be able to achieve the peak power capability of the speaker will depend upon its efficiency and on the power capability of your amplifier. Go back to the sensitivity figure (say, 90 dB SPL with a 0-dBW input) and add to that the power rating of your amplifier (say, 17 dBW). That will tell you the peak levels you can achieve with the combination (in this case, 107 dB SPL). If the answer equals the peak SPL we achieved with the speaker, you have a match. If it exceeds the peak SPL rating of the speaker, you have more than enough power in the amp to drive the speaker to its limits. (If it greatly exceeds the capability of the speaker—say, by 3 dB or more—you are overpowered and the amp could conceivably damage the speaker.) But if the total is less than the speaker rating, the speaker could manage a more powerful amplifier, or the amplifier a more efficient speaker with the same power capability.

Our final test is perhaps the most important one: extensive listening by a panel of critical reviewers. This is not to say that the technical measurements are unimportant, but they cannot fully establish the quality of a system as complex as a loudspeaker. Frequently we discern characteristics in our audition that escaped the laboratory measurements, and very often we simply like the sound of a system whose measurements appeared only mediocre. So don't be too surprised if you find a verbal review that does not correspond precisely with the measurements. After all, if it were easy to spec a loudspeaker, standards would have been set long ago.
A pair of Audio Research Magneplanar Tympani speakers in camera

Loudspeakers Without Boxes

Flat-panel systems find new followers—and new operating principles.

by Peter W. Mitchell

IN THE FIFTY-TWO YEARS since the design of the conventional electrodynamic loudspeaker was established by Rice and Kellogg at General Electric, it has been a nearly universal practice to mount loudspeaker drive elements in cabinets. In each decade diverse nonboxed speaker systems have been patented and offered for sale, but most have rapidly disappeared. The dominance of the cabinet speaker is such that the average person's mental image of a "loudspeaker" is a rectangular box with a grille on its front—never mind what's inside. Of course, departures from the standard rectangular prism occasionally occur to suit specific purposes; recent examples include the triangular prism (Allison One), pentagonal prism (Bose 901), and dodecahedron (Design Acoustics D-12). But a box still is a box.

Recent years have seen the emergence of another loudspeaker configuration, not just as an item of transient, esoteric interest, but as a major contender for the buyer's attention. This is the free-standing panel: tall, wide, and thin. One contributor to their appeal, no doubt, is their striking appearance. Another is that many employ novel transducer designs—unusual approaches to the problem of converting electrical energy to sound. More to the point, however, are the sonic and musical advantages that result from the transducer operation and geometry of flat-panel systems.

The Electrostatic

The classic flat-panel loudspeaker is the electrostatic. Older than most audiophiles realize, it was described in principle a century ago. Arthur Janszen, whose name is immutably linked to the electrostatic tweeter, recalls encountering the Kyle Condenser electrostatic loudspeaker in a Peerless AM radio console in the late 1920s.

Peter Mitchell, a new contributor to HIGH FIDELITY, is by profession an astrophysicist. He is a stalwart of the Boston Audio Society and a consultant to Audio Pulse, Inc.
Operation of any electrostatic is based on a phenomenon you may have seen demonstrated in high-school physics: Similar electrical charges repel each other, and opposite charges attract. To make use of electrostatic force in a loudspeaker, a lightweight membrane is suspended parallel to and a fraction of an inch away from a large metal plate. An electrical voltage (from a power supply or battery) is used to establish opposite electric charges on the membrane and the plate, producing a uniform attractive force between the two surfaces. When the audio signal voltage (usually stepped up to a higher voltage level by a transformer) is combined with the DC voltage on one of the surfaces, the result is an electrostatic force between them that varies with the applied signal. The force makes the membrane vibrate, producing sound.

This is a “single-ended” electrostatic system. Some designers prefer the “push-pull” electrostatic—two plates driven in opposite polarity by the audio voltage, with the charged membrane suspended between them; the symmetry minimizes even-order harmonic distortion.

The crucial advantage of the electrostatic drive principle is that the membrane moves in response to a force field that acts equally on every part of its surface. The result is sound noted for its purity, uncolored by the myriad small resonances of cone speakers and free of cabinet resonances as well.

Contrast this with a conventional dynamic speaker, in which the audio signal creates magnetic forces that make a voice coil vibrate. The coil is attached to a diaphragm (a cone, or disc, or dome made of treated paper, plastic, or metal), and as it pushes the diaphragm back and forth the diaphragm moves the air to create sound. When the voice coil accelerates too suddenly, those areas of the diaphragm not connected directly to it tend to flex with the air load and their own inertia. Hence these portions of the diaphragm do not accurately follow the motion of the voice coil. This “cone breakup” causes distortion, a ragged response (especially in transients), and audible coloration.

Were their advantages attained easily, electrostats might have supplanted cone speakers. But, as one expert has said, the history of electrostatic speakers has amounted to an unending search for a truly satisfactory membrane material. Early models used sheet-rubber membranes that tended to dry out and disintegrate, especially in the presence of ozone produced by the high DC polarizing voltage. So when the technology of cone loudspeakers advanced during the 1930s, the unreliable electrostats were soon abandoned.

During the 1950s the application of modern materials technology began to revive the electrostatic speaker. In England, Peter J. Walker introduced the Quad model, which today is still regarded by British critics as among the most natural-sounding systems available. Meanwhile, Arthur Janszen was experimenting at Harvard with electrostats as research tools. This led to the Janszen 130 tweeter, acclaimed in the November 1955 issue of HIGH FIDELITY as “possibly the finest tweeter available at any price.” This decade also saw the first production, by Acoustic Research, of the acousticsuspension woofer, so for many audiophiles the ultimate loudspeaker was obtained by combining the AR-1 woofer with the electrostatic tweeter. Janszen, interested in the concept of a full-range electrostatic, sold the manufacturing division of Janszen Labs—which to this day makes systems using electrostatic tweeters and dynamic woofers.

Janszen’s first full-range electrostatic made its appearance as the KLH Model Nine—which is still in limited-quantity production. Each Model Nine consists of two panels 6 feet tall, 2 feet wide, and 3 inches thick, bolted together in a shallow V (to improve dispersion). A stereo pair thus contains four of the large (and costly) panels. As a lower-cost alternative, KLH designed the system so that each panel has its own inputs, stepup transformer, and polarizing supply, allowing the two panels of a single Model Nine to operate separately, minus some bass output and volume capability, as a stereo pair. Many audiophiles regard a four-panel stereo pair of Nines as the best system ever devised for reproducing the natural sound of a symphony orchestra.

The KLH Nine soon was followed by Janszen’s Acoustech Ten, similar in appearance but with a different tonal balance. Like that of the Model Nine, its bass response was pure, clean, and tight; but even these 6-foot electrostats lacked the massive bass that many audiophiles prefer. Infinity Systems responded with the Servo-Statik, a stereo...
pair of large electrostatic panels with a separate, biamplified bass commode containing a dynamic woofer.

Electrostatic panels tend to be limited in acoustic power output, especially at low frequencies, because the vibrating membrane has only a fraction of an inch of clearance from a metal stator plate (or plates). If the membrane approaches a plate too closely, the air gap breaks down under the high voltage and a spark jumps with a cracking sound between the membrane and the plate, usually puncturing the graphite-coated Mylar membrane of modern electrostatics. Repeated sparking can cause gradual deterioration of the membrane. Trying for disco-sound levels can even propel the membrane into contact with a stator plate, where it may stick and render the speaker useless. (Some are equipped with fuses to prevent such damage.)

An obvious way to increase excursion limits is to start with a greater plate-to-membrane separation. But since the strength of electrostatic forces falls off with the square of the distance, the efficiency of the speaker is reduced. Efficiency can be regained by increasing the DC polarizing voltage, but this reintroduces the problem of arcing. Day-

The Consequences of Geometry

Panel speaker systems have two interesting properties that arise directly out of the geometry of their operation.

First, they tend to be fairly phase-coherent, since all of the radiating surfaces typically are in the same plane. In most cabinet loudspeakers, by contrast, the depth of the woofer cone causes the low frequencies to emerge from an acoustic position slightly behind that of the tweeter. The audible significance of such phase aberrations is currently a subject of debate among speaker designers. (It will be discussed in future issues of High Fidelity.)

Second, their sound is less influenced by room acoustics than that of a conventional speaker. A conventional loudspeaker is much smaller than the listening room. If it had very poor dispersion—if it fired much of its sound straight ahead in a narrow beam—then the listener would hear a correct sonic balance only at one spot in the room. Good coverage of a listening area requires that a loudspeaker have wide dispersion. As a consequence, much of the sound strikes the walls, floor, and ceiling and has its frequency content altered by the absorption of each surface it strikes. Furthermore, resonant modes are caused by the room's shape and dimensions. Jointly, these absorptions and resonances color the sound reaching the ear from the speakers.

There is a second way to provide a broad listening area: Select a loudspeaker with a flat radiating surface comparable in size to one of the dimensions of the room, and let the speaker beam its sound directly at you. At frequencies where the radiating surface is larger than the wavelengths of the sound, the sound will project straight ahead, interacting little with room boundaries and so acquiring minimal coloration. A tall, wide radiator minimizes reflective effects and requires aiming for best coverage of the listening area. A tall, narrow one (approximating a vertical line source) is less critical because its radiation pattern is wider, although it interacts with the side walls.

Most panel systems are dipole radiators that fire sound equally to the front and back. This has both good and bad effects. The back radiation, in traveling to the wall behind the speaker and reflecting back toward the listener, mixes with the front radiation after a brief time delay that adds a sense of depth and spaciousness to the sound. But the back wave affects the frequency response and the stereo imaging of the speaker. A 9-millisecond delay (the result of placing the speaker 5 feet from the wall), for instance, would produce a peak at 110 Hz and cancellations at 55 and 165 Hz. Therefore, dipole loudspeakers require careful placement if they are to deliver their best sound.

P.W.M.
ton-Wright succeeded with this approach by sealing the entire loudspeaker in a plastic bag filled with sulfur hexafluoride, an inert gas having a higher breakdown voltage than air. The result is a full-range electrostatic, the XG-8 Mark III, that can safely be driven to high peak levels if your power amp is sufficiently large and stable.

When Acoustech ceased operations it was purchased by Koss, which thus entered the electrostatic domain, first in headphones and later—after extensive development—in full-range speaker systems of its own. Koss handled the problem of excessive membrane motion by noting that the greatest excursion of the membrane occurs when low frequencies are reproduced at high levels. Acoustic output depends on both excursion and diaphragm area, which is why full-range electrostats tend to be very large. For the Koss Model One electrostatic, a way was found to interleave panel elements so as to pack an effective total diaphragm area of 19 square feet into a system just 2½ feet wide by 4 feet high.

Koss used yet another design innovation to gain higher peak levels. In conventional two-way designs each stepup transformer handles several octaves (which can result in IM distortion due to core saturation at high levels); each Model One employs four stepup transformers, which also function as crossover elements. Koss also took an unconventional approach to controlling costs. Instead of the common combination of electrostatic tweeters with dynamic woofers, the Koss Model Two contains a dynamic dome tweeter coupled to scaled-down versions of the electrostatic midrange and woofer used in the Model One.

As suggested earlier, many electrostatic speakers demand a hefty and stable amplifier suited to their low efficiency and to the difficult load they present. Many solid-state amps are designed (perhaps optimistically) to function with moderately low resistive loads (4 to 8 ohms). But the impedance of a typical electrostatic is not resistive, and many fall well below 4 ohms. This is because the membrane and stator plates of an electrostatic constitute a large capacitor whose magnitude is multiplied by the stepup transformer at the system's input. The impedance (or reactance) of a capacitor drops as frequency rises, causing electrostats to draw fairly large currents at 10 kHz and above—just the region where output transistors begin to lose efficiency and develop internal heat. To make matters worse, the current is out of phase with the voltage (due to the reactive nature of the load), a condition that heats the transistors still further. Unless the amplifier designer has allowed for the handling of such difficult loads, the protective circuits may trigger (causing distortion or intermittent operation), or the amp may fail altogether.

Some designers realized that vacuum tubes are
well suited for driving high-voltage electrostatic panels—and without recourse to a stepup transformer. Beveridge and Acoustat have produced full-range electrostatic systems with built-in tubed amplifiers. The Acoustat retains the usual flat-panel design. Beveridge encloses the tall panel in a triangular-prism cabinet with an arrow vertical slot to let the sound escape; this design yields unusually wide and uniform lateral dispersion.

Despite their attractively pure and uncolored sound and their geometric advantages, electrostics have disadvantages. They are expensive to manufacture: Except for the modest Quad ($930 for a pair), the cost of stereo with full-range electrostics generally is between $2,000 and more than $4,000. And electrostics are often neither very reliable nor at all easy to repair when something goes wrong. Arcing due to high-voltage breakdown may become severe in humid weather, and like the static charge on a disc record, the DC polarizing voltage can collect airborne dust, hairs, and smoke.

Of course, not all models are equally prone to these ills, and you can substantially extend the life of even the most vulnerable by careful control of its environment. But many designers have sought a transducer that would provide the essential advantages, but not drawbacks, of electrostics.

Planar Magnetics

The planar magnetic combines the geometry of the electrostatic with the operating principle of the conventional dynamic speaker. Like an electrostatic, it contains a membrane of thin Mylar suspended parallel to a large metal plate. A magnetic force field is set up by an array of thin bar-shaped magnets fastened to the plate, and a parallel array of thin wires is bonded to the membrane. When audio-signal current from a power amplifier passes through the wires, they react with the magnetic field, just as the voice coil reacts to a dynamic speaker’s permanent-magnetic field.

The input impedance of such a system is principally that of the membrane wires: about 8 ohms and purely resistive, ideal for ordinary solid-state amplifiers. Since the active wires are distributed throughout the surface of the membrane, it is driven nearly as uniformly as that of an electrostatic and should approach the same freedom from resonances and colorations. The elimination of a high-voltage supply should enhance the reliability of the planar magnetic and reduce its cost relative to the electrostatic, although assembly of the panels remains expensive. And, like electrostics, planar magnetics must be large to have good bass response.

Full-range planar magnetic loudspeaker systems currently available bear two brand names. The Magnepan MG-II is a medium-priced ($625) pair of panels 6 feet by 2 feet by 2 inches. The Audio Research Magneplanar Tympani series of speakers (so called because the Mylar membranes are stretched taut on the frame like the skin of a drum) are larger multipanel systems producing increased range and bass output, with correspondingly higher price tags.

And like the electrostatic principle, the planar magnetic principle has begun to appear in headphones (the Yamaha HP-1 among others) and in tweeters (the DV-R tweeter used in the KLH SCX series and the similar tweeter used in Infinity’s Quantum-Line Source).

The Pulsating Panel

A few years ago a rumor arose that someone in Argentina had developed a new kind of loudspeaker that fit none of the usual classifications. It seemed unlikely; but in 1974 Professor Jose Bertagni and his colleagues moved from Argentina to California and set up shop making BES Geostatic speakers.

At first glance the drive mechanism in the Bertagni seems almost conventional. The transducer employs voice-coil/magnet assemblies, and the larger systems use a piezoelectric supertweeter. But the voice coil does not simply push a diaphragm back and forth. Instead it presses on a large disc formed of specially formulated and
cured polystyrene foam. The disc is shaped into an asymmetrical diaphragm that tapers from the center to the edge.

The frame of the speaker clamps the diaphragm under tension, so that a low-frequency vibration of the voice coil causes the diaphragm to flex more at the center than near the edge. Meanwhile, mid-range vibrations of the voice coil are conducted laterally through the diaphragm, radiating into the air as they go. In a conventional cone driver we call this cone breakup, but the BES diaphragm minimizes the coloration that might otherwise occur with this mode of vibration. Finally, high-frequency vibrations are conducted through the diaphragm material by alternately compressing and expanding it on a microscopic scale. Thus in no mode of its operation does the flat polystyrene panel vibrate as conventional drivers do; the BES Geostatic is indeed unique.

From the external appearance of the Bertagni, one might expect it to produce a plane-wave radiation pattern. Actually the Geostatic produces a nearly spherical dispersion, except at the extreme ends of the audio spectrum (below 125 Hz and above 10 kHz) where nulls begin to show at the edges of the panel. Since the word "omnidirectional" has been misapplied to speakers that have uniform dispersion only in the horizontal plane, Bertagni describes the Geostatic's spherical radiation pattern as "omnipolar."

Quasi-Panel Systems

Finally, there are loudspeakers that look like panel systems but actually contain conventional drivers—with their virtues of nonexotic technology, high reliability, economy of production, and sample-to-sample consistency. Perhaps the best known is the Dahlquist DQ-10. In external appearance it resembles the Quad electrostatic, but the grille cloth hides a 10-inch woofer enclosed in its own cabinet, a 5-inch lower-midrange driver, a 2-inch dome for the upper midrange, a ¾-inch dome tweeter, a piezoelectric supertweeter, and an elaborate crossover. The mounting of these drivers, in a staggered fashion rather than in the single-plane baffle board of a typical box, is intended to provide linear phase operation and freedom from edge diffraction. Thus the Dahlquist achieves some of the virtues of panel radiators while retaining conventional drivers and a relatively modest ($800 per pair) price.

The new Phase Linear Model III resembles a full-range electrostatic or planar magnetic system even more closely. It is supplied as a stereo pair of free-standing panels (5 feet by 2 feet by 5 inches) together with a subwoofer cabinet in the form of a 2-foot cube containing 12-inch woofers for both channels. Each tall panel is a frame on which are mounted two 8-inch woofers, two 4-inch midrange units, and five 1-inch cone tweeters. The Model III is not intended to produce plane-wave radiation; rather, its drivers generate a wide-dispersion radiation pattern. The high-frequency dispersion is particularly wide, as each tweeter fires upward into an inverted-horn reflector that provides virtually uniform horizontal radiation. This allows the tweeters to deliver an unusually large amount of high-frequency power to the listening room, providing a sense of "air" in the stereo image, without harshness due to excessive on-axis tweeter output.

Summing Up

What counts in a loudspeaker is how it sounds, not how it is made. When auditioning a speaker you should consider several questions: Does it sound realistic to you with the type of musical recordings you usually play? Will it play loud enough to satisfy you? Is it compatible with your amplifier? Is it compatible with your room's acoustics, and will your room accommodate its placement demands? Will your dealer let you try it at home for a few days before committing yourself to the purchase? Is it provided with an adequate warranty to protect your investment? And can you afford it?

If your answers lead you to a panel system, you will have joined a growing band of audiophiles. The survey in these pages is not encyclopedic, but it indicates that panel loudspeakers are, today, less than ever a specialized class reserved for a few wealthy or eccentric enthusiasts.
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CIRCLE 35 OR READER-SERVICE CARD
There is a time-honored standoff between composers for the popular media and those for the concert hall. Each artist disparages the other, one being regarded as shameless because he puts his talents at the service of mere entertainment, the other being looked upon as stuffy and mired in purism. Yet each stands somewhat in awe of the other: Film composers often live like movie stars, making the concert musician envious, while legitimate composers have the respect of the public, colleagues, and perhaps posterity, and the film musician is jealous.

Bridging these two worlds, and successful in both, is Britain’s forty-year-old Richard Rodney Bennett. His opera The Mines of Sulphur, his symphonies, and his piano works seem to stay around with promising tenacity, and several have been recorded. His scores for Nicholas and Alexandra, Murder on the Orient Express, and Far from the Madding Crowd have won British and American honors. But a lush romantic score for Lady Caroline Lamb and a sparse serialist work like the Concerto for Guitar and Orchestra barely seem to have come from the same pen. I asked Bennett in an interview how he sees this apparent contradiction.

RRB: I'm a serial composer, and even if I'm doing films I still think in that way—using intervals and building something out of nothing. If you think of Pierre Boulez and the way you can use his pure kind of serial technique but then integrate tonal harmony back into it if necessary, then it seems to be an endlessly fruitful thing.

I went through the whole Webern thing in the Fifties. I was Boulez’ first pupil, and in those days he was extremely intolerant. I mean, he just saw what was before him, and that was all I wanted to see. I fought him, even so. After all, it was that extreme meticulousness that has killed him as a composer. I remember having fights with him in my lessons even though he was God and I was maybe twenty. He used to be horrified if you had the merest vestige of a tonal chord.

Over the last ten years, particularly while working in opera, I've realized the wealth of harmony I've denied myself because of the Boulezian model. I mean chords that are not exactly tonal chords, but very relaxed chords, diatonic chords. If you start with a serial scale that has very strong tonal elements, then it more or less becomes, well, melodic. I like having those resources at hand, because they suddenly sound new to me again.

JC: There are elements in your symphonies that sound almost tonal.

RRB: I don't take the academic line: “Here's the serial technique, and let's not even admit any other influences.” That's too much technique. Rather, it's the flexibility I spoke of: relaxed sorts of sounds and harmonies that are so free that they can open up to anything. It just comes naturally to me.

JC: How did that develop?
RRB: Well, my mother was a pupil of Holst, so that contributed to it, and—well, just the times. At school back then, things were slipshod. It was geared to producing either virtuoso instrumentalists or teachers, and I wasn’t either. I was very much involved in contemporary music, which at that time—the Fifties—just wasn’t the thing.

There was a lot of growing time there when I really had a chance to look around and practice. I’m glad for it. For example, I know a boy in England whose first performance of a symphony he had written when he was still a teenager was at Festival Hall, and the second performance was at Carnegie Hall! And then what do you do? Now he’s perhaps in his early twenties, and he goes around like a grand old man. He’s really become shaggy and tweedy and very patronizing. It turns out he’s a very good composer, but that’s a horrendous way to start.

JC: The first real success you had, at least in this country, was The Mines of Sulphur, as I recall. When was that?

RRB: It was written in 1963 and premiered in the States in ’68 at the Juilliard School of Music. I’ve just attended another production of it in Toronto, by students, and it was done very well. It still works. That’s what I noticed most. It really startled me. That sounds naive—all the effort that went into that piece seems so long ago. Now I think of it as my warhorse. I’m very proud of that opera: There’s a dark atmosphere to the whole thing, and even the performers are affected by the ghostliness of it.

JC: You’ve used Beverley Cross, the librettist for this gothic thriller, on other projects, haven’t you?

RRB: She did the libretto for Victory and for All the King’s Men, a children’s opera in one scene that runs only forty minutes or so. That work is very lightly and brightly scored, for obvious reasons.

JC: On the other hand, your first symphony, premiered by the London Symphony Orchestra and recorded on RCA, is a showpiece for scoring—almost a concerto for orchestra. And yet I detect a certain vocal feeling to it.

RRB: Well, of course, opera is my favorite medium and I wouldn’t be surprised if much of what I do has a singing quality.

JC: But when you play the piano, you seldom do lyrical things in that sense.

RRB: Now that’s a different thing, you see. I play a great deal, but I have to be careful what I play because I don’t have a conventional technique. I don’t want to do the classical repertoire because there are millions of people who can do it better than I. I’ll play Boulez and all kinds of wild music that doesn’t demand a conventional technique. Say you go to Juilliard, that wondrous machine for turning out virtuoso pianists; you’re not geared there to play contemporary music at all, unless you’re lucky with a particular teacher. In fact, a conventional finger technique can often get in the way because the demands of contemporary music are not the same.

Still, I love to play old Tinpan Alley tunes on the piano. I have a collection of old sheet music of Gershwin, Porter, Arlen, and all those are the epitome of the lyric approach.

JC: Would you ever consider writing some songs like those yourself?

RRB: I’d quite like to, but I’ve never met a lyric writer that I wanted to work with. And I’m not a songwriter; they are two different crafts—songs and my kind of composition. Of course, if you happen to do both, as Gershwin could, that’s wonderful. Or someone like Steve Sondheim, who is absolutely brilliant. I really worship him. The songs he wrote for the film Stavisky have a wonderful atmosphere.

JC: Would you ever compose a song cycle, art songs, in this day and age?

RRB: Oh. I have done: a sonnet sequence and a piece for tenor and piano, “The Music That Her Echo Is.”

JC: Do they require a conventional technique to perform?

RRB: Singing contemporary music, one is naturally going to use new tools of a sort—not exclusively the classic vocal methods, certainly. But the whole past of vocal music is still there. So many new musicians say that they follow this or that line and that it’s the only valid one for them. But it’s never a matter of who’s “right.”

“Boulez’ extreme meticulousness has killed him as a composer.”
"Working in films is important for me, but the music is not important."

JC: How do you feel about Schoenberg's influence as against, for example, Stravinsky's?

RRB: I can't imagine a world without Stravinsky, but I don't know exactly what he led to—except a lot of talented people imitating him. In a sense, he devoured himself as he went along. You know, he was a composer of the most dazzling genius, but he fed off what was around him, and when he died, what did he leave? Yet the Schoenbergian tradition goes on and on.

I could never understand Stravinsky's later music at all. Some pieces like *Threni* or *Canticum Sacrum* and the rhythms in *Rite of Spring*, his instrumentation—it's just the music of a knockout composer. But his later stuff, his serial music, no. On the other hand—maybe I'm just going through something right now—I love Schoenberg's music before he invented the serial technique. *Erwartung*, for example: I'll never know how he did it. Stravinsky did some things that were terrifyingly new, but I just don't know where it got anybody. He was like a comet that lit up everything and then was gone. At one time, all I wanted to do was take music apart, and Stravinsky looks endlessly interesting when you do that with him. But again, what have you got? A lot of little elements all laid out in front of you, but nothing has been advanced.

JC: That's what most people do with film music, for that matter, saying, "Sure, the sum total is not so good, but look at all these marvelous parts!"

RRB: Absolutely, absolutely. I'll have to tell you, I'm simply not a film-music buff, though I love the cinema. There are two things that repel me about the worship of film music. First, the moment it approaches the sort of French *Cahiers du Cinéma* attitude, I just shrivel up. I lived with that for so long, because I was a movie nut in Paris, reading all the film magazines, and I really can't stand that *uteur* business now. Second, I think a lot of that film-music worship is a throwback to the Bette Davis/Barbara Stanwyck/George Raft mystique. It's fun, but either it's very trivial or it's inflated.

Working in films is important for me—always has been and always will be. But the music, considered apart, is not very important. That's why I won't take any of my film music out of context. When I was in Toronto, somebody came dashing up to me, saying, "Please, can I get permission to have the elegy that you wrote for the record album of *Lady Caroline Lamb* done as a ballet by some of the national company here?" And I said, "Absolutely not!" It works well in the context of its film and I'm very pleased with it, but I don't want it done as a ballet—it's really only a kind of high-class schmaltz!

JC: What kind of treatment does a legitimate composer receive in Hollywood?

RRB: I'm very well received by the composers out there. But I guess they're rather surprised that I've actually wanted to come—and that I'm not Robert Russell Bennett, which everyone always thinks. I was out there recently for the first time, as I usually work in London. The picture I did was a TV movie, which doesn't pay all that much, but I wanted to work there, you see, just to establish the fact that I'm available. Otherwise, there's always somebody nearer at hand, there's always somebody who's hustling harder. Why, I was about to do a very big picture recently for which they had to use an English composer, and I couldn't get to Hollywood two days earlier... and so I lost it.

JC: Do they worry in Hollywood about the fact that you don't conduct?

RRB: Not really. I was at the Royal Academy of Music in London, and if I had stayed on for a fourth year, I could have learned to conduct. But by the third year I was scoring feature films already, and I wasn't about to handle all of it at one time and learn to conduct. It's rather strange—it's like I don't drive a car any more, and now I'm scared of taking it up again. You know, I'm sure if I had learned to conduct when I was nineteen, there'd be no problem now. It's just a psychological thing.

JC: What about those Academy days? What did you like then?

RRB: We had a new-music society, and we used to give concerts every week of all the current avant-garde stuff. About fifteen or twenty people would turn up, mostly girl friends and so on, and it was
In a student production of *The Mines of Sulphur* staged at the Juilliard School in 1968, soprano Evelyn Mandac (second from right) had the central role.

wonderful. That's the way you learn. You make your mistakes in front of twenty people.

JC: Did any of those avant-garde composers try to touch film music at all?

RRB: No, they were too pure—though there's something to be said for that. Of course, a good many major composers have done films: Prokofiev, Milhaud, Shostakovich, Poulenc, Ireland, Britten, Walton, Hindemith. When film music first developed away from the pit band, it was those composers who did it. The Hollywood composers were much later, in the Forties. You know, the big symphonic thing. But film music began long before Max Steiner and the others.

JC: Was it visual music, though? Cinematic music?

RRB: I'm sure it was, and I think the composers in those days—particularly in France—had a closer relationship with the film makers too. I think there's a really good generation working in Hollywood at the moment—people like John Williams and Jerry Goldsmith, David Shire and Billy Goldenberg. You could talk to any of these composers about contemporary music, and they'd know what's going on.

JC: How about some of your film music now? Is the theme from *Orient Express* your most-recorded theme so far?

RRB: I suppose so.

JC: Even more than *Nicholas and Alexandra*'s love theme?

RRB: Well, that was done in a few film-music albums, but it just had that one pop recording by Engelbert Humperdinck. They took the theme, which was originally very long and had lots of key changes, which was nice to do. They used about eight bars of it and put it all in C major and left it there. Then they wrote a whole new bridge that I had nothing to do with, and they called it "Too Beautiful to Love." I have no control over such things.

The song they made from the *Orient Express* music was turned into a thing called "Silky." The people who prepared the sheet music never looked any further than the main title, where the song is not played completely. It's only later in a dining-car sequence where the tune actually has a climax. So they thought it had no end, and they just repeated the first half and stopped. I was so angry, I went to the head of EMI and made the most colossal scene. I mean, if they can't get out a proper twelve-bar song copy of a tune from a film—!
JC: You commented in the past that the experience of a motion-picture job changes the way the music comes out. Why is that?

RRB: You can go through such traumatic times on films. A director I worked for a while back, for instance, was one who couldn't make up his mind about anything. I could never be sure that my music wasn't going to be all messed about. On the other hand, there was a horror picture called The Nanny, which was just a happy experience that worked very well.

JC: I heard you had to go out on location for the filming of Madding Crowd.

RRB: That was a different kind of experience. John Schlesinger, the director, loves everyone to be involved from the word go. I had done Billy Liar with him in '63, and I knew him socially before that too. He was terribly anxious, in a very endearing way, that one should be part of his "gang" and really involved in it all.

That's fine in principle, except in actual fact I don't like to do it. There's nothing I can do there. You have to do dumb things like supervising people singing in crowd scenes, such as when they were shooting this sort of harvest supper sequence. That day I just sat in the field feeling terribly out of place and getting appalling hay fever. It was only later that I started working on my music. I can't do anything, you see, until I see that film finished.

JC: In your concert music, do you have to make concessions toward what's expected of you, either by sponsors or by the public?

RRB: As a person and as a composer I do try to please a little bit, but I try not to compromise my ideas. Of course, some people would say that it's a compromise already for me to be working in films and not sticking to the "pure" music, but I don't think it is at all—it's just like wearing different hats. Music is music. Some is meant to explore the possibilities of the art, and some is meant just to illustrate the love affair of Caroline Lamb and Lord Byron on screen. Why despair about it?

JC: Does working in an entertainment medium affect your musical ideals? Do you have any problems writing music for films?

RRB: I do tend to use less and less music in my films—I won't do it unless there's something I can contribute. In Lady Caroline Lamb, for example, which has only twenty minutes of music, people noticed the score and I got more mentions in the press for it than ever before. I think to a certain extent it was because each piece of music was so specific.

Film music is an independent art in its own right, but it's a secondary one, a supportive one, because it's not generated by the composer. The spark comes from up there on the screen, not from down here within the music itself. I'm a concert composer first and foremost, but my only musical ideals in any medium are to keep on working and improve—and to feel my music is liked and needed.
Of Copyrights, Creators, and Phonorecords

by Leonard Feist

The new federal copyright law clarifies many questions—and raises others.

On October 19, 1976, President Ford signed a new copyright law, culminating a process that had begun twenty-one years before when Congress authorized a series of studies covering the many varied considerations, conflicts, and problems that would be involved in a thorough revision of an outmoded law. The new law will, except for several special provisions, become effective January 1, 1978.

The enactment of the statute of 1909 that has governed the protection of authors' rights and the use of copyrighted materials for almost seventy years took a little over three years from start to finish. In its drafting, the joint congressional committee was faced with the responsibility of dealing with the many technologies that had developed since the previous complete revision in 1870.

Legislators now, as then, are caught up in a tangled web when dealing with copyright, an intangible, subtle, and esoteric form of property. They are confronted with the need to reconcile, if possible, the conflicting interests of authors whose properties are involved, the users of those properties—and the public’s interest.

The public interest has historically been a strong determinant of copyright policy. For example, every copyright eventually enters the public domain, at which point anyone is free to use—or misuse—it in any way. The drafters of our Constitution determined that this most personal of all kinds of property, the creation of man’s mind and spirit, which exists by reason of law, should be his and his family’s for only a limited time.

Under the 1909 law, that limited period was twenty-eight years with a possible extension for an additional twenty-eight years. The 1976 law provides that all copyrights subsisting on January 1, 1978, shall have a duration of seventy-five years from the date copyright was originally secured. All works created after that date will generally enjoy copyright protection for the life of the author plus fifty years, which is the term long prevailing in most developed countries.

The exclusive rights that the copyright owner will enjoy are enumerated: 1) the right to reproduce the copyrighted work in copies or phonorecords; 2) the right to prepare derivative works based upon the copyrighted work; 3) the right to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; 4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, the right to perform the copyrighted work publicly; and 5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, the right to display the copyrighted work publicly.

This is followed by various limitations on the

Leonard Feist is president of the National Music Publishers Association, Inc., and a vice president of the Copyright Society of the United States.
Among these limitations is a carryover from the 1909 law: the provision establishing compulsory license for phonorecords. In the middle of the 1906-9 congressional process, the Supreme Court had ruled that the copyright proprietor of a musical work did not have the exclusive right to reproduce that work on recordings because, unlike printed works, the intervention of a machine was necessary before the work embodied in the recording could be "perceived." Therefore, the work was deemed not to be a protectable copy under the copyright law. Piano rolls, discs, and cylinders were becoming increasingly important and more and more of a factor in our musical life. In all equity, Congress had to create a new exclusive right: the right to record.

In anticipation of a favorable Supreme Court decision, one piano-roll company had signed up the recording rights of a large number of music publishers, and there was evidence that a monopoly of copyright music in recordings was quite possible—a music trust. It will be recalled that in the early years of the twentieth century, monopolies were an immediate concern of government. Teddy Roosevelt, the trustbuster, sat in the White House.

To resolve the problem and remove the threat of monopoly, Congress came up with a very interesting innovation—something completely new in copyright legislation anywhere in the world. It invented the compulsory license. Once a copyright owner had recorded a nondramatic musical work himself or permitted someone else to do so, any other person could record the work by complying with certain procedures set down in the law. Since no consent by the copyright proprietor was necessary, this constituted, in fact, the "compulsory" license. The statute of 1909 set the royalty at 2¢ per copy. That rate continues to January 1, when the new law increases it to 2¼¢ per selection (an increase of 37½% after sixty-nine years!) or ½¢ per minute, whichever is larger. Under the new law, payment will be made on phonorecords distributed rather than on those manufactured, as had been previously provided.

The first recording of a work has always required the consent of the copyright owner; but it must be noted that unmodified compulsory licenses are almost never invoked for subsequent recordings, so that the consent of the copyright owner is often obtained in these instances as well. Practically all licenses have been and are negotiated within the framework imposed by the provisions in the law.

Even as the Supreme Court's decision in 1908 excluding recordings from existing copyright law made it necessary to deal with an unanticipated and thorny problem, so too did a decision concerning cable television during the early legislative stages of the new bill. Just when it seemed that the revision process was proceeding more or less on schedule, the Supreme Court ruled that in some situations transmittal of programs by cable television was not a "performance" under the law and consequently that no copyright liability existed. A subsequent decision went even further, and the problem of cable became one of the chief reasons for the agonizing delay in the enactment of the new law. The conflict between copyright proprietors of motion pictures and TV programs on the one hand and the cable system operators on the other was one of the most bitter of any in the long revision process. The matter was finally resolved by recourse to what has become the all-purpose

"The phrase used to describe records in the 1909 law is "parts of instruments serving to reproduce mechanically [no infinitives are split in the U.S. law] the musical work," and "mechanical reproductions." In the new law, the term is "phonorecords" for material objects—the discs or tapes—themselves, and "sound recordings" for the works that result from the fixation of the sounds.
compromise solution—a compulsory license! The royalties to be payable by cable television under the compulsory license for their use of programs picked up from regular broadcasts do not look as though they will result in great increases in the monthly charges to the subscribers.

Nor is it likely that the final elimination in the new law of the jukebox exemption will cause any increase in the price per play of the music performed on that device which jukebox operators have labeled "the poor man's symphony orchestra." Jukeboxes had been specifically exempt from payment of royalties for performance under the 1909 act. At that time, coin-operated music machines were a novelty in penny arcades. Jukeboxes since have become an industry with an estimated annual income of $500 million. Again, in the new law, Congress has resolved the conflict between jukebox operators and lyricists, composers, and their publishers by creating still another compulsory license. After January 1, an annual royalty of $8.00 will have to be paid for each jukebox.

Another performance problem with which Congress had to deal was the "not-for-profit" exemption in the former law. Performance royalties had to be paid for a nondramatic musical work only if the performance was public and for profit. This limitation had long seemed to be inequitable, for often it was only the composers and lyricists who were not compensated, while all others involved in the performances were being paid. The blanket "for profit" exemption has been eliminated in the new law, and in its place there are established certain specific exemptions of performances such as those in connection with classroom teaching activities, of transmissions that are part of a nonprofit institution's systematic instructional activities, and of performances of religious works in places of worship. Moreover, performances where there is no direct or indirect commercial advantage nor compensation to anyone are not infringing. To be exempt, proceeds from any admission charge covering more than reasonable production costs must be used for educational, religious, or charitable purposes.

Performances on public broadcasting clearly come under the new exemptions only for those programs of a systematic instructional content and purpose. However, in the congressional hearings, public broadcasting spokesmen raised the specter of problems of clearance of copyrights or excessive charges for their use. Yet another compulsory license was created! Payment must be made for copyrighted musical works that public broadcasting entities use. If negotiations on the royalty rates and conditions fail, the Copyright Royalty Tribunal will fix those rates both for performance on public radio and television and for the recording of music in conjunction with filmed public TV programs.

The establishment of the Tribunal is a very interesting and innovative development in the new law. Although in the case of public broadcasting it may set the initial royalty rates, the Tribunal's prime function is to review periodically the rates set by it and by the law: i.e., royalties for recordings, jukeboxes, and cable television. The Tribunal will determine if the royalty rates should be adjusted. It will also distribute the royalties paid by jukeboxes and cable television and is responsible for resolving any controversies that may arise concerning distribution of royalties among the various parties entitled to share in them.

The Copyright Royalty Tribunal will consist of five members appointed by the President with the advice and consent of the Senate. Their terms of seven years will be staggered. It will have subpoena powers, may require testimony under oath, and in other ways may be better able to demand and get factual information than were the congressional copyright subcommittees in their hearings.

The provisions of the antipiracy law of 1971, which became effective on February 15, 1972, have been incorporated in the new law. The protection of phonorecords from unauthorized duplication has been continued, and the penalties for infringement of this provision of the law are particularly stringent. Since piracy is a willful infringement for commercial gain, the penalty for the first offense can be a fine of $25,000 or one year in prison or both. For a second or subsequent offense the penalties may be doubled. The antipiracy law, by creating a copyright in the phonorecord itself, did not change or affect any rights in the music content in the phonorecord that had been, as previously noted, established in the 1909 law. In other words, a record manufacturer may own the copyright of his recording, but that does not give him any rights in the music he has recorded.

Although there were several strenuous efforts by record manufacturers, recording artists, and the American Federation of Musicians—with support from some influential individuals in the government—to require payment of royalties whenever a recording was performed, a performing right in recordings was not included in the new law. The law does direct the Register of Copyrights to conduct a study and submit recommendations on this right to the Congress by January 3, 1978.

In 1909 and for many years after, interest in copyright was limited to those who created the works (copyright proprietors) and those who utilized copyrights in the course of their business undertakings: broadcasting, motion pictures, phonorecords, and publishing of all kinds. Assuming public broadcasting is included as a mass consumer, although not specifically a commercial one, all the provisions of the new copyright law thus far
outlined come within the scope of legislative accommodations between these interests—users in a traditional sense—and copyright proprietors.

During the past twenty years, a new interest has appeared—that of the individual user. Because for the first time it has become easy for anyone to copy printed materials and recordings, a broad awareness, if not a comprehension, of copyright has developed. No longer is it necessary to have a sophisticated recording apparatus and a pressing plant to make phonorecords. Since World War II, anyone can have his own recording studio with an inexpensive tape recorder and the presence of music. Anyone can operate his own printing plant to duplicate existing graphic material with a photocopying machine down the hall in the office or, at worst, around the corner in the stationery store. Since so much of what is duplicated or taped is copyrighted, the copyright law now touches millions of people, most of whom may not feel the touch.

In the legislative proceedings, the promise and the problems that are part of these new devices were presented by educators and librarians who saw and, indeed, were enjoying the benefits of instant availability of and access to masses of useful material at no cost beyond that of the photocopying paper.

Over the years, the courts have recognized certain limitations upon the copyright owner's exclusive right by finding "fair use" in specific instances. This judicial doctrine has now been given statutory recognition by its inclusion in the law.

Four criteria have been established for determining whether reproduction in copies or phonorecords for such purposes as "criticism, comment, news reporting, teaching, scholarship, or research" is fair use or infringement. The factors to be considered are: 1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit education purposes; 2) the nature of the copyrighted work; 3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and 4) the effect of the use upon the potential market for or value of the copyrighted work.

Subsequently, some educators claimed that even these four criteria were not clear or definitive enough. At the request of the House copyright subcommittee chairman, representatives of book and periodical publishers met with educators' spokesmen, as did representatives of music publishers with music educators' spokesmen. Guidelines were drafted and are included in the legislative history. No guidelines were requested of recording companies, probably because phonorecords had not been a major issue in this long, drawnout controversy. One significant limitation included in the education guidelines on fair use as it applies to music is that no single printed copy—let alone multiple copies—may be made of any work in its entirety or any part of a work that is itself a performable unit, i.e. an aria from an opera, a section of a suite, etc., without permission of the copyright proprietor.

Libraries, in addition to the exception under fair use, have other exceptions. Under certain circumstances, they may reproduce single copies of literary works or phonorecords of literary works without permission if there is no commercial advantage of any kind. These exemptions are spelled out in detail in the law, as are their limitations. The library's rights of reproduction and distribution, however, do not apply to the duplication of copyrighted musical works, with certain very limited exceptions for out-of-print materials.

Many feel that these special provisions—fair use and reproduction by libraries and for certain educational or nonprofit purposes—are the only provisions in the new law that, provided the requirements of such provisions are met, would permit the use of photocopying devices and tape recorders to reproduce copyrighted works. In other words, they believe that the limitations set down in the new law on the exclusive right to reproduce a work are specific as to the use and the user and are not applicable to the general public.

At the moment, the question of private copying or recording has come into focus, not primarily because of the new law, but because of a new lawsuit brought under the old law [see "MCA vs. Sony," HF, April 1977]. MCA, owner of Universal Pictures, and Walt Disney Productions have instituted a suit against the Sony Corporation and others. The suit challenges the legality of home videotaping by Sony's Betamax device. The action claims as copyright infringement both advertising that proposes the use of the device to record TV programming for later viewing and the actual recording of TV programs by Betamax. The eventual outcome of this interesting case may have some bearing on the extent to which taping of copyrighted music from copyrighted phonorecords, or advertising of devices that can be used for that purpose, may be permitted.

Perhaps to emphasize that this exposition on the new copyright law is a mere outline will suggest the true complexity of the subject. The new law probably satisfies no interested party completely, although it includes some concession for almost everyone. The Betamax case may be a preview of things to come. It could be that in creating a new law, new controversies and legal questions have also been created. Still, the long years of wondering and waiting are over, and some answers are clear on many questions that have perplexed and plagued us for a number of years. Other answers are less clear but, be that as it may, come January 1 there will be a new copyright law in the land.
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Chicago returns home. The revival of Orchestra Hall as a recording site made the Chicago Symphony’s sessions for Deutsche Grammophon in February especially pleasant—and perhaps a portent for the orchestra’s recording future, according to contributing editor Robert C. Marsh. In 1968, after a remodeling job had rendered the hall less suitable for recording, Leopold Stokowski abandoned it in favor of Medinah Temple, which has presented problems of its own. The musicians hated the move north and have made it plain that they prefer to work at home; engineers have found it difficult to work there as well.

Orchestra Hall has too little resonance; Medinah Temple has too much. DG’s producers decided that the former problem would be easier to overcome than the latter. To increase the amount of resonance, platforms were used to nearly double the size of the stage and main-floor seats were covered with heavy plastic to reflect sound upward.

Producer Rainer Brock, guest conductor Claudio Abbado, and all others concerned seem to agree that the orchestra’s distinctive sound—brilliance combined with unusual warmth and depth of tone—has been captured on the two discs that came out of these sessions. The recordings contain Bartók’s Piano Concertos Nos. 1 and 2, with Maurizio Pollini as soloist, and Prokofiev’s Scythian and Li Kije Suites.

DG was scheduled to record with two more guest conductors, Daniel Barenboim and Carlo Maria Giulini, at Orchestra Hall. It remains to be seen whether the other labels that record the Chicago Symphony—RCA, London, and Angel—will follow DG’s lead.

Fanciulla in London. DG plans a recording of Puccini’s Fanciulla del West based on the new production at Covent Garden, featuring Carol Neblet (Minnie), Placido Domingo (Dick Johnson), and Ingvar Wixell (Jack Rance), with Zubin Mehta conducting.

The Rostropoviches in Paris. Mstislav Rostropovich has conducted his third opera recording, returning to the composer (Tchaikovsky) and site (Paris) of his first, but under quite different circumstances.

When EMI recorded Yevgeny OneGIN, Rostropovich and his wife, Galina Vishnevskaya (the Tatiana), were in Paris as part of a tour by the Bolshoi Opera. Now that they are living in the West, their ties with the Bolshoi have of course lapsed—a particularly pain-

ful separation for Vishnevskaya, who was a member of the company for twenty-one years. (Rostropovich recently told Gramophone’s Alan Blyth that the omission of her name from the Bolshoi’s 200th-anniversary celebrations in 1976 “hurt us greatly.”)

So when, in January, the couple arrived in Paris to record Queen of Spades (which they have performed together in San Francisco and will do next season at the Paris Opera), it was under the auspices of Deutsche Grammophon, for which company they had previously recorded Tosca. The Ghermann is the Bulgarian tenor Peter Gougaloff.

Pianistic Bartók. Pascal Rogé has recorded Bartók’s three piano concertos and Op. 1 Rhapsody for Decca/London, with Walter Weller conducting the London Symphony. Meanwhile, the young Hungarian pianist Dezsó Ránki, who will soon be heard in the final volume of Hungaroton’s intégrale of Haydn’s keyboard works, has signed a contract with Telefunken, which begins with a complete recording of Mikrokosmos.

Katya in Vienna. Decca/London has recorded Janacek’s Katya Kabanova with Elisabeth Söderstrom in the title role and a mainly Czech supporting cast. The Vienna Philharmonic is conducted by Charles Mackerras, who also conducted an enthusiastically received revival of the English National Opera’s production.

Handel in Paris. The first opera that Handel wrote after he arrived in England, Rinaldo, is being recorded by CBS, but not in England. The site is the Eglise du Liban in Paris, which the company has been using increasingly. The cast includes Ileana Cotrubas (Armanda), Carolyne Watkinson (Rinaldo), Jeanette Scovotti (Almirena), Paul Esswood (Goffredo), Charles Brett (Eustazio), and Ulrik Cold (Argante). The conductor is Jean-Claude Malgoire.

Italian quartets. For Telefunken the Quartetto Esterhazy has recorded Boccherini’s Op. 3 string quartets, while the Quartetto Italiano has been working on Cherubini quartets for Philips.

Schumann from St. Louis. Under music director Jerzy Semkow, whose contract has been extended through the 1979-80 season, the St. Louis Symphony has recorded the four Schumann symphonies for Vox.

Dotted-Line Department. Neville Marriner and the Academy of St. Martin-in-the-Fields—who, separately and together, have become something of a record industry unto themselves—have now signed on exclusively with Philips (though the contracts, we are told, provide for some outside activity). . . . Beverly Sills has extended her association with EMI, signing a new contract directly with Capitol Records, the U.S. EMI affiliate. . . . Andres Segovia must be pleased with his recent RCA records, for he has signed an exclusive contract with that company. . . . EMI has contracted to record the National Iranian Radio and Television Chamber Orchestra in works by Purcell, Vivaldi, and Shosta-
kovich; the four-year-old orchestra’s director, Scherezade Afsar, is the wife of the NIRT’s director-general.

Composers competition. To celebrate its seventy-fifth anniversary, the Minnesota Orchestra invites U.S. composers to enter its composers competition. A distinguished jury of composers and conductors, headed by music director Stanislaw Skrowaczewski, will consider new (i.e., not yet published or publicly performed) works lasting up to thirty minutes for an award of $3,000 plus performance by the orchestra. All entrants must register by October 1 and submit the completed work by January 1, 1976; the jury’s decision will be announced in April. Detailed information and registration forms are available from the Minnesota Orchestra Composers Competition, Orchestra Hall, 1111 Nicollet Mall, Minneapolis, Minn. 55403.

Lincoln memorial. The Reading Symphony Orchestra is offering a recording of a Lincoln’s Birthday concert given in Washington’s Ford’s Theater under music director Louis Vyner on February 9, 1975. The all-American program features Andre Watts narrating Copland’s Lincoln Portrait and playing MacDowell’s Second Piano Concerto. The two-disc set is available with a (tax-deductible) contribution of $50 or more to the Reading Symphony Orchestra, 219 N. Fifth St., Reading, Pa. 19601.
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  - Aux Tuner

- Power Consumption:
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  - Aux

- Dimensions:
  - Phono 1 & 2

- Price:
  - Phono 1 & 2
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  - Aux

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One might not think that a work as gloomy, as tragic, as angry, as bitter, as sardonic, as terrifying, and ultimately as thoroughly pessimistic as Shostakovich's Fourteenth Symphony could at the same time be called "beautiful." Yet in spite of the brittleness of the strings-and-percussion orchestration; in spite of the coldness of the often chromatic melodic lines and the frequent open-interval chord structures; in spite of the nonmelodic, recitative-like setting of most of the texts sung by the bass and soprano in this eleven-movement symphony/song cycle; and in spite of the shock effects, ranging from lugubrious glissandos in the low basses and cellos to violins screeching in their highest registers, the symphony draws the listener so totally into its communicative fabric that the over-all aesthetic experience is at least as strong as in any work of art, musical or otherwise, I know of.

The recording newly released by Columbia (it was issued earlier by the French, German, and English Melodiya affiliates) is the work's third, and the second to come from the Soviet Union, which in itself is a bit of a surprise. For if the Soviets no longer find advanced musical devices seditious (unappreciated new works are simply shunted aside after one or two performances, as they are in any country), their reactions to even mildly negative spoken or written words generally remain swift and predictable. Yet, as I noted in my February 1971 review of Barshai's premiere recording, not only are the texts—by Garcia Lorca, Apollinaire, Kuchelbecker, and Rilke—strong outrages in themselves, but they are ordered in such a way as to suggest an invective autoportrait of the thorny career of this Soviet composer, with the shadow of death, in its various forms, pervading everything else. And the way in which Shostakovich has combined words and music (note the snarling tone of the "Zaporozhye Cossack" movement, for instance), seems to make his intentions unmistakable.

At any rate, neither of the previous recordings, both excellent in their own ways, communicates Shostakovich's stark vision with quite the directness or force of the new one. To begin with, the chamber-like nature of the scoring invites the up-close, fairly nonreverberant sound obtained by the Soviet producers. The sonic impact, both in its realism and in its capturing of the verbal and instrumental detail, is simply overwhelming.

Equally impressive is the taut, energetic shaping of the musical flow by conductor Mstislav Rostropovich's uniquely impassioned conducting of Shostakovich's gloomy and sardonic masterpiece is ably seconded by his singers.

by Royal S. Brown
vich, who was one of the late composer's closest friends. There are those who may find that Rostropovich burns himself out too quickly with the almost frenzied way he plunges into the "Malaguena" second movement and the opening of the third ("Die Lorelei"). To me, however, the individual movements are linked to each other in a rather cubicist manner, so that the content of each definitely bears full coloration, as opposed to the progressive shadings favored by Ormandy.

Rostropovich also elicits a particularly gripping sostenuto quality from both singers and instrumentalists in the slow sections; and throughout, he perfectly maintains the instrumental and instrumental-vocal tensions that help make the music so gripping. He turns the col legno nightmare strings in the middle of the "Santa Juil" seventh movement into a disquieting, almost static grotesquerie. Only in the ninth movement ("O Delvig, Delvig") does Rostropovich falter somewhat, failing fully to bring out the string-quartet intimacy at the opening and not completely identifying, it seems to me, with the fatalistic sadness of the general tone.

Rostropovich’s soloists, soprano Galina Vishnevskaya and bass Mark Reshetin, sang in the work’s first Moscow performance, on October 6, 1969. (The actual premiere had taken place in Leningrad on September 29; the bass of that production, Yevgeny Vladimirov, took part in the Barshai recording.) The sopranos of both earlier recordings—Margarita Miroshnikova and Phyllis Curtin—gave excellent, sensitive performances. However, I know of no soprano who can impart quite so much depth of meaning to Russian texts as Vishnevskaya. Her vocal expressivity ranges from a vibratoless, very Slavic melancholia to full-voiced, impassioned outbursts, with everything perfectly related to words and music that one hardly notices the occasional straining. For the male part a genuine Russian basso is definitely needed. Reshetin supplies the rich, dark hues called for better than Ormandy’s Simon Estes, and I also prefer him somewhat to Vladimirov.

The Shostakovich Fourteenth is a masterpiece that certainly merits more than one recording, and it has fared especially well with the discs devoted to it so far. If a choice must be made, then the vitality of Rostropovich’s interpretation, the outstanding vocal performances, and the brilliant sonic presence of this Columbia/Melodiya release elevate it to a strong first place.

by Andrew Porter

The Operatic Scarlatti

Cambridge’s disc of La Griselda excerpts helps argue the case for modern performances of Alessandro Scarlatti’s stage works.

Alessandro Scarlatti’s operas are not well represented on disc; in fact, in the current Schwann there is none of them. Stage revivals have become more frequent during the last decade (at least nine of the operas have been done), but the composer has still to take his rightful place in the performed eighteenth-century repertory. The day of his doing so is being brought nearer by Harvard University Press’s publication of the operas, under the general editorship of Donald Jay Grout. Three volumes have so far appeared: Eraclea (staged at Cornell in 1970), Marco Attilio Regolo, and Griselda (staged at Berkeley in May last year).

Scarlatti’s importance—and the rewards to be found from listening to his operas—can be summed up in two quotations from Edward J. Dent:

Before 1700, he had gathered up all that was best of the tangled materials produced by that age of transition and experiment, the seventeenth century, to form out of them a musical language, vigorous and flexible as Italian itself, which has been the foundation of all music of the classical period.

Thematic development, balance of melodic phrase, chromatic harmony—all the devices which the seventeenth century had tentatively introduced, are by him woven into a smooth and supple texture, which reached its perfection in one who, although he never knew his true master, was yet his best pupil—Mozart.

In his earliest works there are traces of roughness, of "experiment." At the start of the eighteenth century
he unites boldness with easy control. Mitridate Eupatore (1707) is both grand and passionate. Griselda (1721), Scarlatti's last surviving opera, represents effortless mastery. Nothing now remains to be "solved." Form, harmonic control, balance of melodic periods, and beauty of expressive line conspire; the delicate intimacy of his chamber cantatas and the emotional force of his earlier dramas are united.

I attended most of the Berkeley performances of Griselda. There were serious deficiencies—in the staging, the conducting, the playing, and some of the singing—but the show grew on me, night after night, and it was easy to understand how eighteenth-century audiences could happily go repeatedly to the same opera, with the same cast. Because 1) Scarlatti's score does not yield all its secrets at once, 2) one soon discovered favorite moments that one waited for and could not hear too often; 3) the execution steadily improved, and number after number was brought to fuller life during the run; and 4) the singers varied their ornamentation and cadenzas, so that there were always surprising new feats of bravura as well as familiar pleasures to enjoy.

Cambridge's disc of Griselda excerpts, though described on the sleeve as "a documentary recording made during ... performances," was, I believe, recorded about midway during the run, and not during actual performances. I wish it had been made "live." Griselda opens Act II with an aria, "Mi rivedi, o selva ombroso," whose middle section ends with a long-sustained E flat that must be joined seamlessly to a reprise of the first section. Carole Bogard spun the sustained note ever more exquisitely, made the join ever more tenderly, until by the last performance she inspired her listeners to something like rapture. The sound of that moment is a vivid memory, but the execution on the recorded performance is less bewitching.

As a souvenir of the Berkeley production—the sum of those increasingly beautiful performances—I find the disc a shade disappointing. But let me try to review it as it may sound to someone who wasn't there, and as a partial representation of Scarlatti's opera. Nine of the thirty-seven arias are here (twenty-one and as a partial representation of Scarlatti's opera. Nine of the thirty-seven arias are here (twenty-one were sung in the Berkeley edition), and all four of the ensembles (not counting the brief choral moments in that tally). They are not done in order, and therefore the disc is not a fair representation of the dramatic progress.

The libretto is an adaptation of one by Apostolo Zeno. "Patient Grizzel" is a country maiden whose merits were perceived by the king of Sicily, Gualtiero, who married her, and who then treated her most abominably so that her innate virtue would become as apparent to her populace as it was to him. The liner note dates the tale back to Petrarch, and could have taken it back to Boccaccio and the Decameron, whence Petrarch translated it.

The outstanding singers are Kari Windingstad, as Costanza, the young and beautiful princess brought to court ostensibly to be Gualtiero's new wife (in fact she is his and Griselda's daughter, believed by Griselda to have been executed), and, above all, Daniel Collins, as Gualtiero.

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Collins, as Gualtiero. (Being written for Rome, at a time when women did not appear on the operatic stage, Griselda had an all-male cast, five castratos and a tenor.) Carestini, then about sixteen, was not yet the deep, noble, heroic mezzo for whom Handel wrote, but still a clear, bright soprano. Windingstad sings the music with clear, bright definition, and she brings much tenderness to the duet in which mother and daughter (identities still unrevealed) embrace, each drawn by instinct to the other. Gualtiero was composed for Bernacchi, Handel's Lotario in 1729, when Mrs. Pendarves said he was "as big as a Spanish friar." He was renowned—and sometimes reviled—for his positively "instrumental" virtuosity. Collins' virtuoso prowess in divisions and decorations makes him a worthy successor. His manner is incisive and commanding.

These two singers have the sense of line, phrase weight, and rhythm to supply what the conductor, Lawrence Moe, lacks. They take charge of the music and reveal Scarlatti's expressive power. I regret that in the selection Windingstad has been allotted only one aria, and Collins only two. Griselda herself has four. It is true that she (in 1721 played by a "he." Farfallino, the "little butterfly") dominates the original score. And in Berkeley, Bogard dominated the performance with her lustrous presence and vivid, appealing manner. But the recording did not catch her at her best. The tone seems narrower than it did in the theater and, though of very agreeable quality, somewhat monochromatic. There is a dramatic aria in which Griselda, commanded to choose between embracing the villain and seeing her infant son killed, exclaims "Figlio! Tiranno! O Dio!" As it comes out here, all three exclamations might be addressed.

Ariodante, and Alcina. (Being written for Rome, at a time when women did not appear on the operatic stage, Griselda had an all-male cast, five castratos and a tenor.) Carestini, then about sixteen, was not yet the deep, noble, heroic mezzo for whom Handel wrote, but still a clear, bright soprano. Windingstad sings the music with clear, bright definition, and she brings much tenderness to the duet in which mother and daughter (identities still unrevealed) embrace, each drawn by instinct to the other. Gualtiero was composed for Bernacchi, Handel's Lotario in 1729, when Mrs. Pendarves said he was "as big as a Spanish friar." He was renowned—and sometimes reviled—for his positively "instrumental" virtuosity. Collins' virtuoso prowess in divisions and decorations makes him a worthy successor. His manner is incisive and commanding.

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to the same person, rather than in turn to her son, her persecutor, and the deity. There is a "sleep" aria of melting beauty, "Finirà, Barbara sorte," which Bogard sings limpidly but with a less certain placing of stress and a less certain moving into the lovely, unexpected extensions of the melody than she showed in the later Berkeley performances. Her attack and definition are not crisp, but she does make attractive sounds.

Judith Nelson as Roberto, Costanza's suitor, is trim, light, and exact. The three women's voices, in various combinations, produce that happy ensemble in which the ingredients do not jar yet keep their distinct characters. Riccardo Cascio, in a single tenor aria, is polite but callow.

The orchestra is carefully identified as "student" on the sleeve, and the instruments used are modern, not those of the Berkeley Collegium. The playing—strings, recorders, horns—is quite acceptable (though the horns, I believe, are an octave too low). It is the conductor who strikes me as dull. Scarlatti's music, however, is not dull for a moment, but filled with one marvelous invention after another.

In the notes, Bononcini's setting of Griselda is dated 1721 instead of 1718 (its London performance was in 1722, not 1721). The third band is not Gualtiero's "Che bella tirannia," as billed, but his "No, non sospira," which Collins sings with uncommon brilliance. The recording is clean and decently balanced; there are moments of pre-echo.

**SCARLATTI, A.: La Griselda (excerpts).**

Griselda Carole Bogard (s) Gualtiero Daniel Collins (ct)
Costanza Kati Windingstad (s) Corrado Riccardo Cascio (t)
Roberto Judith Nelson (s)
Bruce Brown, harpsichord; members of the University of California (Berkeley) Orchestra, Lawrence Moe, cond. CAMBRIDGE CRS 2903, $6.98.

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by Alan T. Gaylord

**A Master Storyteller in Search of a Voice**

Argo's "Knight's Tale" and "Pardoner's Tale" have solid merits but leave the dramatic promise of Chaucer on records unfulfilled.

"Myne handes and my lange goo so yerne
That it is joy to se my hisynesse."

—from "The Pardoner's Tale"

No doubt about it, Chaucer should be heard and not seen. If the printed page is forced to be only a picture of his poetry, rather than a guide to its performance, it will seem too much a curiosity, guarded by teachers and scholars. For in black and white, Chaucer may appear simply quaint—an inconsistent speller, with a penchant for unbroken columns, obvious rhymes, and regular lines, not to mention thick glossaries and stupefying footnotes. But release him from the prison of the page, and he will enchant the ear. Chaucer writes—to be recited—the most accomplished narrative poetry in the English language.

In its new recordings of two of the Canterbury Tales, "The Knight's Tale" and "The Pardoner's Tale," Argo has given us a good sample of the range of Chaucer's entertaining art. Although the latter is the more familiar, the former deserves to be heard. And, above all, in Middle English.
That “hisynesse” the Pardoner boasts of was in the language itself. In the fourteenth century, English was collecting honey from all over. Scandinavian, Latin, Flemish, and, most of all, French words were being assimilated and gave Chaucer a copious hoard to dip into. The underlying structure, of course, remained Germanic, with accents strongly placed, consonants generously pronounced, and vowels clearly formed. Although everyone has memorized “What that April with his shoures soote,” those who recite the opening of the “General Prologue” too sweetly, with a cooing sound, will miss the varied pulse: the walking pace, and the colloquial alertness of this poetry of pilgrimage.

In “The Miller’s Tale,” a wench is wooed with a series of taste treats: “He sente hire pyment, meeth, and spiced ale,/And wafters, pipyng hoote out of the gleede.” i.e. sweet spiced wine, fermented honey, spiced ale, and water-cakes, hot from the coals—to me, the passage neatly characterizes the taste of Chaucer’s English. The honey is there, but smoothly fermented. It goes to the head. There is a great deal that is attractive about these recordings. Their jackets are beautifully bright and authentically medieval. Their readers have been well coached by Derek Brewer of Cambridge University, among the best, and certainly the most readable, of Chaucer scholars in England today. (His Chaucer in His Time is highly recommended to newcomers.) They pay proper attention to rhyme and rhythm, and to the sounds of Middle English. They are accurate, in that they use the same pamphlet on pronunciation everyone else uses. Helge Kokeritz’s Chaucer’s Pronunciation (Holt, Rinehart, & Winston, 1962), and their clarity is exemplary.

Nevertheless, the Argo productions illustrate critical choices that are eccentric. These, combined with certain artistic deficiencies, leave me moderately pleased but far from satisfied.

“The Knight’s Tale,” the more heroic of Argo’s ventures (it runs to three discs), has not been previously recorded. Although it is the first to be told on the pilgrimage, and is deemed by all to be a “noble store” worth remembering, most modern readers prefer the “noble tale” the drunken Miller insists on telling next. “The Knight’s Tale” is without “likerous” wenches, dandy dudes, cuckolds, surprising kisses, monstrous farts, sizzling bottoms, or all those other good things a fabliau provides. It is, rather, a tale supremely about love and passion, set above and beyond that sexuality the Miller descends to with such gusto. And it is very long—the longest of all the tales.

But a great tale, nevertheless. Chaucer has plundered the new humanism of Italy and found an elaborate romantic epic by Boccaccio. In translating, he multiplies his matter into old English gold.

His hero is the legendary Theseus of Athens, home from the Amazonian wars (Shakespeare will include the character in Midsummer Night’s Dream, and also collaborate to turn “The Knight’s Tale” into Two Noble Kinsmen). In designing and destroying Theseus, he captures two young knights, Palamon and Arcite, who, while in Theseus’ prison, fall deeply in love with a vision of “fresshe” Emelye, the Amazonian ward and sister-in-law of the Athenian lord. Their bitter, fruitless rivalry is finally taken in hand by Theseus. He commissions a vast tournament to settle the issue. Each young knight prays to a god for success. The knight of Mars, Arcite, wins the battle but loses his life. After a reconciling speech on early death and Providence, Theseus allows the knight of Venus, Palamon, to wed Emelye, and brings about a happy conclusion.

“The Knight’s Tale” lacks only the music to be called the first English opera. It is filled with emotional arias and extended recitatives. If short on characterization, it is long on effects of language. Its descriptions of states of mind, battles, temples, and funerals are lavish, and its changes of pace are many. In charge of the telling is the character of the Knight, an illustrious old campaigner, full of practical wisdom and not without a sense of humor. The tolerant irony exercised by Duke Theseus is clearly in the image of the Knight.

Since all Argo productions parcel out speeches to separate actors—a choice I call eccentric—one can hardly look to Richard Bebb for a realized version of the Knight: rather, he is the “Narrator” and probably more like “Chaucer” than one of his characters, though a Chaucer more at home at the BBC than in the Tabard. Bebb is genial and unruffled, courteous and not too noisy. He speaks to us as from an adjoining chair, over sherry. For effect he often drops, rather than raises, his voice. Over-all, I fear, he becomes much too deliberate. His style tends to be “descending,” in that a line will have both pitch and loudness higher at its start, and then run down. Whereas, as the narrator of a long tale, he needs to be “ascending.” He must catch the latent energy in the tale, must move forward, be ready to burst beyond couples, run beyond lines. This tale may not gallop, but it should stride. Bebb strolls.

Denis McCarthy’s bass-baritone conveys quite well the “ire,” the “reson,” and the positive lordship of Theseus, although in long passages he can drone. He does better with agitated anger than with that nonsarcastic, inclusive irony that expresses the Duke’s authority. In the brief role of the malevolent planet god, Saturn, he lacks color and force. Peter Orr, as Palamon, provides a baritone that is clear but much too mature for this proto-Romeo; while the casting of Frank Duncan as Arcite is a mistake. He sounds here like an aggrieved old man, as if Chaucer’s Merchant had stumbled into the wrong tale. (He will do much better in the other album as the Par- donor.) Prunella Scales, who is all the women, has a mellow alto almost totally out of character. Reading Emelye’s lines as if written by Edna St. Vincent Mil- lay, she conveys lyric bemusement instead of the shallow anguish of a very young girl. Scales is much more suited for Chaucer’s Criseyde, an older and more experienced woman, and reads the part well on Argo’s recording of Chaucer’s Troylus and Criseyde (ZPL 1003/4).

It would seem that clarity and deliberateness were basic goals for the Argo cast, as if by not apologizing for the poem but setting it straightforwardly out, they would let it make its own way. Yet their very seriousness becomes a drag upon its progress. And there are other limitations. First, since the whole Chaucer enterprise began with the BBC Third Programme in 1947, Argo’s Chaucer has never stopped sounding like a genteel radio talk. Chaucer has thus been “said,” rather than declaimed, and his elo-

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quence shut up in too small a booth. Many of his tales are literary sermons, many of his characters rant and rave. Chaucer is always rhetorical, implying rousing an audience in a public place, implying vocal virtuosity, implying stylized speech. You could hear him more than one horse back. But Argo is for ambling side by side.

Second, the splitting of a narrator's tale into pseudo-drama is bad application of a Shakespearian principle. Except for the narrator, all characters are assigned only speeches, and they noticeably fall back upon the model of the soliloquy. Orr tries to take a Palamon "complexity" about Fate to the brink of tragedy, lacking the narrator's leash. It should be the continuous presence of the narrator that provides ironic distancing and control. Narrated, the same speech will betray a certain amount of youthful hyperbole and self-pity.

"The Pardoner's Tale," though the better production, illustrates most vividly the effect of this voice-splitting. For the single disc is so divided that the Pardoner-narrator is the only one who speaks on the first side. The other voices are not heard until the record is half over. And since Frank Duncan does so well in this role, it is the more disappointing to see his effect dissipated, just when it should become concentrated.

We hear him first, telling us how he rings out his "hauteyn speche" from the guest pulpit, how he japes the simple folk by appealing to that same avare-rice he preaches against, and how he settles old scores as he goes: "thus spitte I out my venym under heve/OF hoolynesse" (the record omits the "Introduction" to the Prologue, which is understandable in terms of length, but in no other way justifiable). We listen to his model sermon and like it. The sins are interesting and luridly cataloged. The Pardoner's knowledge of the self-indulgent will is devastating.

But when he begins his tavern tale of three louts who go out to find Death and slay him, the Pardoner is reduced to a bit player. His pulpit disappears; his story becomes separated from him. We need to hear the Pardonernarrator is the only one who speaks on the first side. The other voices are not heard until the record is half over. And since Frank Duncan does so well in this role, it is the more disappointing to see his effect dissipated, just when it should become concentrated.

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But when he begins his tavern tale of three louts who go out to find Death and slay him, the Pardoner is reduced to a bit player. His pulpit disappears; his story becomes separated from him. We need to hear the Pardoner go on to impersonate those churls whose black hearts he enters, and we need to hear him become the voice of Death-in-Life, the old man who cannot die but knows a "croked wey" to send them down. We need to hear the Pardoner take the louts to a heap of florins under an old oak tree, and then separate them into plots to murder each other to avoid sharing the wealth. Thus, when he returns to point his moral and demand his prize, he will be altogether the athlete who thinks he has run his course and won. Dividing his voice divides him, and prematurely robs him of his prowess.

From this flow two consequences. First, the character of the Pardoner, neutered of its final potency, becomes too Dickensian. He is a rogue and a confidence man but not an impudent villain. There is no venom sprayed, nor does the voice come very close to the goatishness Chaucer ascribes to it. The Pardoner in this version is an eccentric exhibitionist who would please, rather than a lost soul who would dismay. We do not begin to fear this Pardoner, nor wish, somehow, to strike back, to show how we have resisted even as we have nodded under his command. That becomes the act of the Host, Harry Baillie, whose vehemence when the Pardoner fingers him sounds more like vulgar bad manners than near-hysteria.

Second: like character, like tale. It has been blandified. Its reserve of power is not tapped, and we get sprightliness rather than aggression. "The Pardoner's Tale" is a moral tale, although the Pardoner only uses morality to increase his winnings, but it is also an act of revenge—on the blustering masculinism of Harry, on the condescending members of the pilgrimage, and on all those who seek a good price for the saving of their souls. Of course, the Tale, if spiritual melodrama, is firmly placed within the Chaucerian comedy, which means that the Pardoner is not banished from the company. But he must go a long way into the outer darkness before being brought back —by the Knight—to a kiss of peace.

Anyone who will supplement a reading of the Tale with the excellent essays collected by Dewey Faulkner in Twentieth-Century Interpretations of "The Pardoner's Tale" (Prentice-Hall, 1973) will find abundantly demonstrated the complexity of the Pardoner and his recital. It may well be that the Argo version does not aim for such complexity because it does not believe in it. If so, it would not stand alone. Most of the other recordings in print do the same.

Let me be clear, then, as to where we are. I have called these recordings "good." There are few that are better. If I were discussing all other Chaucer records that have been made, I should be just as critical—with the exception of what J. B. Bessinger has done for Caedmon (the "General Prologue" on TC 1151, the "Miller's Tale" and "Reeve's Tale" on TC 1223). Most of them do not rise beyond the quaint, the interesting, or the amusing. They remain sincere, even scholarly, trivializations. They help to maintain an image of "gentle Chaucer" that is miniature and two-dimensional, if in pretty colors.

Even though the recording of Chaucer is a very minor industry, there remain great resources in his art to be developed. Great stories, written by a great storyteller, deserve great performance. A master waits for a voice.
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ALBÉNIZ: Iberia (complete), Navarra. Michel Block, piano [Michel Glotz, prod.] CONNOISSEUR SOCIETY CS 2120 and 2121, $6.98 each.
ALBÉNIZ: Iberia (complete). Aldo Ciccolini, piano. SERAPHIM SIB 6091, $7.96 (two discs, automatic sequence).

Until now Alicia de Larrocha has for some twenty years maintained her supremacy in Iberia by periodically re-recording Albeniz' demanding suite. Her first recording for Hispavox (issued here as Columbia M2L 268 and currently available, rechanneled, as Musical Heritage MHS 1307/8) was superseded by a stereo edition, also for Hispavox (issued here as Epic BSC 158). and, most recently, by London CSA 2235. In whichever incarnation, her interpretation has unfailingly rebuffed all competition. Now this three-way challenge has finally produced a recorded Iberia that surpasses De Larrocha's wonderfully idiomatic, but slightly overrefined, performance. The new winner is Michel Block, a French-American citizen who lived for a time in Mexico. Block, a Juilliard graduate and one-time winner in both the Leventritt and Warsaw competitions (he won a special Arthur Rubinstein prize at the latter at the master's behest), plays these complexly difficult pieces with atmosphere, poetry, and brilliant technical address. His brilliant, red-blooded, magnificently idiomatic and at the same time very personal interpretations benefit from gorgeously vibrant, rich-toned piano reproduction, far and away the best ever heard in this music. Even the London engineering for De Larrocha's latest effort--stale and agreeable--sounds rather artificial by comparison.

Not everyone will agree with every detail of Block's very subjective playing. Some may justifiably feel that he subdues ostinato excessively with his lush pedaling, or that he breaks the line at one or two places in an excessively cubistic manner. But as with Picasso or Arthur Rubinstein, one gratefully accepts the magnificently authoritative playing on its own terms. Indeed, it isn't at all hard to see why Rubinstein was so taken with Block's pianism, which is strikingly reminiscent of Rubinstein's own art at an earlier stage in his career. I was deeply impressed with Block's early concert performances in this country and by the DC disc made at the 1960 Warsaw contest, and frankly astonished that his career never really caught on domestically. Perhaps this superlative recording will put him on another course. His playing here is, beyond a doubt, that of a major international artist.

On the few occasions that I have heard her, the South American-born virtuoso Blanca Uribe has also impressed me as a very special sort of artist, and one who ought to be heard from a great deal more than she is. Uribe is quietly teaching (at Vassar) while pianists many times her inferior are performing frequently. She too brings to Iberia a big technique and a superbly idiomatic understanding of the writing. In many ways, her singing tone and completely natural welding of dramatic thrust and yielding lyricism remind me of De Larrocha's earlier performances. Uribe does equally well with the sparer, more modernistic Turina Danzas fantasticas.

Unfortunately, Uribe is not helped by her recorded sound--although not actively unpleasant, the piano tone is rather drafty, litl and unalluring. This music needs physical beauty and (real) resonance of tone if it is to weave its spell of ephemeral magic. Furthermore, the review copy had
an assortment of pops, swishes, and crackles—hardly conducive to rapturous, sensuous listening. Aldo Ciccolini's thesis is similar to his performances of Granados's Goyescas (also on Seraphim, S 60716). His performances are thrilling and full of incisive digital command, but for all their shapeless and sure-handedness they sound overly dry—a two-dimensional replica of writing that screams for Cinemana (not to mention Technicolor).

H.C.

**BACH: Brandenburg Concertos (6), S. 1046–51. Stuttgart Chamber Orchestra, Karl Münchinger, cond. LONDON TREASURY STS 15366/7, $7.96 (two discs).**

Comparison: Münchinger (first released abroad in 1973) has been nearly solved through its issue in the budget Treasury series.

Many collectors of the early LP era were brought up on Münchinger's 1950 Brandenburgs, which survived in various formats until the late Sixties. His 1959 remake has in turn evolved to be the longest-tenured stereo edition in S废弃物. The marketing problem faced by London with this third version (first released abroad in 1973) has been nearly solved through its issue in the budget Treasury series.

Although all three sets nominally feature the Stuttgart Chamber Orchestra, there in fact has been a complete turnover of solo personnel with each new effort. Consistent stylistic threads have included the use of a small ensemble (though with more than one player to a part) and of modern instruments (harpsichord excepted). Between the first and second sets there are virtually no differences in textual solutions or interpretative approach. Slow movements were rarely terribly broad and faster ones were leisurely. Basically, if you've heard one, you've heard both, although my own sense is of more gentleness and lightness in the 1950 set.

Apparently, however, Münchinger radically rethought his approach during the Sixties. Strangely enough, he seems to be responding to both the baroque-performance faction and the Romantic revival! Concerto No. 1 is a clear example of his eclecticism. With superstar Igor Kipnis on harpsichord part, we hear very nearly a full cadenza around the desolate and stark closing chords of the slow movement. In the finale, instrumentation is varied at the third occurrence of the Minuet. On the other hand, the eye-popping ritard that ends that movement and the rubato-soaked treatment of the Polacca seem straight out of the nineteenth century, certainly a far cry from the kapellmeister-ish work of the earlier recordings occasionally inhabited. For consolation, the third movement isn't as poky as of yore. London's annotations fail to identify the violin piccolo player.

Concerto No. 2 has changed less dramatically. Münchinger is just a little more lively than he used to be. His various solo tunes have all been a pretty efficient lot. (Bernard Manchinger is just a little more lively, too.)

The mountain hath labored and brought forth a mouse. This single disc, recorded in March 1976 (some seven degrees before the work's first performance) in the Coolidge Auditorium of the Library of Congress, is all that remains of an ambitious collaboration between the Eastman School of Music and the Library of Congress to reconstruct and mount The Disappointment, or The Force of Credulity, a ballad opera written

**Cripps' Choice**

The best classical records reviewed in recent months

**BACH: Cantatas Nos. 92, 126, Schreier et al., Richter. ARCHIV 2533 312, Apr.**

**BACH: Goldberg Canons (with Reger). Maribo soloists. MARIBORO MFS 12, May.**

**BRAHMS: Violin Sonatas. Grumiaux, Sebok. PHILIPS 9500 108, 161 (2), Apr.**

**CARTER: Brass Quintet et al. American Brass Quintet. ODYSSEY Y 34137, May.**

**CHOPIN: Polonaises. Pollini. DG 2530 569, Apr.**

**COUPERIN: Concerts royaux; Nouveaux concerts. Holliger et al. ARCHIV 2712 003 (4), Apr.**

**CRUM: Makrokosmos II. R. Miller. ODYSSEY Y 34135, Apr.**

**Dvorak: Symphony No. 7. C. Davis. PHILIPS 9500 132, Apr.**

**GOTTSCHALK: Piano Works. List, Lewis, Werner. VANGUARD VSD 71218, Mar.**

**HANDEL: Zwei Concerti; Overtures. Marriner. ANGEL S 37176, May.**

**HINDEMITH: Brass Sonatas. Various soloists. GUILD COLUMBIA M2 3397 (2), May.**

**MAHLER: Symphony No. 5. Levine. RCA RED SEAL ARL 2 1757 (2), Mar.**

**MEYERBEER: Le Prophete. Home, McCracken, Scotto. LEONARD H 34340 (4), Mar.**

**MUSORGSKY: Boris Godunov. Reizen, Goleniov. REGAL RR 240 (3), May.**

**PAGANINI: Violin Concerto No. 3. Vanguard 6276, Apr.**

**SAINT-SAENS: Violin Concerto No. 3. VIEUTEMPS. Violin Concerto No. 5. CHUNG, Foster. LONDON DS 6992, Apr.**

**SCHOENBERG: Variations, Op. 31 (with Elgar). SOVIET COLUMBIA M4 1-2019, Apr.**

**SCHUMANN: Cello Concerto. Mstislav Rostropovich. PHILIPS 8550 923, Apr.**

**STRAUSS, R.: Ein Heldenleben. Mengelberg. PHILIPS 9500 203, Mar.**

**TCHAIKOVSKY: Swan Lake. Previn. ANGEL SCLX 3834 (3), Mar.**

**VERDI: Macbeth. Cossotto, Milnes, Carreras, Muti. ANGEL SCLX 3833 (3), May.**

**WEIL: Vocal and Instrumental Works. London Sinfonietta. DG 2709 064 (3), May.**

**WOLF-FERRARI: Segreti di Susanna. CHIARI, WEIL. GARDIANI LSO 1169, May.**

**YOLANDA MARCOUESCOU: French Songs. ORION ORS 75240, Apr.**

**BIDU SAYAO: French Arias and Songs. ODYSSEY Y 33130, Apr.**

**HIGH FIDELITY MAGAZINE**

80
in 1767 in Philadelphia by Andrew Barton (a pseudonym) that was never performed in the eighteenth century.

This was to be a major contribution to the bicentennial celebration, since The Disappointment has long been an intriguing mystery for American music historians. Reconstruction involved the identification of all 22 ballads whose lyrics are contained in the libretto" by Gerald Graue, chairman of the Bicentennial commission department, who has also composed an overture and three interludes in the style of the period," according to a joint LC-Eastman press release.

The result of their work was published in a two-volume edition in the Recent Researches in American Music series brought out by A-R Editions of Madison, Wisconsin, a highly respected house. The series is under the general editorship of H. Wiley Hitchcock, director of the Institute for Studies in American Music at Brooklyn College, CUNY, and both he and Edward N. White, recently retired chief of the music division in the Library of Congress, "have been consultants on the project since its inception.

After the October 30, 1976, Library of Congress premiere, the Eastman School company was supposed to embark on an East Coast premiere with the show, and according to the New York Times of August 22, 1976, "10 American colleges are already planning to use this version for fall or spring production." However, as the date of the LC production neared it became evident that a minor musicalological scandal was agitating the ranks of those interested in the puzzle. To begin with, it turned out that a version of The Disappointment reconstructed by Stanley Sonntag of Manhattanville College and Shirley Emmons of Princeton University had been performed in August under the auspices of the Bi-State Bicentennial Commission at the Open Air Theater in Washington Crossing State Park, New Jersey, thanks to the researches of Beth Slusser of the New York After Dinner Opera Company; it was revealed that the New Jersey production had been based on a 1937 WPA Federal Theater Project reconstruction that played in the Majestic Theater in Brooklyn under the title of The Treasure Hunt. In addition, it was disclosed that the LC-Eastman version had relied heavily upon the researches of Judith Layng of Hiram College, and those were demonstrated to have been based on faulty assumptions.

To top it all, the LC-Eastman production turned out to be a crashing bore. By far the most interesting aspect of the show was the music. Many of the popular eighteenth-century airs identified by Graue maintain considerable charm, and Adler did no violence to their spirit in his graceful settings. Thus, the Turnabout disc does preserve the best of the LC-Eastman Disappointment in the overture, prologue, eighteen airs, and epilogue. The interminable spoken text would lie of interest only to specialists. Graue's skimpy notes give the listener no conception of the musicalological and textual difficulties posed by The Disappointment, which (surprisingly enough) reappeared in a second, revised edition in 1796 that also never reached the boards. One of the most tantalizing puzzles about the piece is that it seems to have been in production when the show was called off, according to the Pennsylvania Gazette of April 22, 1767, because its "personal reflections" rendered it "unfit for the stage." The text casts no light on these insulting "personal reflections." The stated reason for the withdrawal was that an epidemic of digging for buried treasure was plaguing the City of Brotherly Love at the time and that, since this was the subject matter of the ballad opera, its caricatures of characters referred to recognizable respectable Philadelphia citizens. This strikes me as a rather lame excuse for killing The Disappointment. Another mystery is the 1796 edition, in which the references to the king and his tax collectors are altered to the president and his minions. Was there also a 1796 epidemic of digging for buried treasure, or was there some other reason why that version never saw the light of day?

It would have been pleasant too to have some authentic information about such fine tunes as "The Bloom of May," "The Bonny Broom," "Shambuy," or "Kitty, the Nonpareil" but Graue supplies us with nothing but the titles.

Those who buy this recording, by the way, hear more music than did those who saw the performance—the record includes instrumental interludes that were omitted at the Library of Congress. And fortunately, the Turnabout cast does not sing in the incomprehensible dialect affected by that of the LC-Eastman production cast (they are not identical, and the recording's Trushop and Hum are not identified at all), but I am at a loss to account for the variation between the sung texts and those printed in 1767.

At least one participant in this musicological comedy comes out of the morass with some credit—arranger/composer Samuel Adler. If you forget all about such things as authenticity and scholarly integrity, you can listen to his sensitive settings and original music with genuine pleasure.

I.L.


Both of these performances are characteristic of Ashkenazy's superlatively poised (but never flashy) pianistic ability, his scrupulousness of detail, and seriousness of musicianship. His readings of these pieces convey that they are, for all their classical antecedents, big sonatas both in scale and in scope. To be sure, unlike some pianists (Arrau, for one), he realizes the graceful elements—rippling arpeggio passagework and the like. Yet for all the swiftness and symmetry, these are not "pretty" interpretations, featuring instead structural design and a kind of swift, brilliant objectivity that lets the music plead its own case.

As far as they go, these are excellent versions. There are others, however, that go even farther. Schnabel's (in Seraphim ID 6003) have an undercurrent of nervous grandeur; his slow movements have an eloquence that somehow reveals greater depths of emotional reserve than Ashkenazy can currently muster. Similarly, the scherzo of Op. 2, No. 3, in Schnabel's reading—although taken at practically the identical tempo set by Ashkenazy, has a kinetic "swing" that goes beyond Ashkenazy's precise, rather icily objective playing. Although taken at practically the identical tempo set by Ashkenazy, has a kinetic "swing" that goes beyond Ashkenazy's precise, rather icily objective playing. Although taken at practically the identical tempo set by Ashkenazy, has a kinetic "swing" that goes beyond Ashkenazy's precise, rather icily objective playing. 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expect Ashkenazy's performances some twenty years hence to resemble Solomon's. His competition is fierce in this music, and while I like Ashkenazy's performances very much, along with the Schnabel and Solomon recordings already mentioned. I prefer the terse, very-much-Hungenberg (Vanguard Cardinal VCS 10064) and gracious Kempff (DG, deleted) in Op. 2, No. 2, and the richly inflected accounts of Op. 2, No. 3 by Arrau (Philips 6747 039). Rubinstein (RCA LSC 2612) and Claude Fournier (Victoria VICS 1003).

London uses a moderately distant piano sound in an expansively reverberant acoustic (Kingsway Hall, London). The two producers—the record doesn't specify who did which piece—seem to have worked somewhat differently, or is it Ashkenazy himself who favors a warmer, more unfulfilled sonority in Op. 2, No. 2, and more of a cutting edge in the companion work?

H.G.


Emanuel Ax's third recording is in many ways his most successful. The playing shows a cultivated grasp of classical proportion and a pellicular, crystalline coloristic sense. He is also gratifyingly scrupulous in following Beethoven's indications, and even when he does depart from them he seems to know what he is doing and why.

In the interview excerpts printed on the jacket, for example, Ax says, "Those octave passages [at the end of the Waldstein Sonata] are not marked glissando. I find that very important. I don't do them glissando. I do octaves from the wrist, simply because I like the sound. Beethoven knew the word glissando and placed it in the First Piano Concerto. Here comes the question of tempo fluctuation. One plays the coda at a breakneck tempo [it is marked prestissimo]. It's impossible to play octave passages from the wrist at that same tempo. I personally feel it is acceptable and desirable to slow down and play octaves." Having encountered this rationale before, I think it is important to point it up its fallacy. Beethoven may not have used the actual word "glissando," but he did indicate that the cited octave was to be played legato and gave a repeated thumb/fifth-finger fingering whose authenticity is beyond dispute. Ax no doubt knows as well as anybody that it is impossible to play octaves legato from the wrist with that fingering at any tempo.

On the other hand, he is unexpectedly forthright on another, equally controversial point: Beethoven's pedaling in the Waldstein's rondo. Most pianists are trained from the cradle to avoid the mixing of tonic and dominant implicit in those markings. I am happy to report that Ax refuses to invoke such excuses as the composer's death or the limited sustaining power of the old pianofortes (even so fastidious a musician as the late Bruce Hungenberg hedged on this point) and proves triumphantly that careless execution, and not the modern instrument, makes Beethoven's pedaling so hard to realize accurately—he achieves a memorable wash of overtones without any harshness whatsoever. He is also too be applauded for choosing the alternating loud-soft dynamics at bars 321-28 of the third movement, as indicated in the manuscript, rather than the less characterful all-soft variant of the first printing (and most subsequent editions).

I must take some important exceptions to both performances. For one thing, Ax does not really sustain the demonic momentum required by the Waldstein's first movement. He goes slack in the chordal second part-writing (e.g., bars 14-15) becomes a shade generalized and bland in his interpretation of the Adagio introituzioni. And there is a careless mistracing in the left hand at bar 104 of the first movement: Ax's A flat (instead of B flat) changes the second chord from B flat minor to D flat major.

Ax's performance of the Op. 35 Variations is closer to the theme's graceful Prometheus origins than to the overpowering form it took later in the last movement of the Eroica Symphony. His interpretation, then, is far closer in Czerny's witty, urbane statement (London CS 6727) than to Schnabel's caustic, swashbuckling account (Sera-phim IC 6067) or Arrau's bronzen account (Sera-phim IC 6067) or Arrau's bronzen account (Serenade IC 6067) statement (London CS 6727) than to Schnabel's caustic, swashbuckling account (Sera-phim IC 6067) or Arrau's bronzen account (Serenade IC 6067) of the Waldstein, the failings of Ax's performance relate to insufficient forward momentum and excessive concern for pianistic per se.

In their genteel way, both of these readings make musical sense. And in articulation and delicacy they far exceed the capabilities of most young pianists.

H.G.

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**BEETHOVEN:** Symphony No. 6, in F, Op. 68 (Pastoral), BBC Symphony Orchestra, Colin Davis, cond. PHILIPS 6500 463, $7.98. Tape: 7300 361, $7.95.

**BEETHOVEN:** Symphony No. 7, in A, Op. 92, London Symphony Orchestra, Colin Davis, cond. PHILIPS 9500 219, $7.98. Davis' early-Sixties recording of the Seventh is highly acceptable with its massive, cleanly detailed sound.

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The sin of omission that besets so much of Seiji Ozawa's work in music of the classic-romantic period is one of rhythmic blandness. He tends to glide across its surface as if all measures, all notes were of equal importance. Points of departure have no special spring, points of destination arrive unheralded. The textural clarity is often remarkable, the playing disciplined, tonal coloring and blending accomplished with considerable skill—yet the result remains flat and inexpressive because the central issues of shaping have been ignored.

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It's lighting the way to the future of tuner technology.
chorus, especially in that little off-stage passage preceding the "Scène d'amour" (admirably handled by the engineers, too). Those ascending series of triplets in the violins near the end of the Capulet's party have an arrestingly abrasive sound. The solos are capable, and José van Dam more than that--the interaction into the musical scene precisely the kind of accented and shading of lines that has been missing heretofore. But the rest is--well, boring, like a speech read phonetically by someone who doesn't understand the language.

The fascinating, subtly irregular violin melody at the start of "Romeo soul" is static, deadpan, when it should bristle with rhythmic ambiguity (is the first note an upbeat or a downbeat?). A bit later, under the great oboe melody, the gentle percussion intrusions are virtually inaudible, their rhythmic conflict with the pizzicato string accompaniment unrealized. The instrumental counterpoints of the "Convoi funèbre" merely gable, without disclosing either sense or sensitivity. The final chord of the work (as that of the "Fête") seems to have landed on the wrong foot--or is it merely that the performance's general lack of concern about which is the right foot--is more than that--he injects into the final scene precisely the kind of accenting and shading of lines that has been missing here-tofore.

On the back of DG's box, some clown has ascribed to Julia Hamari and Jean Dupony the roles of Romeo and Juliette. Fortunately, they restrict themselves to the assigned solo lines in the Prologue, and do not take voice during the "Scène d'amour." The rest of the presentation is respectable enough, with an intelligent essay by Julian Rushton, texts, and translations. My recommendation would be to stick with the Davis recording (Philips 691716/7). D.H.

BRAHMS: Concerto for Piano and Orchestra, No. 1, in D minor, Op. 15. Arthur Rubinstein, piano, Chicago Symphony Orchestra, Fritz Reiner, cond. [John Pfeiffer, ass't prod.] RCA RED SEAL ARL 1-2044, $7.98 [previously issued only in mono as LM 1831, recorded April 15, 1954]. Tape ² ARK 1-2044, $7.95; ² Ars 1-2044, $7.95.

This is the first release of an experimental stereo tape made concurrently with (but using different equipment from) the mono recording issued more than two decades ago as LM 1831. Since this version has just been edited for the first time, and from different tapes, it is possible that the mono and stereo performances are not identical. And while source RCA assure me that the differences, if any, are minuscule, Rubinstein's first entrance does seem to flow a bit more naturally in the stereo edition. His rubato there is exaggerated almost to the point of caricature in the slower, heavier performance with Mehta and the Israel Philharmonic (London CS 7018, February 1977). Similarly, the pianist's left-hand ostinato in the passage beginning at bar 123 seems more sedate and naturally phrased.

These and other ostensibly differences may be largely the result of the sonic superiority of the new version. In the mono original, the rather closely miked piano sounded hard and clangorous, the orchestra edgy, and thin. In the stereo version, the piano is placed more discreetly in the total context and the over-all sound is much richer, although the Brahms and timpani remain a bit obscure, the woodwind lines--which Reiner shapes as if the entire section were a single suave instrument--have particular luster. Sometimes the reverberation is excessive, but except in the first movement, where the blended, euphonious stereo placement somewhat smooths the cutting ferocity of Reiner's introduction, every sonority advantage is with the stereo edition. Indeed, I expect that some listeners will prefer the big-orchestra approach here to the interpretive and sonic introspection of Rubinstein's 1963 recording with Leinsdorf (LSC 2917 or VCS 7071). I continue to favor the Boston performance, but this reincarnation presents the Chicago one in a much more favorable light.

The best news is that RCA is contemplating release of some other early stereo tapes, including the Munch/BSO Damnation of Faust and some portions of Toscanini's final two NBC Symphony concerts. H.G.


A recording of the Brahms E minor Sonata by Piatigorsky and Rubinstein dating from the 1930s was once available on Victor 78s and later in an early microgroove transfer (LCT 1119). Both long since deleted. The sound is splendid: full-bodied piano tone that never swamps the cello. Now if only Columbia would counter this wonderful disc with one by Casals and Horowitz--the French radio archives have performances of both sonatas, including several choices for the E minor with far more adventurous use of the different registers and the higher positions. By comparison, the earlier work stays almost doggedly in the "safe" low register, posing fewer technical problems.

The new performance, wonderfully melodic and surprisingly animated, is perhaps a shade more reflective and gently introspective than the old one, but the playing remains suave and refined. The modern engineering makes itself felt in the far greater clarity and impactiveness of the piano, most importantly in the finale, whose fugal ingredients here show their kinship with the Bach gamba sonatas.

There is a dangerous shift near the beginning of the F major Sonata that unwary cellists miss. Piatigorsky is not an unruly cellist, and it sounds as if he made a determined--and successful--attempt to avoid that pitfall. But in other places, his tone turns rather waxy; in modulation, articulation, and sheer energy, he sounds more taxed than in the E minor. Even so, this is the fervent playing of an undisputed master, and Rubinstein's work in both sonatas is the epitome of what a good Brahms ensemble pianist ought to strive for. His solid, bass-oriented sonority is rather akin to Backhaus (with Fournier, now on Turnabout TVS 34461, rechanneled), but far more ardent and larger-scaled. Piatigorsky and Rubinstein bring to this music a typically Slavic feel for nuance and freedom of phrasing. Tempos are flexible and varied, but always within an underlying basic pulse.

Save for some crackle throughout the F major Sonata, the overall sound is splendid: full-bodied piano tone that never swamps the cello. Now that if only Columbia would counter this wonderful disc with one by Casals and Horowitz--the French radio archives have performances of both sonatas, including several choices for the E minor.

BRUCKNER: Te Deum, Verdi: Quattro Pezzi sacri: Te Deum. Uta Sprechelsen, soprano; Hecdrun Ankersen, mezzo; Adalbert Kraus.

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CIRCLE 10 ON READER-SERVICE CARD
Some may wonder about the wisdom of recording relatively provincial forces in music already presented on disc by the major Verdian and Brucknerian maestros. Fortunately Martin Stepani proves to be a technically secure conductor with a clear sense of both microcosmic rhythmic patterns and macrocosmic dramatic ones.

His reading of the Verdi Te Deum is more penetrant, outgoing, and crisp and less ethereal than any of those in the integral Four Sacred Pieces recordings (of which Giulini's, Angel S 36125, is a clear enough top choice). It is even reminiscent, in its tensile strength and forward surge, of the Toscanini Te Deum (currently on imported RCA AT 131). The unfortunate brass flubs that plague Toscanni's rendition shortly before the mezzo solo are avoided here, and the Bielefeld chorus is generally smoother than Toscanini's Shaw Chorale, if not nearly as pure and seraphic as Giulini's Pitz-trained Philharmonia Choruses. Stepani does make one textual decision I've not run into elsewhere: The opening measures for tenor and bass are given to soloists, rather than full choir sections.

The Bruckner is similarly successful. Stepani brings lots of excitement to the opening section, and there is abandon and drive aplenty to the 'Aeterna fac cum sanctis'. Contrasting repose occurs in the following "Salve Fac populum," with Adalbert Kraus's tenor solo most appealingly plangent. Though the performance as a whole doesn't have the sustained sweep and naturalness of (schum (DG 2707-024), few will want the erratic three-sided Bruckner Ninth to which that interpretation is currently held in monopoly. (Conversely, while I admire Haitink's authoritative Bruckner Seventh, Philips 402 759-90, I find the coupled Te Deum rather tentative.)

No prior recording of either work has the fullness and immediacy of Telefunken's sonics. despite the rather modest forces employed and what appears to be a somewhat dry hall acoustic. True, the opening measures and what appears to be a somewhat dry hall acoustic. True, the opening measures and developmental moments of the Bruckner have some miscalculations, with the chorus almost swamped under the weight of orchestral sound. Still, direct comparisons with other editions do leave the competition sounding quite murky, and Telefunken has provided its usual top-flight pressing and packaging.

Carpenter: Sonata for Violin and Piano—See Foote: Sonata in G minor


The pieces heard in this collection, though all twentieth-century in vintage, represent stylistic outgrowths of the post-Romantic epoch. Donnány's conservative, well-crafted sonata could almost have come from Brahms' pen; this is a relaxed, tonally rounded, graceful work thoroughly deserving of many more performances than it is granted. Sibelius immediately displays a more acerbic—one might even call it a harshly astringent—personality in the pungent, biting scales and thrusting attacks that begin the neoclassical Op. 80 Sorataina. While it is obviously conceived on a humbler scale, this work has much of the same vaulting edge to be found in the violin concerto. The shorter pieces are relatively more lyrical but are saved from salon banality by the character and quirky humor of Sibelius' style. The Berceuse, for instance, is restive rather than reposeful—a kind of more cheerful alternative to the ever-popular Valete triste.

The Donnány sonata and Sibelius sonatina have been recorded before, although no alternative version of either remains in the domestic catalog. Diana Steiner, a West Coast violinist who started with Zimbaliist and Heifetz, has a vibrant, pulsating G-string sonority free of the sullen, bloated quality so many of her colleagues inflict on lower-register cantabile passages. Her left hand is unfailingly accurate and the bowing nearly assured, but on one or two occasions her playing takes on a slightly forced, astringent quality aggravated by the close microphoning. David Berfield gives keyboard support of real profile and concentration.

Donizetti: Gemma di Vergy

Gemma di Vergy (Ida) Montserrat Caballe (s) Natallia Chudy (ms) French (s)
Tarqua Louis Guiton (b) Paul Pietsch (bs)
Count of Vergy Guido Rolando
Guido Mark Mixner (ts)
Schola Cantorum of New York. Opera Orchestra of New York, Eve Queler, cond. [Thomas Frost and Steven Epstein, prod.] COLUMBIA M3 34575, $20 98 (three discs, automatic sequence) [based on the concert performance of March 14, 1976].

Gemma di Vergy (1834) was successful in its day and widely performed. Like Lorenzo Vinci and Maria Stuarda, which came just before it, and Marinu Paciiero and Lucia, which came just after it, Gemma belongs to Donizetti's high romantic period, when he did daring and impressive things with force, with orchestration, and with dramatic turns of melody. It maintains a more consistent level of dramatic invention than Martin Stuardo. It has considerable energy—and a not uninteresting plot, based on a play by the elder Dumas.

The libretto, the Count of Vergy, has been ordered to divorce his childless wife, Gemma, and get an heir by another marriage. Gemma, who loves Vergy, alternates between grief and rage. The tenor is a hot-blooded Arab slave, Tamas, who loves her mistress (and is, rather surprisingly, on Christian terms with her). The bass, Guido, plays no active role but—like Raimondo in Lucia, or Giorgio in Puritani—is ever on hand for sage comfort and counsel. The action is violent: In the course of it, Tamas kills three people (Vergy's squire Koldino, Vergy, and finally himself). Gemma makes two opportune entrances to prevent earlier killings, and Tamas makes one just in time to prevent Gemma from killing her successor. Ida (a small mezzotone role) plays no active role but—like Raimondo in Lucia, or Giorgio in Puritani—is ever on hand for sage comfort and counsel. The action is violent: In the course of it, Tamas kills three people (Vergy's squire Koldino, Vergy, and finally himself). Gemma makes two opportune entrances to prevent earlier killings, and Tamas makes one just in time to prevent Gemma from killing her successor. Ida (a small mezzotone role).

Not one of the numbers is mechanical or merely conventional. Both of Gemma's solos, her entrance cavatina and an extended finale, have expressive calettas at moderate tempo. A duet for husband and rejected wife develops a Russian device of exclamations over a line carried by the strings. The soprano/tenor duet unfolds over a ground bass. The buildup of tension in the slow section of the first finale is particularly impressive. There are many unexpected entrances and unexpected structural turns, always for dramatic effect. Although the piece is performed here in an abridged and impure edition by Rubino Proietti, the surprises are authentic Donizetti. The cutting of most calettas to a single verse, which deprives them of stature, is not.

Gemma di Vergy was revived for Montserrat Caballe in Barcelona and in Naples during the 1975-76 season, and soon after those productions there followed the Carnegie Hall concert performance on
March 14, 1976, given by Eve Queler's Opera Orchestra of New York, which is the basis of this recording. Queler has provided some of the headiest operatic evenings I have had during four seasons in New York, and from its opening bars this set demonstrates her flair for apt tempos, for vivid colors, for encouraging singers to give of their best, for generating excitement.

The first voice heard is Paul Plishka's and he is in splendid form. He has a kind of double number set into the introduzione. Rolando, who has just come from Avignon bearing the Pope's dissolution of the marriage, tells Vergé's men about daring deeds of Joan of Arc, and they reply, against their dashing, almost jaunty dialogue. Guido reflects gravely on Gemma's impending sorrow. Then he continues this reflection in a solo cavatina.

Tamas enters. His "Mi toglieste a un sole ardente" is a fiery and once-famous piece, with a cry of "patria, nome, e liberta" that roused Italian patriots as Verdi's invocations of fatherland and liberty used to do. Luis Lima, a young Argentinian tenor, has the ring of bright metal in his voice, and when that metal is refined and polished he may take his place in the great Spanish tenor line: from Garcia and Gayarre to Domingo. Carreras. Already he is a winning performer who puts his heart into words with ardor.

Next, Gemma. In her entrance aria, Cabballe sometimes opens up too violently and exaggerates the dynamic gradients within a phrase. This is perhaps a price that must be paid for "live" performance. As the evening progresses, her singing becomes increasingly beautiful. The final scene is one of the most exquisite things she has put on record, and possibly it is more eloquent, more expressive, than anything that could be achieved in a studio precisely because she is singing to an audience intent, rapt, on each magical phrase. The last fifteen minutes of Side 6 provide an answer to anyone lamenting that the "grand tradition" of operatic singing is dead.

Vergy enters, to sing a duet with Gemma: next, he has two full-scale arias with cabalettas. When reviewing Louis Quilico in the concert performance, I said that although he looked like Mr. Pickwick he sounded like a grandee. Listening again, I qualify this only to remark that he, too, takes time to get into his role. At first, he produces fine big tone but is insufficiently graceful or eloquent in his phrasing. Later, he comes to life more fully.

Just how the recording and the live performance overlap, just how much patching and audienceless recording was done, I am unsure. There is very little sound from the audience on the records (a cough near the start of Side 6 is exceptional), and there is none of the applause that greeted every number—usually before the number was quite over—in the live performance, until cheers break in at the very end. There are audible splices. Gemma and Ida in the scene of their confrontation, sometimes seem to be singing into different acoustics. Moreover the "sound" is not that of Carnegie Hall; I suspect that the singers were closely and directionally miked (Queler, it seems, with especial closeness) and that— in order to minimize audience noise—hall
sound was so far as possible abolished. There seems at times to be some added artificial resonance, not the natural resonance of Carnegie Hall. Balance between singers and orchestra is good.

As in the Columbia Le Cid (M3 34211. March 1977), similarly based on a Carnegie Hall live performance by the Opera Orchestra, I am at moments puzzled by the disparity between what I heard a year ago, live, and what I hear now on the records. The latter resembles neither a smooth studio recording nor the familiar "hall sound" as captured by pirates. But then, we are dealing with a novel genre. The custom of preparing a studio recording and a concert performance together, one series of rehearsals serving for both, is sensible and well established. Preparing a broadcast and a recording in tandem also has a long history, from Toscanini to such products of the European Broadcasting Union as the Unicorn album of Carl Nielsen's Saul and David. Live recording from the opera house is also familiar. But this kind of—what can one call it?—beating the pirates at their own game?—seems to be a new development. I welcome it, for it would be sad if this splendid performance of Gounod had disappeared after a single hearing.

Delta for the cover design. Beta-queri-minus for the album booklet, which contains some interesting information, some horrid misprints ("Lablanc."); "Gioseppi Roux."); "Mercadante.") A text not quite adjusted to what the singers sing, and a translation often loose and sometimes plain wrong. When Gemma says to Ida, "Do you not know who I am?" ("Miei tu ignoro?") her words are rendered, "You ignored me!" A.P.


**Dukas:** Fanfare pour précédé "La Péri"; La Péri; Polyeucte Overture; The Sorcerer's Apprentice. Czech Philharmonic Orchestra, Antonio de Almeida, cond. [Eduard Herzog, prod.] Supraphon 10 1560, $6.98

The success Paul Dukas had with fantasy-inspired works becomes particularly apparent when his two orchestral masterpieces, The Sorcerer's Apprentice (1891) for Corneille's seventeenth-century tragedy, Polyeucte Overture (1899), are compared with the unransumbersome overture (1891) for Corneille's seventeenth-centruy heroic tragedy, Polyeucte. Although the overture starts off with a striking and very solemn unison theme in the strings, it soon sinks into a kind of Prix de Rome pompousness no doubt suited to Corneille's inflated theatrical language but not very convincing musically. It does have other attractive moments, but the Cournd-tum-Wagner finale ends things on a rather low note.

La Péri and The Sorcerer's Apprentice are marked by a perfect lightness of touch. La Péri, furthermore, intermingles within a beautiful flow several sumptuous melodies, including a strange serpentine invention following the Sorcerer's Apprentice-sh opening. Both Pierre Boulez and Antonio de Almeida perform La Péri well. But while the Almeida approach is fairy-tional and recorded in spacious, high-ball sound with a fair amount of thumpy bass and reverberation, Boulez' rendition sparkles with a fairy-tale sheen and with almost excessive brightness of sound. As with several other Boulez recordings, his La Péri is a version I would not want to be without because of everything that is suddenly to be heard for the first time. And his disc contains by far the best-played, most sumptuously recorded version of the fanfare that precedes La Péri.

But I must say I prefer the subler, more hand-mediated Martinson/ORTF performance of La Péri on Musical Heritage (MHS 1467) containing the same fare as the Supraphon. Those who want all three works should probably turn to the Musical Heritage album; those who can do without the Polyeucte Overture will probably be satisfied with the Boulez for its sonically brilliant La Péri and with the electrifying Weller/London Philharmonic performance of The Sorcerer's Apprentice (London CS 6665), which also contains the composer's Symphony in C.

I doubt, however, that Roussel fans will be in any hurry to trade in the Munich/La moureux recording of the Third and Fourth Symphonies (Musical Heritage MHS 1879) for Boulez' misconceived Third. Roussel balances his abrasive harmonies and sometimes almost humpulent orchestration with a characteristic rhythmic drive. Yet Boulez, particularly in the first movement, heads in one direction while Roussel goes off in another, resulting in a stagnation that leaves the music naked and unfairly ugly in spots. He re-teams himself here and there, as in the fugal section of the second movement, but for the most part the impression of cross-purposes remains. R.S.B.


Comparison—Op. 109
Kertész/London Sym
Comparison—Op. 110
Neumann/Czech Phil. In Tel 36.35075

The four programmatic tone poems Dvořák wrote in 1866 to Erben's folk-legend-based verses are sumptuous in melodic invention and use of orchestral imagery. The Wood Dove does a altogether splendid job of depicting the events and characters in the story: the violins' imitation of the wicked widow's exaggerated sobbing, the trumpet's hold heralding of her lover's arrival, the briskly defiant wedding music, the harmonically chilling woodwind writing for the denouement with its cooing of the title character. In The Golden Spinning Wheel, there are wonderfully swaggering passages portraying the king's arrival at the forest hut of the heroine. The grizzly details of the future queen's dismemberment by her stepmother and sisters, however, don't come across in Dvořák's overly benign treatment. Furthermore, nor does the wedding music possess the necessary stark irony to underline the false-ness and deception in that situation. Perhaps the atmosphere of cynicism and sadism just wasn't on Dvořák's wavelength. I feel too that this work hangs together less tightly than The Wood Dove, on whom apparently shared by Vaclav Talich, who made sizable cuts in his old Supraphon recording of The Golden Spinning Wheel. In any case, Kubelik's pairing of the two symphonic poems is a logical and welcome choice, and taken on its own, quite well done. He makes the most of the dramatic patterning of The Golden Spinning Wheel, bringing to bear joivality and open-air vitality when needed without slighting the work's lyricism. He also seems to coalesce the structure of the work nicely at those points where Dvořák's inspiration sags. The rival Kertész/LSO version on London (coupled with the Symphonic Variations) is marginally less lovingly shaped, though a trifle neater in execution.

The Bavarian Radio Symphony is more seriously challenged in The Wood Dove, where it cannot match the emotional sheen, and expressive understanding of the Czech Philharmonic under Neumann (in the three-disc Telefunken set containing the complete Slavonic Dances and Rhapsodies and the Czech Suite). Telefunken's recording, furthermore, has a sense of depth and color lacking in the more cramped and achronomic DG ambience. To balance the scales a bit, there is much to say for Kubelik's lateral division of first and second violins.

DG's spine and jacket front bill this record Dvořák's "Symphonic Poems"; in fact, there is a second disc to come, containing the remaining Erben-based symphonic poems (The Noonday Witch and The Water Goblin) in addition to the Symphonic Variations.

A.C.

**FOOTE:** Sonata for Violin and Piano, in G minor, Op. 20 CARPENTER: Sonata for Vio-
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SONY

This recording turns out to be a very pleasant surprise. Not only are violinist Eugene Gratovich and pianist Regis Benoit excellent instrumentalists, but both violin sonatas prove to be well worth hearing.

For me, the Arthur Foote C minor Sonata, published in 1890, is the more fascinating of the two works. First performed by Franz Kneisel (to whom it was dedicated) in Boston, the sonata has a fine, virile opening movement and a strong finale. Were it not for the alla siciliana second movement, which has more than a touch of the salon about it, the sonata could easily be mistaken for the work of a European fin-de-siecle master.

The John Alden Carpenter sonata, composed in 1913 and first performed by Mischa Elman a year later, is one of the Chicago musician/businessman's earliest works in an extended form. It strongly reflects French influences (César Franck comes immediately to mind), as did most of his later music, but it lacks the virility that makes the Foote sonata memorable.

Nevertheless, both pieces are good enough to deserve an occasional hearing in public concert. and it is good to have them available in strong, well-recorded performances.


The full-length version of Psyché, for chorus and orchestra, often sounds as if Franck had simply changed the ripe chromatic progressions of the D minor Symphony around a bit to lead to the same musical conclusions. Psyché, however, lacks the melody's dynamism, and it if compensates somewhat with a warm but rather asexual sensuousness, it does rambles. Nonetheless, this thematically unified work has more than its share of attractive moments, including the limpid theme in the "Psyché and Eros" movement and many of the choral passages.

Performances of the complete Psyché have been rare, and this Connoisseur Society/Pathe Marconi release fills a gap in the catalog, though the gap would be better filled by a performance with more richness and depth. The recorded sound, which is rather shereen, could have been more in tune with the music. An important release, but something of a disappointment on all levels.

R.S.B.

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by establishing clear-cut character differentiations. Institutional and historical-specialist collectors who demand all period or replica instruments won't find it difficult to choose between the Chorzempa/Schoder versions and those by Tachea and Harncourt for Telefunken (39.35228, March 1976). The former’s practical advantages are its inclusion of all sixteen concertos (rather than only the twelve in Opp. 4 and 7) and its more extended use of organ ad lib materials mostly drawn from Handel’s harpsichord suites and violin sonatas. Its practical disadvantage is that these added materials and the generally slower tempos require five rather than three discs.

The price difference might not be enough to rule the Chorzempa set out of contention—what does so for me is a variety of tonal and execution flaws, none of which is probably the fault of the soloist and the engineers. Chorzempa himself plays well, if without marked personality projection, and his decorative and improvisatory contributions sound appropriate enough. But the Dutch ensemble is too often harsh-sounding in Phlegm’s strong, clean, quite closely miked recording, while Schoder’s readings are too often hard-pressed in the faster passages, too stiffly rhythmized and surgically expressive in the slower ones. And what is perhaps the deciding factor is that the organ itself—the c. 1789 Kuckel two-manual instrument in the Old Catholic Parish Church of Haarlem, Holland, tuned to a 423-hz A—lacks, to my ears, either tonal charm or pungency.

In sharp contrast with this mostly constrained approach, that by Malcolm and Marriner is respectfully vivacious and more pictorially varicoloured. The soloist is heard on no less than three British organs. The detectable little one in Merton College, Oxford, for Concertos Nos. 1 and 2 and 6–8, the slightly larger one of St. John the Evangelist, Islington, in Nos. 7–11, and the still larger one of St. Mary Rotherhithe, in Nos. 13–16 and the sonata Il Trionfo del tempo e del disinganno: while in Nos. 3 and 12 he switches from organ to harpsichord (as in the accompaniment the continuo part is switched from harpsichord to organ). Except for the inclusion of the festive sonata, Malcolm is more sparing than any of his competitors with transcribed or improvised interpolations—and one of my two minor complaints here is that Christopher Hogwood’s otherwise informative notes don’t specify which of these are Handelian and which Malcolm’s own. The other complaint is that in Marriner’s admirably pointed, surgically expressive in the slower passages, too stiffly rhythmized and—the most part Berman provides another complaint—what does so for me is a variety of tonal and execution flaws, none of which is probably the fault of the soloist and the engineers. Chorzempa himself plays well, if without marked personality projection, and his decorative and improvisatory contributions sound appropriate enough. But the Dutch ensemble is too often harsh-sounding in Phlegm’s strong, clean, quite closely miked recording, while Schoder’s readings are too often hard-pressed in the faster passages, too stiffly rhythmized and surgically expressive in the slower ones. And what is perhaps the deciding factor is that the organ itself—the c. 1789 Kuckel two-manual instrument in the Old Catholic Parish Church of Haarlem, Holland, tuned to a 423-hz A—lacks, to my ears, either tonal charm or pungency.

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sions of poor Ethelbert Nevin. Nevin once said: "I have a horror of being a 'successful drawing-room songwriter' with nothing else to back it up," and unfortunately that's what "The Rosary" sounds like. salon pieces as "Narcissus" did to him. Drake performs Nevin's Water Scenes, Op. 13 (with its ubiquitous 'Narcissus' as No. 4). Un Giornina in Venezia, Op. 25, which is almost hearable, and three of his songs as arranged for piano solo: "The Rosary" (which sold 2.5 million copies of the sheet music between 1888 and 1928, peaking in 1913 with 287,267). "The Merry, Merry Lark," and "Oh, That We Two Were Maving." The songs are simply wretched—no other word will do. It is difficult to understand why they were, and continue to be, popular. This record, by the way, marks Nevin's triumphant entry into Swann.

In addition to the Tragicus, Snyders play a pastel-colored version of Grieg's The White Peacock and a nine-minute set of variations published in 1824 by the German-born pianist, organist, and composer Christopher Moldbrach, who emigrated to America in 1800 and settled in Baltimore, living there until his death in 1850. A very astute real estate operator, he left an estate valued at $190,000. Meineke is said to have visited Beethoven in Vienna in 1817 and won praise from the master for a concerto he is said to have composed. One would never guess it from his variations on Madam de Neuviles' Favourite Waltz, which chases its tail rather ungracefully before lapsing into blessed silence. The identity of Madam de Neuviles remains a dark secret, but the work was "respectfully dedicated to Mrs. Frevier," an unknown female.

Again, I was bothered by the distant mocking and the rather disembodied sound of the piano, but if you must have Meineke, this is the only place you'll find him. I.L.

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**VIVALDI**

**MOZART: Sonatas for Violin and Piano**

Vols. 1–2. Szymon Goldberg, violin; Rudolf Lupu, piano [Christopher Rastream, prod.]

London: CBS 2243 and 2244, $13.96 each two-disc set.


Comparisons:

Szeryng, Haebler

Phil 6560 105; 6560 43/5

Szegedi-Horszowski, Szell

Vanguard 265/7, 266/45D

Pauk, Frankl

Vox SVBX 546/547

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**VARATIONS ON "ST ANTONI CHORALE"**

Berlin-Philharmonic Orchestra

Karajan

Haydn has been called the father of the string quartet, but I have never heard Mozart called the father of anything nonbiblical, which, when he took it up in the style of Johann Christian Bach, was a one-sided affair, with the violin holding full sway and the violins simply accompanying. The precocious Mozart spun off eighteen sonatas of that kind (calling them clavier sonatas with violin ad libitum) by the time he was twelve. Then he took ten years' holiday from the medium and returned at twenty-two (in 1778) to write K. 296 for the daughter of his landlord at Mannheim, and a set of six sonatas, K. 301–6, for the wife of the Elector of the Palatinate, and he made it clear that he had some fresh ideas on the subject. Although he called the Palatinate sonatas "Grafiehduetti mit Violin" there is, in all the sonatinas of 1778, substance to the violin part—the dialogues are real, the melodic responsibility is more equally divided, the interplay of instruments is very much part of the scheme.

There are certain hangovers from the older style: All but one of the Palatinate sonatinas are in two movements (a pattern stemming from J. C. Bach), and one of the most beautiful and poignant themes to be found among the seven works, the Andante scionomo of K. 296, is according to Einstein lifted almost verbatim from London Bach (Other sources say that Bach may have got the tune from Mozart; in either case, they both recognized its value.) But the violin/piano sonata, whatever its designation, had come to stay, and it continued to develop in Mozart's hands right through the "middle" set of five works in 1781, K. 376–80, up to the final sonatinas, K. 454, 481, 526, and 547.

There are wonderful musical peaks along the way: the rondo of surprising solemnity in K. 302, marked 'grazioso' but sounding nonetheless quite hymnal; the lovely interweaving of instrumental lines in the Allegro of K. 303 (a sonata that Einstein calls 'somewhat strange': the opening Allegro of K. 304 in E minor, dark and important. And so it goes, up to the commanding gestures, exalted lyricism, and searching explorations of K. 454 (and what wide-ranging ideas unfold in the rondo finale) and the muscular, dramatic statements of the first movement of K. 481, with its slow movement of particular eloquence and a variations finale that allows the piano a special burst of brilliance.

Where does the record buyer stand amidst all this? The domestic catalog lists four complete or nearly complete recordings of the sixteen "mature" sonatinas, including two of extremely high quality.

For London, Szyman Goldberg and Rudolf Lupu offer sensitive, rather intimate, lyrical, and understated performances. The sonatinas have so far appeared, in two two-disc sets, with Vol. 3 due shortly. For Philips, Henryk Szeryng and Ingrid Haebler perform in a grander, more projecting, more overtly concert style; they have recorded an entire set of the sixteen sonatinas and both independent sets of variations (K. 352 and 394), and only four of their six single discs have been released domestically. The stature of the London and Philips teams weighs heavily on the competition, and I for one find that the Vanguard Everyman performances of fifteen sonatinas (all save No. 57) by Szegedi-Horszowski (with George Szell taking over at the keyboard in K. 454 and 481) pose too many problems of tone and intonation to be acceptable today except as a matter of historical curiosity. There is, to be sure, an admirable thrust and vigor to Szegedi's approach—but his Mozart is no sissy. But the recorded balance as it emerges in the reprocessed stereo (and perhaps in the original, for all I know) favors the violin outrageously, and the ensemble work is up to the standards of the two new versions. Compared to Frankl on Vox (all sixteen sonatinas, both sets of variations, plus the first of the three unfinished sonatinas, K. 402–4) sound demure and polite and, in general, encompass a...
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much narrower expressive range than their competitors.

It is difficult to compare the violinism of Goldberg and Szeryng without seeming to belittle the former, and this I assuredly do not want to do. While it is true that Goldberg does not command Szeryng's variety of color and the sense of reaching to the back row of the house, his perception of Mozart is balanced and lovingly shaped on its own scale. He may not put as much ginger into the rhythms (as in the Minuet of K. 363), and his tone may be leaner, his profile lower. But he maintains Mozart's momentum unfailingly, the lyric lines sing in his hands, and his collaboration with Lupu is unerringly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly. the lyric lines sing in his lower. But he maintains Mozart's momentum unfailingly.

In the Largo introduction of K. 454, and they, too, interweave marvelously through the seductive elaborations of a movement like the Adagio of K. 481.

S.F.

NEWIN: Piano Works—See MacDowell. Sonata No. 1

OFFENBACH: La Vie parisienne.

Mezzo

Regine Crespin (s)

Regine Crespin (s)

Mady Mesplé (s)

Mady Mesplé (s)

Michel Senechal (t)

Michel Senechal (t)

Heinz Arne (t)

Michel Temporel (t)

Luis Maioni (b)

Jean-Christophe Benoit (b)

Baritone

Germaine Dor (s)

Giovanni Fratelli (s)

Frédéric Dufaux (s)

Baritone

Baron Gondremarck

Gontran

Honorat

Bournon

Baron Gondremarck

Theodore Frick (s)

Proser (plus smaller roles)

Chorus and Orchestra of the Théâtre du Capitole (Toulouse), Michel Plasson, cond. [Eric Macleod, prod.] ANGEL SBLX 3839. $15.98 (two SO-encoded discs, automatic sequence)

Offenbach's first attempt to portray, not historical or mythological figures, but his own contemporaries, and thus the manners and follies of his age, has lost none of its power to charm and elate. The element in La Vie parisienne of social satire, with its emphasis on such specific concerns of the Second Empire as rank, money and provincial naivete, may have been superseded, but there has been no lessening in the work's good humor or its insight into human folly. To this day La Vie parisienne, first performed 111 years ago, remains a font of wit, joie de vivre, and delicacy of feeling. The reason, of course, is not so much the libretto of Meilhac and Halevy as the music of Offenbach, a petit-maître, if you like, but a genius in the unerring certainty of his aim and the individuality of his voice.

Given the composer's incomparably greater importance in the continuing artistic value of La Vie parisienne, it is unfortunate that his contribution should not be easier to locate on this recording. Though I am glad to have so much of the spoken text, I do not especially want to play it through every time I sit down to listen to this work and I wish that Angel had provided handling so that one could go straight to the music without effort.

The performance itself is wonderfully successful, both well acted and beautifully played. With such talented character singers as Michel Senechal and Jean-Christophe Benoit (who impersonates three figures, each with a radically different temperament and manner of speech), there is no lack of color and vivacity. The "name" singers, too, are equally adept at characterization. Mady Mesplé sounds characteristically narrow in tone but sings with lively assurance. Her easy handling of every mood in the complete works without impediment her enormous distinction as an artist.

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The LSO is everywhere nearer than the Moscow Radio Symphony, its tonal sheen a welcome relief from the raucous playing of the Russian orchestra. Weller pushes a rather impressive test in the Classical. Among the no less than four LSO versions in London's catalog, his is technically cleaner than both Ashkenazy's (CSA 2314, with the piano concertos and various short works) and the dozen-year-old Sargent (STS 15114, with Peter and the Wolf). He evokes as fine playing as did Abbado (CS 6679, with Symphony No. 3), drawing even more pointed phrasing and beauty of woodwind detail. Clearly, Weller has fashioned a Classical to rank with Marriner's elegant recording (Argo ZRG 719, with Bizet's Symphony in C) among modern versions.

London's crew has brought out of King's College, Cambridge, a sharply etched, clean and steady executing of the Seventh. And the Classical is one of the most magnificently sung recordings of recent years. The impact and range are of demo caliber (e.g., the bass drum in Requiem). You will not be able to find them quickly. Even so, they are worth the search. Highly recommended. French - English libretto. D.S.H.


Comparison: Rachidstevensky/Moscow Radio Sym.

The music offered on the London and Melodia/Angel discs differs in one respect: Rachidstevensky, like his father, Nicolai Anosov (on a fondly treasured Supraphon/Parlament mono disc, stunningly played by the Czech Philharmonic), uses the original elegiac closing of the Seventh Symphony, while Weller employs the more commonly heard revised version, in which Prokofiev tucked on twenty-three rather trite measures based on the finale's thematic material. I rate the quieter ending a definite advantage, and the Russian recording also benefits from Rachidstevensky's almost manic abandon and drive throughout the Seventh. And the Classical is one of the few versions left in captivity to take the opening movement as a "real" allegro — and if my ears deceive me not — to separate first and second violins laterally.

The new release, fortunately, has at least as much going for it. Weller's pacing is broad and steady, his rhythm taut. The Seventh emerges as a somewhat more dignified and subtle work, despite the choice of the less dignified denouement. In the Classical, there is a welcome depth and tenderness to the Larghetto, and if I wish he'd get on with the opening movement a bit, I can't complain of any lack of propulsion in the finale.
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From the "official" recordings, the basic style and sound of these new accounts have the ring of conviction. The ripe emotionalism of the orchestral playing, the disciplined, cutting edge of Vásáry's pianism, and the penetrating, analytical intellect are all part and parcel of Rachmanninoff's idiom. For all their license, these performances have the ambiance of authenticity.

Rachmanninoff, paradoxically, has often seemed to take a more literal view, reserving his wildest innovations for the works of others. Vásáry and Aranovich, one might say, give Rachmanninoff a dose of his own medicine and, in the process, increase our perceptions of and affection for the material.

Their performance of the First Concerto--solid, emphatic, deliberate, yet very intense--reminds me of the reading that Robert Goldsand gave with Colin Davis and the New York Philharmonic in 1968. In the last movement, the tutti following the opening piano flourish is made to sound akin to portions of the Richard Strauss Burleske, which preceded the original version of the First Concerto by only a few years. Toward the end of the Second Concerto, Vásáry plays a usually uneventful bridge passage with an accentuation that emphasizes a kinship to the first movement's second theme. Fascinating details keep cropping up in both performances.

There is no dearth of alternative versions to choose from, and traditionalists will probably be happy with, for example, the gorgeous, slender Second Concerto by Riemann and Ormandy (RCA ARL-1-0931). Those in search of a new slant, however, are urged to sample this new disc (incidentally, the first installment in a cycle). The DG reproduction is absolutely first-rate in clarity, impact, and brilliance.
ment, coloristic detail, and sheer alive-
ess." Since that 1966 disc we have had
clean and serviceable accounts by the
Melos Ensemble (Angel) and the Music
Group of London (Unicorn) and an indifferent one by the Boston Symphony Chamber
Players. Now comes a tripleheader, which adds two more strong contenders to the
catalog.

The Amadeus. I am sorry to report, is
overshadowed by the Beaux Arts and
Tashi: For all Gilels' lovely pianism there is a
prevailing overeasiness on the part of the
principal in particular that repeatedly breaks the pace
and flow of the music: the development sec-
tion of the first movement, for example, is
almost halting, and the generally nervous
intensity of the first violin tends to lessen the
cohesiveness of the textures throughout.
(This seems less the case during the
stresses and turnmills of the Quartetsatz,
and the same violinist handles the lyric line
quite pleasantly.)

Peter Serkin and Tashi make a fascinating
contrast to Peter Serkin and the Schnei-
der group. The irrepressible "tempera-
ment" of the older performance has been
replaced by a sense of deliberation. a con-
trast to Peter Serkin and the Schnei-
der group. The irrepressible "tempera-
ment," prod.

The Beaux Arts, perhaps less individual
than Tashi, nevertheless presents a beau-
tifully wrought performance, full of kinetic
energy, sonorous in ensemble tone, occa-
sionally more headlong than Tashi, as in
the first variation of the fourth movement.
The Beaux Arts adopts faster tempos than
Tashi, and is often tighter in rhythm. At the
same time, pianist Menahem Pressler takes
a more tender view of the piano part in the
first movement, giving just a hint of rubato
that Serkin eschews. It makes a nice effect.
S.F.

SCHUMANN: Concerto for Piano and
Orchestra—See Greg Concerto


LISZT: Années de pèlerinage: Sonetti del
Petrarca (3). Alexis Weissenberg, piano. [Mi-

cel Glotz, prod.] CONNOISSEUR SOCIETY

Despite Weissenberg's customary hard,
glassy sonority, the Schumann is one of his
more successful recordings: big, disci-
plined, and tautly expansive. (I know that
sounds contradictory, but somehow he
achieves both breadth and compression.)

Shostakovich is perhaps best known for the
symphonic style that blended large-scale
romanticism with neoclassical structure in
a context of tragic but nonprogrammatic
expressivity. Yet only five of his fifteen
symphonies—Nos. 4, 5, 6, 8, and 10—really
fall into this category: though I rate the
Eighth the finest of the group, for many the
Tenth is the outstanding product of this
style.

Yet the Tenth is the only one of Shosta-
kovich's symphonies still in need of a really
satisfactory recording. Berglund's certainly
achieves both breadth and compression.)

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June 1977
full emotional impact. Berglund’s Fifth (Angel S 37279, April 1977), the English EMI issue (SLS 5044) is the one to get if you are interested. R.S.B.

SHOSTAKOVICH: Symphony No. 14. For an essay review, see page 71.


Comparisons—Symphony

Berglund/Halle

Bernstein/N.Y. Phil.

Ang. S 36489

Col. M 30232

There are Sibelius Firsts coming down the pipe (Berglund, Stokowski) that are probably worth watching for. There have also been some outstanding ones in the past. Bernstein’s impassioned, even demonic, interpretation builds the music in a marvelously frenzied surge from beginning to end, though it has its ensemble problems and the recording has many a flaw (hum, pre-echo, edited-out rests, etc.). Barbirolli’s final recording of it (by far the best thing in his EMI Sibelius cycle, which Angel has only partly issued here) is a deeply felt lyric counter with the work. It is grand and noble, with surprisingly virtuosic playing and truly enlivening details, such as the switch from staccato to legato and back again in the low strings at letter B of the finale. Davis’ reading, however, is one of absolute and utter probity. Though I prefer more of a stentor in the closing pages of the scherzo, he is right on target about countless details (usually glossed over by other conductors) with regard to sudden and gradual accelerations and decelerations, extreme dynamic changes, accentuation, and the like. Although I’ve never encountered (nor do I again expect to) an interpretation of such astonishing faithfulness, there is not the least sense of myopic pedantry. Indeed, Davis seems caught up in the great vaulting tone of melody and sonority that he and the music generate together. The BSO follows every hairpin, every touch of rubato with uncanny control. Articulation is dazzling, and the pitch is good and true. One can’t help singing out Harold Wright’s deeply moving delivery of the opening clarinet solo, but special praise should also go to the double basses for their athletic precision in the finale. Finlandia comes off with bravura flourish and grim patriarchal fervor.

Philips has again provided for these artists sonics of remarkable warmth and depth. The pppp bass drum trill before K in the third movement, clarion clear over these awesomely silent surfaces, is an apt signpost of what we’re about, and how far we’ve come, in this first century of the phonograph.

A.C.

SIBELIUS: Violin Works—See Dohnányi: Sonata for Violin and Piano.

TURINA: Danzas fantásticas—See Albéniz: Iberia.

VERDI: Ouattro Pezzi sacri: Te Deum—See Bruckner: Te Deum.


Fischer-Dieskau, Moore

in EMI 1C 181 01470/6

Fischer-Dieskau’s second survey of the Wolf Goethe songs differs in only the smallest respects from his 1960 recording; now available only in a seven-disc Wolf compendium from Germany: No. 37 (‘Sie haben wegen der Trunkenheit’) is omitted. No. 39 (‘Was der Schankmeister heute’) is added, along with the ‘Wanderers Nachtlied’ setting published among the

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Prices on Various Poets. And the set is filled out with settings of Heine and Lenau, only one of which ("Wo wird einst," also among the Songs on Various Poets) was published during the composer's lifetime; the others are all early songs, written between 1870 and 1889. All of these modifications are to the good, save for the omission of that one song from among the Schenkenbach group—a nuisance, because it has otherwise been recorded only once, by Raymond Gilvan on a Da Camera record that I've never come across. The other missing songs are all unsuitable for male voice, and we were all recorded at one time or another by Elisabeth Schwarzkopf, on discs no longer available—some of them never on LP at all. And the comparative merits of Dieskau's two versions are by no means subject to simple generalization. Not surprisingly, the new set is better recorded—not only is the piano sound firmer and cleaner, it is also more forward, an equal presence with the voice (as it certainly should be in these songs).

The sounds that piano makes are, for the most part, also finer. As in the preceding set of Morike songs (DG 2706 053, May 1975), Daniel Barenboim's control and coloristic sense prove admirable and true to Wolf's writing; even such a detail as the hard's preatory harp strumming in "Der Sanger" is ravishingly shaded, the riotous rhythms of the Schenkenbach songs have splendid bounce and clarity, the Rattenjäger's Postlude dances him out of town on an exhilarating deacon that never slackens its pace (at least, unfortunately, did Moore's performance in the older set).

The singing is, almost inevitably, less consistent than before; the passing of some fifteen years has taken a toll on the voice, and has lost all the repose and innigkeit of a younger Wolf, though there is still a rich vocal quality, and some fine moments of phrasing. In general, the Wolf here is more forward, especially in the older women's songs, such as "Lichtlein," which is now taken faster than in 1960, and with much swelling of tone. But no one can beat our prices.

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BASSOON AND RECORDER SONATAS. Trio Primavera (Michael McGraw, recorder and bassoon; Julian Fifer, celesta, Dennis Mchmho, harpsichord). CAMBRIDGE CMS 2826, $6.98.

MUSIC FOR FLUTE, HARPSCHORD, AND PIANO. Continued on page 104

Hugo Wolf
Engraving after the Vages portrait

High Fidelity Magazine
London's remembrances of things past. Since London began importing its British-processed musicassettes eleven months ago, the flow has become a flood. The latest release—eight Prestige Box sets, seventeen singles—must be my biggest review-tape shipment since Deutsche Grammophon's Prestige Boxes greeted in this column since my September 1976 "Tape Deck" discussion of noncommercial tapes in general and those of the Viennese Light Music Society in particular, the prospect of expanding its American membership has led the Society to some slight relaxation in its strict rules. Releases still are available only to enrolled members, of course, and may not be copied or sold. But the previous recording-artists' anonymity now is abandoned in crediting the first of a new series of "Viennese Nights: Rare Works of the Great Waltz Kings" (Blue Danube Recordings No. 120, Dolby cassette) to the Biedermeier Konzertorchester under Otto Schulz. And when rarity is claimed, the Society really means rare! The program comprises not only works recorded for the first time (to the best of my discographic knowledge), but also those unfamiliar even by name.

There is an illuminating contrast between five of the earliest published Johann Strauss II waltzes of 1844—48 with three polkas and a march of 1856—62 when the now-most-famous works were beginning to appear. In the former group are Schottische (Op. 17), Humoreske (Op. 21), and Freilichtpolka (Op. 48) all of which had been composed by the end of 1845. In the latter group are the jaunty Deutscher Krieger-Marsch, Op. 284, and three bouncing polkas: L'inconnue, Op. 182; Maskenkonzert, Op. 253; and Veilchen, Op. 256. Herr Schulz is a more outspokenly vigorous conductor than the anonymous one of the cassette program I reviewed last September: the Biedermeier is perhaps a bit bigger on the unformed orchestra; and the present recording is more robust in a more reverberant ambience and is processed at a higher modulation level. But if there is consequently some loss in delicacy and seductive grace, there is a gain in dramatic force. And Schulz himself demonstrates no less sure command of authentic stylistic idioms than his predecessor.

So again I'm happy to recommend Society membership to all Viennese-music aficionados. The annual subscription rate (now cited in American currency) is $10, which covers a new catalog of the 140-cassette repertory. Individual Dolby cassettes are $8.00 each, air postage paid. Write Reginald Woollard, Secretary, Viennese Light Music Society, "Pickwick Papers," Stickford, Boston, Lincs., England.

Muscovian/antipodean ballet axis.

Both the geographical and repertorial extremes of current ballet activities are delineated by three cassette releases ranging from a nineteenth-century Russian monument (played by a British orchestra under an American conductor) through an early-twentieth-century French masterpiece (by an American orchestra under a Frenchman) to a new Australian ballet metamorphosis of an Austrian operetta (by a Down Under orchestra under a Briton).

The Previn/London Symphony Tchaikovsky Swan Lake (Angel 4XS 3834, three boxed Dolby XDR cassettes, $23.98) is a more-than-complete version. (It includes the long-omitted Act III pas de deux from the original production.) As in his earlier Nutcracker and Sleeping Beauty (the latter as yet untaped), Previn is extremely persuasive in the sensuously lyrical and vivaciously scherzoistic passages, less so in those demanding theatrical impact and grandeur. Yet few listeners will not be musically and sonically enchanted by this beautifully airy, kaleidoscopically colored recording—the only one currently available on tape.

Few modern ballets have fared as consistently well on records as Ravel's magnum opus, Daphnis et Chloé: for years in the Munich, Monteux, and Ansermet versions; nowadays by Martinon for Angel and Boulez, with the New York Philharmonic and Camerata Singers, for Columbia (MT 33523, Dolby cassette, $7.98). The Boulez account is fascinating for its distinctively individual reading and is thrilling—indeed, often magical—in its vivid sonic immediacy.

The third entry is a hybrid work and of far lesser musical stature: Lanchbery's ingenious adaptation of Lehár's Merry Widow (Angel 4XS 37092, Dolby XDR cassette, $7.98) As I noted in my November 1976 disc-edition review, these "highlights" omit three of the full score's nineteen "numbers" and the Adelaide Symphony isn't a particularly polished orchestra. But the Leharian tunes, waltz rhythms, and voluptuous sonorities surely will intoxicate all but aural teetotalers.

**Further Viennese Night illuminations.**

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**by R. D. Darrell**

The Fourth Concerto and the rhapsody, are available separately, coupled in CS5 6776. $7.95.

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**June 1977**
ANO. Anne Diner Giles, flute. Allen Giles, harpsichord and piano. [Peter Christ, prod.]
CRYSTAL S 312, $6.98

The smaller recording companies often perform special discographic services—partly in the presentation of highly specialized music and performing artists, even more in providing recording opportunities for talented musicians.

Of the present two examples, I give precedence to the more homogeneous all-baroque program of the apparently very young members of the Primavera Trio. It features a fine Bassoon Sonata in F minor by Telemann and less distinctive bassoon pieces by Boscain and one Giovanni Antonio Bertotti (who is ignored by Grove's even though he was the first, in 1638, to publish bassoon/continuo sonatas). There are also the familiar Handel and Loeillet recorder sonatas, in F and G, respectively, plus a more obscure soprano recorder sonata from the Op. 2 of Philibert de Lapugnoy (c. 1700-90). But this mostly fine music is overcropped by Michael McGrath (doubling on bassoon and recorders) and is recorded with balances unduly favoring the soloist and the continuo cellist at the expense of the far too reticent harpsichordist.

The same imbalance exists in the Crystal release, where either the recording engineer or harpsichordist/pianist Allen Giles deter almost obsequiously to flout Anne Diner Giles (principal of the Los Angeles Philharmonic) and where it's probably the close making that should be blamed for the unpleasantly penetrating high-register qualities. The prime musical attraction is the second of two Op. 1 flute/harpsichord sonatas in B flat, by Frederick the Great's famous teacher, Johann Joachim Quantz; the other, in A minor, is less distinctive and the recording is cut off too hurriedly at the end. The B-side flute/piano works—the quite well-known Sonata by Deltréau and, in what well may be a first recording, a Cappuccio by the relatively obscure Swiss composer Paul Muller-Zürich—seldom if ever rise above the level of routine compositional professionalism. K.D.D.

HEIFETZ-PATGIORSKY CONCERTS. Jascha Heifetz, violin, Gregory Patgiorsky, cello. Leonard Pennario, piano (in the Dvóřák)

If you wonder how Heifetz, Patgiorsky, and Pennario fit the Dvóřák Op. 65 Trio, which commonly lasts just under forty minutes, on one disc side, the answer is not simply breathless tempos. (In fact the Beaux Arts Trio takes the finale faster in its set of the trio, Philips 6763010.)

If there are any repeats to be omitted. The sad fact is that they make scattered cuts, and the mike setup allows for less stereo separation than we are nowadays accus-
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Peter Asher—Producer Power & a Touch of Class
by Sam Sutherland

8430 Santa Monica Boulevard is a two-story California Modern office building complete with tinted windows and a courtyard full of tropical plants. The building faces a pancake franchise, a bowling alley, a liquor store, and Barney's Beanery, which used to have the best jukebox in West Hollywood. But even with the disco vamps infiltrating Barney's machine, there still seems to be ample room for Linda Ronstadt's records—which is fitting: across the street in 8430 sits Peter Asher, her manager and producer.

The offices are modest by Hollywood's standards and cramped by Beverly Hills's. And the current clutter of packing boxes and stacks of tape reels reveals Asher's surrender to the inevitable: After several years in these comfortably shaded rooms he has been forced to move to larger quarters. He has no choice—he's too successful.

Peter Asher has emerged as one of the most respected and bankable producers in Seventies pop, and it is in that role that he is best known to the public. His work on James Taylor's early, career-making records has proven as influential to the sound of pop/rock as
Taylor’s writing has been to its content. In an era when six-figure and still spiraling production costs make breaking even on label balance sheets more and more difficult for artists, and the pop audience itself is growing increasingly fragmented, the stakes are clearly higher than they’ve ever been—and a producer’s track record is a crucial consideration for any artist. Asher’s careful output of durable albums has earned him that most elusive of commercial music distinctions: a consistency to the quality and finish of his work. In fact, his very liner credit is a selling point.

His style is difficult to characterize. Linda Ronstadt calls it simply “class,” as do any number of reviewers, perhaps because Asher’s touch is distinguished less by specific technical or instrumental signatures than by a prevailing depth and clarity of sound and a concern for unity of content. His orientation as a producer has always been toward singers and songwriters; although his sessions are invariably played by excellent musicians, he has yet to yield space to lengthy instrumentals or melodramatic technical embellishments, preferring to focus on the singer. His instinct for selecting and presenting concise, commercial pop performances may be of primary value to his business associates. But to the average record buyer, Asher’s presence is probably more conspicuous in the wealth of detail and color captured in his recordings: Elegantly arranged string settings, intricate percussion tracks, and smooth, high backing vocal harmonies are among his most evocative constants—each feature typically controlled to enhance and not eclipse the session’s star.

That approach is grounded in Asher’s own career as a performer. In the early Sixties, while still a student in an English public school, he began singing informally with his friend Gordon Waller. Their modest coffeehouse performing dates mushroomed with the first volleys of the British Invasion, and Peter & Gordon’s subsequent EMI contract resulted in a global recording career. World without Love, the first of several Lennon-McCartney songs they recorded, became an international hit single in 1964 and marked the beginning of their four-year tenure as chart artists. Their melodic, gently folk-flavored arrangements subsequently evolved into more urgent, larger-scale pop productions like To Know You is to Love You, I Go to Pieces, and Woman.

“When we started, I wasn’t listening to much pop music at all,” Asher says. “The Beatles’ was really the first pop music that I listened to a whole lot of, except for Elvis’ big hits. I was listening to a lot of Woody Guthrie at the time. It was mostly Gordon that made me aware of all the other stuff; he made me listen to more Buddy Holly and Everly Brothers, and more of a lot of other records than I ever had before.”

In the late Sixties the pair drifted apart as response to their records tapered off and Waller became involved in a separate acting and recording career. Asher wasn’t consciously planning his next move; it was his involvement in selecting material and musicians early in Peter & Gordon’s career that led to his independent production work. “I was always interested in those aspects,” he recalls, “and I would insist on staying while the record was being mixed, which then was unusual to do.” At that time, pop recording both in London and the U.S. was still limited to four-track technology and tight recording schedules.

“The decision [to go into production] was really made for me by Paul Jones,” he explains. “We’d been together in the studio on various things before, and he’d watched me work and knew that I was interested in producing records. And he asked me if I’d produce some tracks with him. It was bold of him to ask me.”

Jones, lead singer for Manfred Mann’s band during its most successful mid-Sixties incarnation, had graduated to a solo career in Europe, and his endorsement proved important. Those early sessions revealed that Asher was already astute in assembling session bands. “We did about three tracks,” he says, “of which the only one that was nearly a hit was a Bee Gees song called And the Sun Will Shine...” But it was a great session: I used Paul McCartney playing drums, Paul Samwell-Smith [a Yardbirds alumnus who, like Asher, has since emerged as a producer with commercial credits] playing bass, and Jeff Beck playing guitar. I don’t know where the tapes for that are now, but based just on the personnel, it’s obviously a legendary track.”

If the Jones sessions were Asher’s baptism as a producer, his appointment as a&r director for the Beatles’
then-embryonic Apple label set the stage for his commercial vindication. Asked to assume that post by McCartney when the label was still more an idea than a reality, Asher found himself at the center of an often chaotic situation. "It turned out to be a title that carried less power than the name implied, simply because of the nature of the four owners. You had to get a quorum of approval from them before you could actually do much. It made decision-making difficult, but at the same time I learned a great deal working with them."

While at Apple he received a call from James Taylor, referred by Danny "Kootch" Kortchmar. Kortchmar had accompanied Peter & Gordon on an American tour as a member of the King Bees before linking up with Taylor in the Flying Machine. The referral was more social than professional, but on hearing Taylor's songs Asher signed him to Apple and produced his debut album, "James Taylor."

The LP wasn't an auspicious commercial success. By Asher's own recollection, it sold somewhere in the neighborhood of 8,000 copies in the U.S. Apple was meanwhile plagued by its own anarchic style, and in 1969 Asher departed for New York and a brief stint at MGM Records, partly because his friend Ron Kass was the president, and partly because "they offered to bring me and Betsy [his wife] and the cats and all our belongings over on the Queen Elizabeth first class, which was very important since I had no money at the time."

While still with MGM, he flew to Los Angeles to find a new label for Taylor, whom he was now managing. As it turned out, a fatefully large slice of those first albums had been scooped up by musicians, and Taylor's reputation as a cult artist persuaded Warner Bros. to take the gamble. Asher left MGM, moved to Los Angeles, and in 1969 produced a second album, "Sweet Baby James." After a slow start, it began to sell. A single that had already been covered by two artists, but without commercial success, followed. The song was Fire and Rain, and Taylor became the archetypal singer-songwriter.

Asher's growth as a producer and manager has been a careful, conservative process. After several outside assignments, he limited his production commitment to Taylor alone, later pairing him with other producers. In 1973 he took over the management of Linda Ronstadt's career, stepping in to wrap up the sessions for "Don't Cry Now," her first album for Asylum. That record, which offered a rotating cast of producers, managed to sell steadily if unspectacularly, at least partially sustained by Ronstadt's touring. Her next album, "Heart Like a Wheel," was Asher's first full production for Ronstadt, and marked the singer's transition from survivor to star. Three singles from it—You're No Good, When Will I Be Loved, and It Doesn't Matter Anymore—followed, demonstrating the new breadth of Ronstadt's recorded style. The first, a striking remake of an old Betty Everett tune, was a soulful, desperate ballad that enjoyed broad pop success; the second scored on both pop and country charts; and the last became a major country hit. Without diminishing Ronstadt's country roots, Asher had succeeded in finding the convincing pop format for her. "Heart Like a Wheel" went Gold, then Platinum, and Asher the manager kept his new star on the road for a series of tours to ensure that her draw as a concert performer would equal her record sales.

Asher himself is unwilling to formalize his approach to either of his roles. He agrees with his friend John David Souther, one of the other producers involved with Ronstadt's "Don't Cry Now," who convincingly describes production as "the most undefined job in the world, because there's no guidebook as to what you should do." (Asher produced Souther's "Black Rose," released last year on Asylum; it was his first production agreement since Ronstadt's successes.) What Asher clearly does do is to organize. Souther describes him as "a great organizer, and a great mixer who can sort out all the situations in the room, who can say no to people and make them dig it. . . . He's flexible enough to make it work."

"Everybody always knows exactly what's expected of them," Ronstadt says of Asher in the studio, "and
forces involved; it’s clearly your job to make sure that it all fits together, that what everyone is aiming at is a common goal. But as for saying, ‘Sing this, sing it this way,’ certainly not. Eventually, the thing should be based around the way the person sings the song best, and what the song is. That’s where you really start.”

Asher starts with pre-production planning—selecting material, arranging it, and then rehearsing his musicians long enough to achieve familiarity without exhausting the freshness of the songs. Once in the studio, however, he avoids carefully staging the recording process. “I prefer to have a lot of things cooking along at the same time, so that you’re not suddenly faced with days of nothing but vocals, or just millions of guitar solos to put on and nothing else to do.

“I would rather know in my head that we’ve got this guitar solo to do, and we’ve got to do these background vocals, and we’ve got two more tracks to cut, and we’ve got a couple mixed, but two more sides still to mix. . . . I prefer to juggle it like that, which is a little bit confusing, but much more interesting because you don’t suddenly have to mix millions of things one after the other.”

Apart from that approach, and Asher’s admitted obsession with “in-tuneness,” he denies any master plan behind the steady evolution of his production style. “I think it changes all the time. I go through different phases. ‘James Taylor’ was less live, for example, than the subsequent album; ‘Sweet Baby James’ was an entirely different approach, where there was a great deal less overdubbing and a lot more live vocals. . . . Every album is different, really.”

His attitude toward the studio itself mirrors that dis-trust of formulas. He has gradually placed increasing emphasis on capturing basic band tracks and lead vocals with as live a session feel and as solid a sonic finish as possible. But his use of overdubbing and tonal effects has varied widely, ranging from simple, unadorned studio performances to the carefully structured composite solos he and guitarist Andrew Gold create for Ronstadt’s records. “There are a lot of effects there,” he observes. “There’s tons and tons of toys that I use all the time, but I think if they’re used right, they can sound completely natural.”

At least part of that naturalness stems from his long-standing practice of using the same core of full-time players for his sessions, rather than relying extensively on studio musicians. Thus, Ronstadt’s touring band has remained the instrumental base for each of her Asher-produced records, with shifts in the lineup generally reflecting changes in her band rather than Asher’s choice of guest performers. He’ll also be returning to the basic Taylor band—guitarist Kortchmar, keyboard player Clarence McDonald, bassist Lee Sklar, and drummer Russ Kunkel—now that he has reassumed production/management duties for the artist. (Taylor recently switched from Warner Bros. to Columbia.)

Similarly, Asher’s two most recent outside projects, Andrew Gold and John David Souther, both revolved around the basic Ronstadt band, yet in each case shifts in the lineup have yielded significantly different arranging styles. With Gold (leader of Ronstadt’s band, and a multi-purpose instrumentalist, as reflected by his one-man-band success with You’re No Good and Heat Wave), Asher used the full band, alternating sessions for his “What’s Wrong with This Picture?” (see BACKBEAT, February issue) with Ronstadt’s “Hasten Down the Wind.” John David Souther’s “Black Rose” uses the same band as instrumental base, but Asher and he succeeded in broadening the record’s stylistic mix by adding jazz players Stanley Clark and Donald Byrd, along with a roomful of familiar rock players.

Peter Asher will probably never see more than a few of his records on the charts at the same time, in contrast to faster, more expedient producers whose reputation is built more on quantity of output than quality. But aside from his drawing power as a successful producer-manager, the most significant characteristic of Asher’s career is musical. “He has such an incredible sense of taste,” Linda Ronstadt emphasizes, “and always of what’s appropriate. He knows exactly when to stop with something. And I trust that impeccably. Even though we really work like a team, and everybody’s ideas are brought into play at some point or another, including mine, Peter’s so great at taking all those ideas and just tuning them like a chord.”

Asher has already weathered the pop spotlight as an artist, and it is perhaps that perspective that explains his empathy with musicians both successful and unknown. Having been a star, he now prefers making them.

“His very liner credit is a selling point.”
Ah, the legendary toughness of the musicbiz! For every thousand that try, one makes it. The rest sling hash and pump gas, making fodder for the occasional country song before truckin’ on home. Star-struck kids, born to die a little, born to feed a myth. . .

Myths are good fun, and this is a handy one, providing copy for the flacks and hacks, a copout for those who don’t make it, and ego food for those that do. But while public and publicists can groove on it without much harm, a musician who wants to get ahead better go with reality. My highly unscientific survey of various level-headed souls, some successful, some just beginning (and all—like Holly Golightly—still traveling), shows pretty clearly that if the myth ever approaches reality it’s only by coincidence. For the land is aswarm with musicians who, without hitting those peaks reached by one in a thousand in any trade, are making it in one way or another with a little luck and a lot of struggle.

“They call that struggle “paying dues.” Most everybody hopes to skip it, courtesy of some hip Fairy Godmother, but things rarely happen that way. The good news is that without any dues-paying, the Big Break could become a Big Disaster. As progressive rock group City Lights’s lead guitarist, John Berenzy, says, “It’s a protection, because it forces you to really get it together.”

Getting it together covers more than the intensive musical training playing night in and night out can give you. (If you’re that lucky—rock group Foghat and Cathy Chamberlain’s Rag ‘n’ Roll Revue, for instance, started out with two and three gigs a year.) More importantly, it involves getting in touch with the reality of the music business, which often has a lot more to do with business than with music.

Of course, one of the myths is that every businessman in the field is a rogue. A stanza in the Ballad of Pretty Boy Floyd runs: “I’ve traveled the whole world over./I’ve met lots of funny men./Some will rob you with a six-gun,/And some with a fountain pen.” Many are convinced the man was talking about the music business, and, in the old days, the fringes could indeed be lawless. Johnny Martin recalls an occasion in the Mighty Clouds’s early years when a promoter pulled a pistol to persuade them to forgo their fee. Bob Tulipan, a white manager who used to operate out of Florida, has seen the same thing happen even more recently in the South. “You’d get paid and right as you were getting paid there’d be somebody who had a gun to you, so you’d give the money right back. The people that you had met with to negotiate the deal would be really nice, but by the time you’d get there to play, those people weren’t there!”

On the recording side, the smaller labels—especially in fields like jazz, r&b, and country—used to carry a marked reputation for Jaws-like practices. New York “salseros” remember vividly a former record-company owner’s technique at renegotiation time, which was to say, in fatherly tones, “Write in any royalty rate you like, my boy—because I’m going to pay you what I’m going to pay you, anyway!”

But for the most part, the fountain pen has replaced the six-gun, and the business today is increasingly one of large corporations and know-how. And although stories of record companies’ “creative accounting” practices are legion (albeit many who tell
them have grandiose ideas about their own potential market), on the whole the trend has led to a rise in straight, hard-nosed dealing. What's needed for the creative ego to deal with the corporate hard-nose is less paranoia and more level head. In fact, the infamous shark specializes in gobbling up artists who either believe business is beneath them or are prepared to pay for that mythical 'inside edge.' Better to find your own. For inevitably, hustling is a do-it-yourself proposition.

Getting your own foot in the door is really not all that horrendous. Bruised egos are prone to bind their wounds with the myth that you need 'pull' to get heard in the crystal palaces of Babylon. But take heart: The reality didn't work out that way for Don Ranmer, a young guitarist-songwriter still in the dues-paying scuffle. Like many others, he answered one of those alluring ads that offer to produce, publish, and promote a demo tape of three tunes, all for a mere $500—plus, it turned out, all publishing, management, and production rights for three months! Fortunately, he had the savvy to do some checking and discovered another song shark. "I ended up making the same demo with four tunes, getting a better sound in a better studio myself for $165, and I didn't have to give away anything!" With no pull at all, he then sent that same demo tape to Sire Records and almost immediately got an offer for two of his songs for a Stanky Brown album. (He ended up turning it down, but that's another story.)

"It was magical. I called the day after the demo was made and they saw me that afternoon. And there's not a company in the city that won't do that if you press hard enough and sound like you're on the case."

The same goes for getting club dates. In fact one struggler believes booking himself is "the most effective way for a beginner, because without a record contract you're not going to be able to get a reputable agent." Some of the shadier booking agents are, in the words of an agent-turned-performer, "horrendous, to the point where musicians are contracted at $30 an apiece per night, and the agency gets $500, illegally, by calling itself a production company, and doesn't even pay taxes on it."

There is nothing occult in selling yourself. You do what all salesmen do—you study the market. Melba Moore once commented, "You know you're going to do anything at first, but then you have to find out where you belong." Then, as former studio musician Lou Stevens learned when he went out to do his own post-rock acoustic thing the hard way, you "leave your ego behind and deal with it as a business. Most club-owners are looking for a sound investment and not for musical quality."

Nor—despite the real exceptions—are club owners necessarily musician eaters. For the most part the hip musician needs more common sense than karate. Greg Coverdale has long experience of beating about the scenes. "I did the Top 40 disco scene when I was in high school in all the small bars and stuff, and I never had too many bad scenes about being paid. And that was because of approach." Specifically, his approach was to get the money up front: so much on fixing the date, and the balance before setting up.

Once you're in you can relegate some of the business aspects to a manager. Many have had good ones from the start of their career. But since ten percent of
two gigs a year doesn’t pay for a 57th Street name plate, let alone the offices behind it, most newcomers’ managers are either newcomers themselves or are otherwise committed to The Cause. Cathy Chamberlain is married to hers. Foghat’s manager, Tony Outeda, was a friend who joined them when things were so bad that “I couldn’t even get us arrested.” City Lights’ lawyer-manager was once a guitar pupil of Berenzy’s.

If you don’t hitch up with some executive-minded and, importantly, competent risk-taker, then you go back and tend to business yourself, or else business will tend to you. As a songwriter put it, “For me to just sign this away to somebody—is like really asking for no respect.”

Like any business, not all aspects are clearcut: right way, wrong way; good guys, bad guys. A prime example is the showcase. “Showcasing”—playing for free—is an established way of getting a hearing. Some musicians feel that it’s a club racket aimed at getting free music rather than encouraging new talent, and that it can even be self-defeating. “You create problems for yourself in the long run, because a club owner doesn’t want to hear that you showcased at another club, he wants to hear that you made money at another club and drew consistently.” But Cathy Chamberlain found them valuable—“terrible on the one hand and a necessary thing to deal with. It’s easy to complain about how awful it is and refuse to deal with it, but all that means is you don’t get anywhere.”

The real problems can arise when the newcomer is somewhere between susceptibility and stardom. The perfect example is the young performer who winds up entangled in some producer’s strings. Andrea Vereen (Ben is her ex) is a young rock-oriented black gospel singer who aims to cross over into message-oriented rhythm and blues. But her producer had more traditional ideas: sexpotism.
Andrea Vereen—don’t get entangled in a producers’ strings

“I refused to sing Bring Your Body Over. I said if I was a rock singer I wouldn’t do Bring Your Body Over! He was disgusted. He said, ‘Shut up and go back to church.’

Cathy Chamberlain’s first record deal (she has since signed to a new label) began to look less rosy when she found that “they wanted me to do Bette Midler. They were trying to get my record out and go national before hers came out!” She resisted, and the LP never came out. Her first—on Warner Bros.—was released in April.

A young songwriter has even less clout than a performer. Coverdale wrote one tune for Fathead Newman’s last album. His Feel the Music started out as a rather tasty blend of r&b and Latin disco, but the producers wanted a formulaic disco sound, and, in the mixing, they got it. Coverdale views it philosophically.

“The tune they heard in my basement and the tune on the album are really not the same. There’s a conga player on that cut who’s doing the job, and you just don’t hear him. But we have to remember that there are a million right ways. Who’s to say mine was best? They got what they wanted.”

The final, and perhaps the greatest, problem is in dealing with all this psychologically. Here, the raunchier aspects of the musicbiz myth—the drugs, the public incidents of infantile behavior—and its reality most frequently coincide. Because in reality, the pressures in this business can be as great as those in “straight” life.

“It’s a hungry world,” John Berenzy says. “People who’ve heard me the first night want to hear me top myself the next night. It becomes a real syndrome.

“Life on the road has become a cliché: It drives you to things. A corporate body trying to push you in a very nonaesthetic direction drives you to things. The fact that you haven’t seen your loved ones in a while drives you to things. And the fact that your record isn’t being pushed in the town in which you’re playing is the equivalent of having frostbitten fingers for a guitar-player.”

But despite the occasional rock freakout that gets the headlines and feeds the myth, most musicians willy-nilly develop strength to deal with the pressure, peaks, and crises of confidence that are part and parcel of anybody’s reality. And lest we forget the power of positive thinking, John Lennon once said the reason the Beatles succeeded was that whenever things looked bleakest, at least one of the four was feeling up enough to say, look, we’re going to make it. A prime example of that kind of determination is pianist/band leader Eddie Palmieri. In 1968, he was clearly finished—no band, no gigs, overwhelming personal and emotional problems, a terrible reputation for unreliability. But he hung in—and in both 1975 and 1976 he won the Grammy for Best Latin American Recording (respectively for “Sun of Latin Music” and “Unfinished Masterpiece.”)

Old Cal Coolidge said it, way back when. More than talent, more than business savvy, intelligence, or luck, the essential quality for making it in any business is (yawn!) perseverance. Without it, you better stick to the gas pump.
Introducing Equalization

Since we're covering a parametric equalizer this month, it seems an appropriate occasion to say a few words about equalizers in general, and parameters in particular. Equalization (the alteration of tone color, or timbre) is achieved by boosting or attenuating the amplitude (volume) of certain portions of the frequency spectrum. (The frequency spectrum of the human ear runs roughly from 20 Hz to 20 kHz.)

As an example, equalization in a pop recording might be used to give a "graphic" display of the result of the frequency response—hence its name. As you may have gathered by now, two of the parameters (remember this word) with which equalizers concern themselves are frequency and amplitude. (How loud will the altered portion be relative to the rest?) A third parameter is bandwidth. The individual sections of any equalizer boost or attenuate in the immediate vicinity of the selected frequency. Bandwidth tells you how much of the nearby frequency spectrum is affected. When, for example, you boost 600 Hz by 10 dB, you are also boosting 580 Hz and 620 Hz—though generally, of course, by a smaller amount. (Shelving equalizers take effect only on one side of the selected frequency, and here bandwidth as such does not enter the picture.) Some of the more expensive equalizers may have a two-position switch to select wide or narrow bandwidth—sometimes referred to as low and high Q, respectively.

On conventional equalizers of any sort, the amplitude of the equalization is almost always continuously variable, while control over the selected frequency and the bandwidth (if any) is switch-selectable. However, when these latter parameters are continuously variable, the equalizer is dubbed a "parametric" to distinguish it from its less-sophisticated cousins: the tone control, the graphic equalizer, and the others.

With a parametric equalizer, the user may sweep across one or more sections of the audio bandwidth. This in fact is the principle behind the famous wah-wah pedal. On many parametric equalizers, the bandwidth may also be swept from a narrow band of several Hz to several thousand Hz. And, while amplitude control is just what you might find on any conventional equalizer, some parametrics offer attenuation capabilities far beyond the other equalizers. In effect, silence (almost) at the desired frequency. The parametric equalizer is an incredibly versatile production tool, as anyone who has used one will testify.

Furman Sound Parametric Equalizer/Preamp Model PQ-3. This is a three-band parametric equalizer that offers separate control of low, midrange, and high frequencies, with full facilities available within each range. The frequency range of the three sections overlaps, with the low section variable from 25 to 500 Hz, the midrange between 150 and 2,500 Hz, and the high from 600 Hz to 10 kHz. Within each band, equalization may be varied from a gain of 20 dB to an attenuation of more than 40 dB. Bandwidth is adjustable from less than 1/3 octave to over 4 octaves.

PQ-3 incorporates a variable-gain preamp, enabling the onstage user to couple the device directly to a power amplifier. High- and low-level input and output jacks make it possible to use the preamp section as a distortion unit. Parametric equalizers are among the best anti-feedback devices around because you can zero in on the precise frequency that is howling without disturbing the rest of the audio spectrum. Parametrics also can shape a sound more critically than any other device; besides, they're fun to play with. For instance, during the course of the PQ-3's field test, we created wah-wah vocals and turned our grand into a toy piano. I also used it on a commercial recording to simulate an air...
plane pilot's voice coming through one of those wretched little intercom systems found on jetliners.

The PQ-3 generates no audible noise of its own and all of the controls are smooth. The preamp offers up to 27 dB of gain (depending on which input you use), and it may be used for reducing hum, increasing presence, or correcting deficiencies in some microphones. Musicians, meeting-hall managers, and especially basement recording studio engineers will find this a versatile low-cost tool with broad application. For the musician in particular, the PQ-3 offers more color possibilities than any wah-wah pedal, fuzz, or flanger he ever dreamed of. The manufacturer's specifications list input impedance at 10,000 ohms, output at 10 ohms. Frequency response, with eq. out or set flat, is said to be ± 0.5 dB, 20 Hz to 20 kHz. The PQ-3 weighs five pounds, requires 115 volts AC, 4 watts, and retails for $300.

CIRCLE 121 ON READER-SERVICE CARD

Helpinstill Guitar Sensor. This is an attractive, innovative idea for a steel-string acoustic guitar pickup. The Helpinstill Model 65 adheres to the body of the guitar with pressure pads (supplied) and fits under the strings near the bridge. It senses the strings as well as the body of the guitar, thereby combining the brightness of the metal's sound with the warmth of the wood's. We tried it with a Yamaha steel string and a Polytone amplifier; the sound was nice and the response even over all the strings and harmonics. The pickup's output cable runs to a transformer, which may be attached to a belt, loop, or pocket. A volume-control pot sits on top of the transformer box for easy access, and the output from the transformer is a standard phone jack. The input is a mini-phone plug/jack configuration and is of the shorting type. This means that if you pull the plug without first turning down your amplifier, the amp won't put out that nasty hum. Model 65 is virtually noiseless and, although it is somewhat sensitive to physical movement of the guitar, it is no more so than other acoustic pickups. Aside from a rather bright sound on the high strings, little other tone coloration was apparent. Suggested list price is $79.50.

CIRCLE 126 ON READER-SERVICE CARD

MXR Analog Delay. Time-delay devices that employ either analog or digital circuits have become extremely popular in the past few years, specifically for recording and open-air concerts. Digital delay is used in vocal doubling, string thickening, and in delaying the onset of reverberation (thereby replacing the tape-slap technique). By combining a direct and a delayed signal, effects may range from a slight "fattening" of a sound all the way to a discrete echo, such as you might hear in the Grand Canyon.

Following the trend of adapting studio equipment (such as phasers, flangers, and reverberation devices), musicians have begun to use analog and digital delay. MXR's Analog Delay is designed specifically for electric instruments and gives the user time-delay control var-

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CIRCLE 45 ON READER-SERVICE CARD

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HIGH FIDELITY MAGAZINE
able from 25 to 500 milliseconds. Next to the delay is a mix control, to balance the delayed signal with the normal direct signal. REGEN permits regeneration of delayed signal with the normal direct signal. The DELAY is a mix control, to balance the two signals. The foot-activated bypass switch to restore the signal to normal.

Tycobrahe Direct Box with Automatic Fader. The direct box idea had its origin years ago in the form of the matching transformer used to convert the high-impedance output signal of an electric guitar or bass to a low-impedance signal. This meant that the signal could be fed directly into the console, rather than via a microphone in front of the instrument's amplifier. With the guitar plugged into the transformer, however, there was no wire to go to its amplifier—thus the player couldn't hear himself. So the standard setup became a Y-connector, which let the musician plug into both amplifier and transformer. Then along came the "direct box," which took all of the features just mentioned, added a ground switch to reverse polarity when necessary (for hum reduction), and put the whole thing in a neat little box. It's a fine idea, and most studios have several. Sound people who work on stage have found them essential in eliminating feedback, since they can be substituted for microphones in many cases.

Tycobrahe's direct box offers a significant addition by incorporating a noise gate. Sometimes, in fact, the accumulation of hums, buzzes, and other eccentricities of electric instruments will render a signal useless for recording—not to mention annoying for stage use. The noise is most obvious between notes—say, while waiting out a four-bar rest. A noise gate closes the signal path from the instrument to the amplifier (or tape recorder) when little or no signal is passing through it. So, during that four-bar rest, the output from the instrument is reduced to a subaudible level. Some noise gates, however, tend to cut the signal off during its natural decay or make audible thumps when activated. Tycobrahe's noise-gate sensitivity control permits manual setting of the gate's threshold, which should eliminate those thumps. A direct box with a controllable noise gate is an excellent notion by anyone's standards. Frequency response is rated at 5 Hz to 50 kHz, input impedance at 330,000 ohms, output at 100 ohms, noise at -90 dBm. The unit may be powered by a 9-volt battery or optional PS-9 power supply. List price is $59.95.

Polyfusion Sound-A-Round. A couple of months ago, avant-garde vocalist Joan La Barbara came into my studio with a technical problem. She was planning to give a concert in Berlin and wanted to create a whirlwind sound effect by moving the sound all around the room. Looking back to the days when quad was "happening," I recalled the joys of the joystick. Simply stated, a joystick is a potentiometer, analogous to the balance control on your stereo or panpot on your console, except that it covers 360 degrees instead of 180 (or less). I explained to Joan that she would have to have a joystick and accompanying controls made for her concert.

Shortly after our conversation, the literature on the Polyfusion Sound-A-Round arrived. It is said to do everything that a conventional quad joystick does, with a few electronic extras. One line-level signal at its input can be panned to any point around or within a circle. In addition, the unit has a built-in voltage-controlled oscillator so that in the auto mode the oscillator controls the movement of the sound. Speed of movement is governed by varying the oscillator, via a front-panel control or an optional foot pedal. Depth determines how large in diameter the circles of sound will be. Four LEDs indicate direction and speed of movement, and the former can be reversed by another front-panel switch.

Of course, all these functions can be controlled manually as well. So, if you need a whirlwind, here's just the thing for you. Ping-Pong, swirling, creating moods... your imagination is the only limitation. Sound-A-Round is powered by 115 volts AC; suggested list price is $299.95.
Van Morrison makes another good album


There’s a lot riding on this album. It’s Van Morrison’s first in two years, a comeback of sorts from a time of relative obscurity, rumors, and general uncertainty about the man’s artistic, if not personal, future. The last couple of LPs before the hiatus were uneven in quality, giving rise to the suspicion among both musicians and fans that he might be through, in the same sense that so many other people think Dylan is through.

Van Morrison is aware of all this as his album’s title—“A Period of Transition”—proves. What a tentative, almost embarrassed, overcompensatingly straight, baldly unpoetic title from one whose previous works’ names rang in a way at once elemental and mythic: “Astral Weeks,” “Moondance,” “Tupelo Honey.” The pressure to reaffirm his strengths with this LP must have been cruelly intense. It does, in fact, deliver many of the things he’s good at and loved for—believable and individual white blues, a rich singing voice whose rawness magically expresses tenderness as defined through pain, and instrumental and vocal backing that is unerringly tight and right.

It seems churlish, then, to complain about an album this good that was made under the kind of circumstances we know produced it. But maybe that’s exactly the problem. Like Dylan, Ochs, Lou Reed, the Randy Newman of “Good Old Boys,” like seemingly all of our finest established rock songwriters, Van Morrison is afraid. One thing artists do when they fear their talents may be slipping is make safe albums. In my book, “New Morning” and “Planet Waves” were safe albums. “Northern Lights—Southern Cross” was a safe album. The last Who album was safe. I think “A Period of Transition” is better than any of those forgettable-to-abysmal efforts, but it’s still straight about what it is and what it isn’t. It is a solid record of Ray Charlesish blues, waltzing funk, and warm ballads in a familiar mold of which Van Morrison is the undisputed master. In other words, it’s a good album. But sometimes I think the thing I hate most in the world is good albums. They’re frustrating because they don’t allow you the conviction of healthy hate like pretentious, dishonest, or otherwise disastrous albums by major talents. But neither do they take you soaring to the heights their creators’ masterpieces can. They exist in limbo, and end up imprisoning you and your relationship with the artist.

Perhaps all of this will seem less mean-spirited if I explain what this album is not. What it is not is closely related to certain reservations I’ve harboring towards Morrison for some time. “A Period of Transition” is not what “Astral Weeks” (1968) was—an infinity-bound sheet of anguished yet lapidary poetry and yearning, which combined with its flowing music, was so total an experience that it transformed you. You felt your humanity enhanced just by having been exposed to it. The source of its power was a brilliant mixture of opposites. Morrison found images of eternal life in the sleep of death, perceptions of celestial purity in the grubbiest, sleaziest back streets, and a closeness to life’s sources in conditions that were blindly destructive yet subtly stated. This guy was feeling so much, and it was flowing through him and the delicate mechanism of his talents so naturally, that it was awesome for all concerned. His vocals on that record actually sounded humbled by their own power. Glints of that power had come through his previous output often, most notably in T.B. Sheets—a wrenching recitation of the repulsion and heartbreak felt by a person visiting a dying loved one in a tuberculosis ward. And yet previous to “Astral Weeks,” we had mainly thought of Van Morrison as simply a great rocker and author of classics like “Gloria” and...
Brown Eyed Girl

"Moondance" was the very different successor to "Astral Weeks," and consolidated his reputation as a writer/poet/performer of music that crossed all barriers. Even people who had grown out of or been uncomfortable with hard rock in the first place could take it seriously. Not to say the LP wasn't a classic, but it seldom broke through to the levels of emotion or poetry its predecessor achieved. In retrospect, "Moondance" may have been the beginning of his troubles. Most of the albums that followed were more or less imitations, though never as good; it seemed to me that in Domino (from "His Band & the Street Choir," 1971) Van Morrison effectively announced his retirement in much the same way Dylan did in Watching the River Flow. There ensued a series of I-love-my-wife-and-gee-we're-so-happy-laid-back-on-our-farm albums that were not all that different in spirit from those Dylan was making at the time. And as with Dylan, you had the distinct impression that it was a lie, certainly a copout.

There were intermittent attempts to recover the spirit of "Astral Weeks." One, "St. Dominic's Preview" (1972), had at least a couple of songs on it that could rank with his best work. But his poetry—with its images of the infinite in the elements, in stars and earth and sand and sea—was itself thinning out. By Side 2 of "Hard Nose the Highway" (1973), he had been reduced to prattling incessantly about falling leaves.

Whether dealing with his personal experiences and feelings or the world around him, the Van Morrison of recent years seemed to be losing his grasp on how to say what he wanted to say. In fact, he left the impression that he might not even know what he wanted to say any more. In short, and again like Dylan, an artist out of touch with his art and possibly himself.

I'm feeling a combination of euphoria and sadness, and maybe even a little shame. "A Period of Transition" has been coursing through my headphones as I've been writing this, and the music on it is all beautiful and gets more lovely with each hearing. One song in particular, The Eternal Kansas City, seems destined to enter the pantheon of Morrison masterpieces. But at the risk of seeming pompous or corny I would be dishonest if I didn't say that this album begs the question, and that the period of transition itself is just bidding time to buy time. It may be evil selfishness to expect pinacles like "Astral Weeks" to come more than once in any artist's lifetime. The only trouble is that once you've breathed the air up there, those steadily coursing mainstream waters just all seem to run downhill.

June 1977

Miles Davis: Water Babies. Teo Macero, producer. Columbia PC 34396, $6.98. Tape: PCT 34396, PCA 34396, $7.98.

Columbia is playing dumb about this release, but both the personnel and the style date it back to around 1967 or '68, one of Davis' most productive periods. The two groups represented here (Herbie Hancock, Tony Williams, Ron Carter, and Wayne Shorter on Side 1; Hancock, Williams, Carter, Shorter, Chick Corea, and Dave Holland on Side 2) surely have to be among the best of the many fine ensembles Davis has led over the last two or three decades.

Which leads us to the question of why Columbia has chosen to release a ten-year-old recording and without any particular explanation. The obvious answer is simply that they had it, so why not release it? In fact, they have a lot more. Teo Macero, Davis' longtime producer, once told me that he had hours of unreleased Davis material, most of it at least as good as what has been issued already, some of it much better. And, given the creative uncertainty that seems to have afflicted Davis' current work, it's not hard to understand Columbia's desire to run with already proven material.

The Davis, Hancock, et al, group was probably the premiere jazz group of the Sixties (with the possible exception of the Coltrane-Elvin Jones-Jimmy Garrison-McCoy Tyner bands). If it had a failing, it was Davis' reluctance to deal directly with the iconoclastic currents which were buffeting the jazz world in those years. Although he had players—Williams and Hancock, in particular—who were quite capable of playing out music, Davis managed to keep a tight, conservative rein on things.

To his credit, his efforts usually worked, even if the results were not always as topical as some of his critics might have liked them to be. The three shorter pieces on Side 1, Water Babies, Cupiecorn, and Sweet Pea, are superb examples of the final maturation of post-bebop jazz. Beautifully played, sometimes brilliantly improvised, they are virtual textbook examples of state-of-the-art modern jazz. Two Faced, on Side 2, obviously was recorded later than Side 1 and begins to show either the pre- or post-influence of the kind of musical thinking typical of Davis' "In a Silent Way." Dual Mr. Tidman Anthony is an early attempt at jazz/rock, and one that generally fails because of Williams' surprisingly clumsy drumming and an overall rhythm-ambivalence about what the hell is going on.

In sum, this is a fine collection of Miles Davis music, even if it is a bit out of sync, chronologically. Still, in lieu of whatever Miles's next stage is going to be (no doubt it will be every bit as vital and life-affirming as all of his previous ones), this will serve nicely. In fact, for one, will have no objection if Teo Macero and Columbia dip into their vaults for a few more unreleased gold nuggets from the Davis glory years.

D.H.


Since their formation by James Davis in 1928, the Dixie Hummingbirds have continued to be among the best and most influential gospel groups. For the uninitiated, you can hear them backing Paul Simon on several of his records, including Love Me like a Rock. Their own records have sold well enough through the years, at least by gospel music standards, but never near the level merited by their fine music. (Do you have to be a Catholic to appreciate a Lassus motet?) Rhythm-
metrical and especially vocally their close harmonies and fine lead singing, inspire in the broadest sense of the word.

It's surprising that Peacock, their label of many years, should take so long to present a program of the sextet at their finest—in live performance (at the Tabernacle Baptist Church in New Brunswick, New Jersey), before an enthusiastic audience. There are no surprises here as to personnel or content. James Walker, the "kid" of the group, has been with them since 1954. Founder Davis continues to lead the group, and their instrumental backing continues to be the lone guitar of Howard Carroll. Rhythm trappings are minimal—generally they use a Rhythm Ace, although it sounds like they sprung for a drummer and bassist for the album. (No performance credits—including the group's names—are listed anywhere.) The selections, nearly an hour's worth, range from a self-introduction in Who Are We through Swing Low, Sweet Chariot to Let's Go Out to the Programs, a series of imitations of other successful gospel groups.

I'm crazy about this album, and I urge anybody with the slightest interest in this music to give it a try. One caveat: Though the harmony singing is some of the best you'll ever hear, the lead vocals by Walker and the amazing Ira Tucker sometimes get pretty funky. This is not a compromise aimed at a wide crossover.

As lead singer for Genesis, Peter Gabriel wrote and sang elaborate melodramas ripe with allegorical schema and amplified by a vivid theatrical sense. As producer for Alice Cooper, Kiss, and enough other heavy metal bands to qualify for a degree in metallurgy, Bob Ezrin perfected a thundering style using caveman echo and synapse-melting distortion to heat up the attack of often-limited players while submerging their flaws. When Gabriel left Genesis, that band re-emerged with its delicacy intact but much of its bombast pared away:

Hunter, two heavy metal specialists, are featured guitarists, but both turn in versatile performances. Robert Fripp's guitar and a battery of keyboards and percussionists complete the band, and Gabriel and Ezrin used that varied lineup effectively, ranging from full-throttle rock arrangements to restrained solo work.

Peter Gabriel has clearly chosen to eschew theatrics in favor of music, a decision that has provided Bob Ezrin with a chance to display his intelligence and taste as a producer. The partnership is a promising one, based on their first collaboration.

T.E.

**Peter Gabriel**

Bob Ezrin, producer. Ato SD 36-147, $6.98. Tape ♦ CS 36-147, ♦ TP 36-147, $7.97.

As lead singer for Genesis, Peter Gabriel wrote and sang elaborate melodramas ripe with allegorical schema and amplified by a vivid theatrical sense. As producer for Alice Cooper, Kiss, and enough other heavy metal bands to qualify for a degree in metallurgy, Bob Ezrin perfected a thundering style using caveman echo and synapse-melting distortion to heat up the attack of often-limited players while submerging their flaws. When Gabriel left Genesis, that band re-emerged with its delicacy intact but much of its bombast pared away:

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**Peter Gabriel**—"eschewing theatrics"?

**Garland Jeffreys**

**Ghost Writer.** David Spinetta & Garland Jeffreys, producers. A&M SP 4629, $6.98. Tape: CS 4629, ♦ 8T 4629, $7.98.

Pop music may be the only art form flexible and synergetic enough to allow Garland Jeffreys to make some sort of aesthetic sense out of his bewildering background. His West Indian, Puerto Rican, white, and Brooklyn-born-American-black blood pulses through this, his first album in four years, flowing from sparse reggae to r&b to straight-ahead rock & roll to a Spanish serenade. Jeffreys and his superb band of New York's finest studio musicians have created an aural Family of Man.

"Ghost Writer" is not, however, simply a virtuoso exercise in eclecticism. Jeffreys probes each musical genre and his own relationship to it. Whereas the

**Garland Jeffreys**

**Modern Life,** he takes full advantage of a sturdy heavy-metal riff to launch a passionate vocal performance, which is in turn undercut by the wan ennui of the lyric ("Modern love can be a strain...")

Throughout, Ezrin's production sound is stunning, moving from the Wagnerian scale of ... *Dolce Vita* and ... Flood to the warmer, more intimate presence on other songs. Subsequent listeners, especially on headphones, reveal a wealth of careful instrumental details, hardly surprising in view of the session crew. Instead of a hard-rock rhythm section, Ezrin has used bassist Tony Levin and drummer Allan Schwartzberg—who have played everything from r&b to folk—for his bottom. Wagner and Steve Hunter, two heavy metal specialists, are featured guitarists, but both turn in versatile performances. Robert Fripp's guitar and a battery of keyboards and percussionists complete the band, and Gabriel and Ezrin used that varied lineup effectively, ranging from full-throttle rock arrangements to restrained solo work.

Peter Gabriel has clearly chosen to eschew theatrics in favor of music, a decision that has provided Bob Ezrin with a chance to display his intelligence and taste as a producer. The partnership is a promising one, based on their first collaboration.

**Peter Gabriel**—"eschewing theatrics"?
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political protest aspect of reggae is usually remote to American fans who know little (and could care less) about conditions in Jamaica, he brings it to bear on hussing, right here in the States. And his exploration of romance and regression South of the Border obliquely indicts the idle and often racist fantasies of so many white American performers.

As Jeffreys ponders his motley makeup and even shifts from one ethnic accent to another, his tough vocals never lose their distinct identity. He and his band know exactly what they're doing ("Ghost Writer" took only three weeks to record) and do it with polished authority. Co-producer David Spinnoza joins forces with the other guitarists to blaze sinuous trails through Jeffreys' compositions, and the album's ambitious conceptual reach never exceeds its firm musical grasp. In all, this is the most insightful and accomplished album to be released by a singer-songwriter since Joni Mitchell's "Hejira."


"I'll play guitar all night and day, just don't ask me to think." So swears Lofgren on the LP's opener. But the problem with "I Came to Dance" is that his usually muscular guitar playing is subdued, even anemic, and that maybe he's begun to think but not nearly enough. A gymnast in his youth, Lofgren has been poised on the brink of stardom for several years now, and previously his music achieved a balance between tender teenage romanticism and the make-believe snarl of a would-be tough. But age (Lofgren is now twenty-five) and, presumably, his own frustration at not yet attaining stellar success have under-

cut these poses, and he strikes them here more out of habit than conviction. His version of Keith Richard's "Happy" misses the fervor of Keith Don't Go, his earlier tribute to the Rolling Stones' guitarist. On other cuts Lofgren seems to grope for a new persona; significantly, he sometimes sings from other people's points of view—that of his father or a struggling musician's neglected wife. And while these are generally the most interesting tracks, it's clear that he hasn't yet broken through to a new identity. Too much of this album is empty attitudinizing.

Busy arrangements fail to conceal—indeed, they emphasize—Lofgren's uncertainty about his role. Horns and strings flank his guitar, which often sounds as if it were off in a corner filling and embellishing. His on-the-spot singing is drowned in a soup of backup vocals. And, worst of all, most of the songs lack impetus and direction. Lofgren has so few points, musical or lyrical, to drive home that many tracks never get past their cluttered production. On Goin' South, an insipid female chorus warbles "Follow your heart." Lofgren doesn't seem to know where his is leading.


It is a mystery to me why Charlie Mariano continues to be a virtually forgotten jazz man. His records surprise, delight, and startle, and his playing has grown and matured in the twenty-five years or so that he has been a prominent professional musician. Despite its title, his latest effort has nothing whatsoever to do with silent movies. (Twelve trees refers to the twelve people in the studio for the recording.) It is a remarkable collection of music by a group of musicians whose diverse origins remind us how international a music jazz has become. In addition to Mariano (who plays soprano and alto saxophones, flute, and nagaswaram—an Indian double-reed, oboe-like instrument), the group includes two Poles in keyboardist Jan Hammer and violinist Zbigniew Seifert, two Englishmen in drummer John Marshall and bassist Jack Bruce, and Japanese percu-
sionist Nippy Noya.

Mariano clearly is the catalyst. No matter what instrument he plays, it is his energy and drive that makes a mixed bag of seven different compositions come together as a recording. Particularly interesting are two duets, Sleep My Love and Charlotte. In the first, Mariano plays flute with Seifert's violin. The interaction—it is not clear how much is improvisational, how much composed—combines the life and vitality of an impromptu jam session with the organic movement of a Bartók duo. Charlotte, with Mariano on soprano sax and Hammer on acoustic piano, bristles with a different, but just as exciting, energy.

Mariano's nagaswaram playing on Parvati's Dance also deserves mention. The instrument is fiendishly difficult to work with, and it simply doesn't lend itself to jazz articulation and phrasing. But none of these problems either deter or hinder Mariano, who succeeds in creating a rare and truthful synthesis of the elements of jazz and Karnatic music. Other pieces are struck from a contemporary mold, bubbling over with frisky percussion sounds, criss-crossing rhythms, and the occasional swoop of a synthesizer. Hammer's Thorn of a White Rose is a particularly fine example, but the general creative level in virtually every part of the recording is so high that it's difficult to praise one selection above another.

I'd call this a necessary recording for anyone who wants to get a fix on contemporary jazz. Mariano deserves the attention, sure, but the real point is that his music should be widely heard. "Helen 12 Trees" is a fine place to start.


The romanticism that Elliott Murphy's staunch defenders applaud sounds to me like mere nostalgia, but Murphy is still a fascinating—though frustrating—figure. He combines an idiosyncratic sensibility with a musical imagination that is banal in the extreme. His songs usually sound like someone else's (Dylan, Lou Reed, Springsteen) even as their lyrics describe a world of upper-middle-class angst that is, within the context of pop music, uniquely Murphy's.

"He could write a book." is the theme.

Continued on page 127
As far back as 1945, Ortofon was making the cutterheads used throughout the world to cut the grooves in master phonograph records. But the phono playback cartridges then available could not put our cutterheads to the test for sensitivity and capacity.

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Brazilian popular music, a superlative Afro-Indo-Portuguese amalgam of shifting, glancing melodies and joyously sophisticated percussion, has been an intermittent part of the U.S. music scene’s exotic fringe since the mid-nineteenth century. Ghosts of its rhythms, left over from the ‘40s-samba and ‘60s-bossa nova eras, still haunt our stuffier dances and classier supermarkets. Unfortunately, the schmucks who think you and I can’t digest anything solid have always foisted a kind of musical wheatena on us in-between times, enfeebling its greatest glory—the contrast between liquid melodies and strong but lilting percussion.

Now, once again, the Good News: signs that it may be third time around for Rio, U.S.A. A Brazilian fringe has been sneaking back into jazz ever since Miles Davis hired percussionist Airto for his “Bitches Brew” album in 1968. Brazilian percussionists have been popping up all over—Airto with both Davis and Chick Corea, Guilherme Franco with Keith Jarrett and McCoy Tyner, Portinho with Gato Barbieri, and Paulinho da Costa with Dizzy Gillespie.

Within the past few months, those early birds have been followed by a sudden summer’s worth of swallows. That bellwether of Latin hyphenations, Santana, included two strongly Brazilian tracks on his latest album, “Festival.” An authentically new sound provided by the cuica—an excitable instrument named for its rhythmic squeaky-squeak—has recently enlivened such disco-oriented numbers as Ralph MacDonald’s “The Only Time You Say You Love Me,” and Bill Summers’ “Brazilian Skies.” Michael Franks’s latest “Sleeping Gypsy” includes a track in homage to Antonio Carlos Jobim, and a couple recorded in Brazil with some native musicians, though they all seem to be following a trend rather than doing anything interesting.

Dizzy Gillespie’s latest album, “Dizzy’s Party,” shows how well fringe-Brazilianisms can work when the musician knows what he’s doing (Gillespie has been exploring jazz-Latin fusions for almost forty years). Both its title track and “Harlem Samba” use part-funk, part-samba rhythms whose Brazilian elements remain strong and avoid the cocktail/jazz garnish to which Latin rhythms are often reduced.

At the heart of all this activity is a crop of recordings by Brazilians. Jorge Ben is one of that country’s leading singers, and a major composer from the bossa-nova era (he wrote “Mas Que Nada”). Percussionist Airto, singer Milton Nascimento, and keyboardist Hermeto Pascoal share an avant-garde popularism and a tendency to appear with each other (e.g. “Slaves Mass”). None plays “Brazilian” music in any restrictively ethnic sense—though their strong combination of eclecticism and roots is typical of Brazil’s highly experimental outlook. Their...
Introducing the Avid 101.
A rational solution to the problems of
2-way speaker design.

Designing a reasonably priced 2-way speaker system has always had its problems. One of the most perplexing of which has been engineering a speaker system with both well-dispersed midrange and really extended bass.

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A rational solution.
The Avid 101 overcomes the traditional bass versus midrange dilemma through an unusual combination of a large vented enclosure and a specially engineered 8 inch woofer.

Unlike conventional vented designs, the Avid 101’s vented enclosure is used to extend the bass response of the system, rather than to increase the efficiency. This unique design (essentially a 4th order Chebychev filter alignment) achieves really extended bass—down 3 dB at 30 Hz—while the use of an 8 inch woofer insures a smooth, well dispersed midrange up to its 2500 Hz crossover point.

Of course, no ordinary 8” woofer could do the job. It took us over a year to perfect the woofer design and it’s quite unique. For example, it utilizes an unusually large magnetic structure and a specially developed rubber-edged core of almost twice the weight and stiffness typically used.

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Things just wouldn’t be complete if we didn’t give the 101 a high-end performance that was every bit as good.

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The right choice for most listeners.

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bums all make use of the popular street-sound, as well as the African and Portuguese ends of the ethnic spectrum: but they also contain strong rock and jazz elements, some English lyrics, a liking for experimentation, and occasional lapses into tiresome artiness.

Pascoal is by far the most experimental of them all. Though it has moments of avant-gardist silliness, "Slaves Mass" is creatively exciting in its mix of tape sounds (from human heartbeats to speeded-up chatter) with expressionism, and Pascoal's own excellent keyboard work. Nascimento, Airto, and Ben all blend rock and Brazilian rhythms and solos, with a good deal of success, besides letting their hair down on several traditional street-popular numbers. Airto also lets his eccentric sense of humor loose on 'Candango,' a zany vo-de-o-do number with guitar out of the blues end of r&b. Ben is a master of casually beguiling Brazilian singing style, and his "Milton" has fine solos from trombonist Raul de Souza, saxist Wayne Shorter, and Herbie Hancock on (acoustic) piano. Paulinho da Costa's "Agora" is quite another kettle of drums, heavy into Latin jazz, Brazilian style, with interweaving brass riffs like rolling tides, good brass and sax solos, and—in Bello—an unusually effective jazz/Latin/disco feel. Like Airto, da Costa gives the full Afro-Brazilian percussion sound its head on several tracks, notably a long reminiscence of Rio's samba schools, "Ritmo Number One.""One reason the U.S. Brazilian crazes in the '40s and '60s faded so fast was the absence of a base of authenticity to counteract 'wheatenaism, such as the Latin communities provide now in salsa. The presence in our midst of a nest of really influential Brazilians may provide that authenticity for the third return of the Rio Thing. Meanwhile, enjoy!;.)


Jorge Ben: Tropical. Robin Jeffrey Cable, producer. Island SLPS 9390, $6.98. Tape: ZC1 9390, Y81 9390, $7.98.


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Where can you find: Europe's largest waterfalls? Europe's blondest blondes? Europe's highest geysers? Europe's greatest glaciers?

And where can you find moonlike craters where the astronauts trained? Where can you find: Europe's tallest, tallest? Europe's highest geysers? Europe's greatest glaciers?

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Jorge Ben: Tropical. Robin Jeffrey Cable, producer. Island SLPS 9390, $6.98. Tape: ZC1 9390, Y81 9390, $7.98.


The most striking cut on this, his fourth LP, is a lament for the Princess Anastasia, but it never quite transcends the kitsch of its boy soprano backup choir. And the rockers cry out for a crack rhythm section and a lead guitarist whose playing is less perfunctory than Murphy's.

The feeling in his music is further enervated by an acute self-consciousness he criticizes ("You think too hard/You feel too little") but cannot overcome, and by the second-hand nature of some of his ideas. A trite allusion to Gone with the Wind reduces an initially convincing love song like Darling (And She Called Me) to a well-worded cliche. Murphy can be moving when his images seem generated by his own experience, as on Summer House and Let Go, but most of this album is spiritless.

Continued from page 122

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Flora Purim: Nothing Will Be as It Was

... Tomorrow, Leon "Ndugu" Chancier, producer. Warner Bros. BS 2985, $6.98. Tape: M5 2985, M8 2985, $7.97.

Flora Purim's rise to prominence as a "jazz singer" (she has won most of the major polls lately) tells us more about the decline of the style than it does about her qualities as a performer. Listening to this newest release, one is hard put to understand just why she is called a "jazz singer" at all.

That she is a gifted performer is beyond question. Of all the Latin American singers who have arrived on these shores in the last decade and a half, she is certainly the best—light years beyond the ethereal fumbling of her predecessor, Astrud Gilberto. But like Ms. Gilberto, Antonio Carlos Jobim, João Gilberto, etc., Ms. Purim confronts American music—and, specifically, American jazz-based music—with a couple of distinct and interrelated handicaps. First, the mechanics of Brazilian style involve dips, swoops, and misplaced accents that either sound out of tune or erratic when applied to the rhythms and articulations of American jazz. And second, heavily accented English is both a distraction and—when it messes up the logical accents in a sung phrase—an irritation. (It's no accident that English rock singers generally try to use something close to a Southern accent when they perform.)

One track here, Corre Niña, is so superior to the others that it might as well have been made by a different performer. And that's because it is the only song Ms. Purim sings in Spanish and the only one with a Latin backup group. Ironically, it is also the only track which can claim any of the intensity, the fire and the bright improvisational spirit of jazz. The singer's problem lies in the comparison to the erratic language, awkward phrasing, and the too-slick studio production sound of the other tracks. They make Corre Niña gleam like a diamond in a pool of rhinestones.

And that, in turn, tells us something about Ms. Purim's real skills. Performing in her own idiom she confirms the fact that jazz is a genuinely international music, and one which is receptive to creative variation from other cultural influences. In short, when Flora Purim sings a form of jazz which is a natural extension of her abilities and her experience, she is a fine performer. It's when she tries to deal with a style that is beyond her view that she has problems. D.H.


Over the course of previous albums and performances, Bonnie Raitt has politely warned us not to expect any sudden, bold pop breakthroughs. Her early work as a blues and folk stylist established the central qualities of her singing and song sense that have remained fairly constant, despite shifts in production and arranging. Her sixth album respects that constancy while offering some intriguing new commercial wrinkles. There are slashing hard rock rhythm guitars (on Gambin' Man) and atmospheric, cyclical string arrangements (on Jackson Browne's Opening Farewell) that may tempt her boosters to make a concerted chart assault, but the real strengths that surface after repeated plays are already familiar to Raitt's admirers.

Actually, "Sweet Forgiveness" represents a slight return to her earliest records, which emphasized a sometimes ragged but always appealing spontaneity.
Carole Bayer Sager—
So Much Is So Right

First steps are awkward and uneven: debut albums are usually the same. But Carole Bayer Sager may have been born a long-distance runner. Of course, she's not a fledgling—despite the husky, ugly-duckling voice. She's been writing lyrics for years and for almost everyone: Bette Midler, Johnny Mathis, Leo Sayer (When I Need You), Melissa Manchester (Midnight Blue). And the composers she's joined forces with on her first album—Manchester, Hamlish, and more—are pros. Still, "Carole Bayer Sager" has the kind of musical identity that eludes even more experienced artists.

The writing is fluent and often playful in a manner reminiscent of Broadway's Golden Age. She weaves delicate puns through outright sentiment and deftly skims a metaphor across an entire verse:

It's hard to make friends/
When they all become
Scratches in my phonebook/
So many lines are disconnected.
All my lines ring/
But some of them ring truer.
Friends can be found/
Through a song when I sing.**

But Sager's words are not her only strength as a lyricist. More important is the way in which they fall together to shape the music. The ten cuts are the work of six different composers, yet all but one (a disco fiasco entitled Don't Wish Too Hard) sound like the product of a single songwriter. Her rhythms of conversation and internal rhymes lead melodies into characteristic patterns. Simple short-lined verses are set off by artful embellishments. A phrase serves as a turnaround; the final line of a stanza is doubled in length.

In spite of the elegance of her material, the lady is no cool, forbidding debutante. Indeed, her voice is the perfect foil for her lyrics: rough-edged where they are smooth and formal, vulnerable where they are sophisticated. Like Carole King's, Sager's half whispers and brave attempts at high notes call attention to the feelings kept so tightly under control in the songs themselves. Unfortunately, her quavers are sometimes smothered in strings and sleek male backups, obscuring that all-important dramatic tension between singer and song. Indeed, with so much so right, the brazen overproduction that mars "Carole Bayer Sager" seems criminal. No one over the age of five needs the choruses of hearty laughter (shades of I Am the Walrus) to appreciate the humor of You're Moving out Today. And the screaming guitar solo that erupts in the midst of the melancholy Sweet Alibis has the artistic impact of an alarm clock. The album's real flaw is its failure to rely on Carole Sager's extraordinary ability to sell herself. Nevertheless, it's going to take more than clumsy arrangements to trip up a talent as sure as this one. A.S.

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HIGH FIDELITY MAGAZINE

128
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Even better, visit a Bose dealer and ask him to play the 901 Series III in comparison to any other speaker—regardless of size or price. That should tell you everything you need to know.

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R&B

BY JOHN STORM ROBERTS


If you don't know black congregational music, check out God Is Watching You—not a bad evocation of what Old Time Religion still has to offer any Sunday night in the storefronts. And Little Bit of Love is Bob Marley-Bobby Bland-derived, with a touch of country in the guitar. In other words, this is another good, use-all-the-roots group—young, hungry, and having fun. There's a swing, punch, and joie de vivre here to which half of the chart-bound heavies can't even come close.


I'm glad I caught theirs. Zesty group singing with all sorts of pleasing touches in the arrangements. Right-on lead vocals, good humor, and great vibes. The prevalent gospel/funk mixture, but not merely As Before. Above all, they sound simple and relaxed. Big time when too many singers are just another set of pipes. Pity he sings falsetto so remorselessly that the frame ends up better than the picture. Still, it's all immaculate, though it does lack a little something. Conviction, maybe.


Aside from having a damned long-winded title writer, this man's a real craftsman. His skilled and tasteful arrangements make top-o'-the-chart formulae just memorable enough to stand out. Pity he sings falsetto so remorselessly that the frame ends up better than the picture. Still, it's all immaculate, though it does lack a little something. Conviction, maybe.


The Black New Wave seems hot for eclecticism run riot, with all sorts of strange goings-on held together by a mean funk/pump rhythm section. Slave isn't all-fired maniacal as Parliament, but builds its own sound with a similar blend of parody, punch, almost-standard R&B brass with a faintly sinister twist, and the bonus of lead guitar braced between Hendrix and Santana. But fella's, lay off Frankenstein, will you? It's getting to be like whitey's Star-Trek rock-teresome.


The Ohio Players man the crossroads of church soul, hard funk, and the New Weirdly with cool craft. The result is occasionally overly laid back, but mostly both soft and strong. Not particularly "original," but individual in detail and effect.


Some folks got merit, some folks got press coverage. Some folks got both, and here's one of them. Though this is standard gospel/soul in material and style, Pendergrass does it beautifully. It's the crucial little things that count—less the gravel-and-honey, dip-and-soar voice than the shifting, easy cross-rhythms of his phrasing. Even though he's weighted down with here-we-go-again arrangements and rentagroup backup vocals, eat your heart out, Harold Melvin!


Too many super-range singers keep taking off for the chandelier just to show they can. Luckily, this one spends most of her time at ground level, and the results are pretty nice.

Aretha she ain't, but Minnie she is—and that's a plus at a time when too many singers are just another set of pipes.


Oh yes. Despite the hyped-up CBS arrangers' school appurtenances and a couple of crummy numbers, oh yes, indeed! Who ever thought up the album title was full of it, since Ms. Shaw sang with Count Basie before, and the results are pretty nice. She's got the jazz sophistication of phrasing and tone, plenty of r&b drive, and even a soupcon of the wit that black music has lost somewhere along the way.


The real thing comes in more than one flavor. Simon's heavy voice is out of a tradition that produced both the Kansas City shouters like Joe Turner and the southern r&b men like O.V. Wright. And the man sings like he knows what the lyrics mean. No world-shaker—the material is only fair, for one thing, but a square meal of an album in a world of Muzakburgers to go.
Come and sit inside a song.

Your favorite tapes and records are loaded with intricacies of sound that most speakers don't let you in on. But the Koss HV/1LC's deliver your song the way the musicians played it. All the delicious touches of musical perfection unfold around you, putting you deep inside the tune. Taking you to a place where the honey-smooth power of the lead singer's voice is in delicate balance with the instruments and back-up chorus. So that you're presented with every colorful spark of talent, from all angles—the way you'd hear it if you were standing in just the right spot on stage. And Koss HV/1LC's deliver all ten audible octaves, brining you every ounce of everything from the low down throb of the bass, to the up-sweeping highs of the violin section.

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by featuring friends and band members rather than the expert session players that dominated her later work. Like its predecessor, "Home Plate," the new album was produced by veteran folk, blues, and pop producer Paul Rothchild, and continues that album's sleek pop finish and tough, spirited playing. But this time the emphasis is primarily on Bonnie's own excellent stage band, yielding a grittier, more spontaneous feel consistent with her live shows.

More obvious is a renewed emphasis on the blues vocal styles that were an early Raitt hallmark. She has always balanced her repertoire to include gentle ballads that display her delicate, even girlish upper register; recent albums have witnessed a straighter pop approach to such songs, but here the most lyrical, pop-styled material is given an even tougher punch. That occasional frailty in her top end is gone, replaced by a more flexible, resilient attack that is a woman's, not a girl's. When she uses that instrument to frame faster, blues-based songs like "Three Time Loser" and Del Shannon's vintage '60s rocker, "Runaway," she achieves a stunning mix of the singer's toughness and the loser's pain. Inviting comparison with R&B stylists like Ann Peebles and Aretha Franklin instead of the pop and rock singers Raitt is normally compared to.

The choice of material is familiar and underscores the premium that she and her band place on the currency and consistency of her work. In addition to songs from past Raitt contributors like Jackson Browne, Eric Kaz, Little Feat's Bill Payne, Paul Siebel, and Mark Jordan, there's a successful new interpretation of "Runaway" that is charged with wiry Memphis R&B guitar and a squeezing harmonica solo that straddle rock and blues comfortably. That hard rock savvy, which also powers Kaz's "Gamblin' Man," is counterpointed by spare folk settings for Siebel's classic elegy, "Louise," and Karla Bonoff's "Home," either of which could have fit seamlessly into Bonnie's earliest records.

Summarizing Raitt's current stylistic mix are the album's more fully developed pop ballads, Jordan's excellent "Two Lives." Payne's "Taking My Time," opening "Farewell," and Daniel Moore's title song. On each, a lush romantic fullness is achieved with vocal harmonies and richly detailed arrangements, yet Raitt's own lilting singing and the slinky blues lines her guitarists favor are used to offset any bathos. "Two Lives" is perhaps the best example, capped by a swelling chorus that reveals a series of striking pop/gospel counter-melodies just beneath the moving lead vocal. Both here and on the title song, Raitt cuts loose on the fade, soaring into her upper register and roughing up the lyric to insert propulsive r&B syncopations, yet sustaining a warm timbre that is totally lyrical. S.S.

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Jim Robinson: Economy Hall Breakdown. Sonny Faggart, producer. Pearl 5, $6.98.

Even though this disc was recorded in Preservation Hall in New Orleans, it is not quite the customary vintage New Orleans jazz. Of the six men in the band, only trombonist Jim Robinson and Allen Jaffe, owner of the Hall and resident tuba player in the Preservation Hall Jazz Band, are drawn from the Hall's regular cast of characters. The remaining odd assortment of players gives this collection its special flavor and sets it apart from the innumerable other de luxe New Orleans jazz LPs of recent years. Trumpeter Johnny Wiggs, a leading light of white jazz activity in that city during the Twenties, plays a crisp, cracking trumpet, with frequent use of muting—which is quite different from the big, brassy, open horn sound of such Preservation Hall regulars as Percy Humphrey and Kid Thomas. Raymond Burke, the bookkeeper of Bourbon Street, has a clarinet style that is his own idiosyncracy—a blend of low-register New Orleans mellow as in Barney Bigard's playing, with an eccentric manner of phrasing somewhat similar to Pee Wee Russell's. Bob Greene, the Jelly Roll Morton specialist, adds Morton's distinctive piano approach with trills, breaks, and his own Spanish tinge. And although drummer: Yoichi Kimura is in the solid, steady rolling tradition of Zutty Singleton and Cie Frazier, the fact that he is Japanese adds an exotic touch.

The LP has some provocative moments, particularly on a lively "Economy Hall Breakdown" into which Wiggs incorporates King Oliver's "Dipper Mouth Blues" solo. Morton's "2:19 Blues" features an elegant Wiggs lead; and on "St. Peter Street Breakdown," a slow blues. Greene takes an idiomatc Morton solo. Jim Robinson, the greatest of the latter-day New Orleans trombonists, is consistently commanding, full-bodied, and genially positive in his gruff, swaggering statements, and Burke has a leprechaun charm. But despite its differences from the norm, this band, like others of its ilk, eventually becomes a victim of formula. By the end of the side, what had been fresh and invigorating on Side 1 has worn thin from repetition. J.S.W.

Phil Spector's Greatest Hits. Phil Spector, producer. Warner/Spector 2SP 9104, $9.98 (two discs). Tape: ** 2SP9104, ** 2SP9104, ** 2SP9104, $11.97.

Spector, the self-styled creator of "Tomorrow's Sound Today" in the early Sixties, is just about the only record producer with the right, ability, or nerve to assemble a collection of singles and reissue them under his own name. Which is fitting, for this is the man who not only claims to have invented the term "producer" as it applies to recordings, but was among the first to place that role above the individual performer's. Indeed, his name is better known than those of many of his acts.

The twenty-four selections gathered here are legitimate hits ranging from 1958 with the Teddy Bears' "To Know Him Is to Love Him" (which Spector also wrote and sang on) to 1969 with Sonny Charles & the Checkmates' "Black Pearl." Most of the artists represented here lasted no longer than their association with the man Tom Wolfe characterized as "the teen tycoon of pop." (Did you ever wonder whatever happened to Curtis Lee after "Pretty Little Angel Eyes" and Under the Moon of Love, the Paris Sisters after "I Love You How You Love Me," the...
Checkmates, the Crystals, the Ronettes, Bob B. Soxx & the Blue Jeans, or Darlene Love?) But many of them have enjoyed healthy careers as hitmakers: Ben E. King (Spanish Harlem), Gene Pitney (Every Breath I Take), Ike & Tina Turner (River Deep—Mountain High), and the Righteous Brothers (You’ve Lost That Linn’ Feeling).

Spector dominated his sessions. He preferred to work with exceptionally strong-voiced singers whose own artistic temperaments wouldn’t conflict with his own. He hired talented arrangers and musicians but left little room for their creative impulses. He tended to use the same crew of songwriters (Greenwich/Barry, Goffin/King), often writing with them and always knowing that he could depend on their coming up with what he wanted.

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“What he wanted” he once described as “little symphonies for the kids.” A Spector record was a three-and-a-half minute chunk of real life, drawn from the street and placed on plastic. His protagonist was a teenaged, lower-class/urban street urchin, misunderstood by his elders and determined to make something of himself. This sentiment and story line was applied to a Wagnerian backdrop, often described as a wall of dubbing of strings, keyboards, and percussion to give the illusion of a huge orchestra and chorus. Earlier discs, like the Paris Sisters, the Teddy Bears, and Curtis Lee, were exceptions to this technique though strong in their own way.

Most of Spector’s recordings have been out of print in this country for years, making this album valuable for seekers of his famous oldies. Serious-minded recollectors will find some of the

Continued on page 136
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oddball inclusions here typical of his projects: an alternate take of the Crystals' 'He's Sure the Boy I Love' and an odd selection of mono and stereo mixes. Spector constantly preaches 'back to mono,' but some of the selections here—including that mentioned above, originally issued in mono—are in true stereo; others previously available in stereo, like the Righteous Brothers' and Ronettes' cuts, are here in mono. Ken Barnes's liner notes are thorough, and the cover art is excellent.


Now that Jimmy's in the White House and 'We Ain't Trash No More!,' as proclaimed in a recent Esquire article, it will be interesting to see what (if any) influence the new cultural hot center will have on the sounds and demeanors of the Southern bands following in the Allmans' wake. As the most unreconstructed of American rock traditionalists, these groups change little if at all from album to album; but a big part of the Allmans' legacy was the outlaw stance, and it's pretty hard to make like Jesse James when—like Marshall Tucker—you play the Inaugural.

A partial answer might be found in one of Toy Caldwell's lyrics on the new Tucker album. "Well I'm ridin' along, singing that same ol' cowboy song/That's been sung a hundred times before/But I'm livin', I'm happy, and I'm free."

Okay, y'all. Sentiments like that might alternately be taken as:

(a) I-got-plenty-o'-nuttin' rustic wisdom;

(b) a declaration of oafish laziness ("Who cares about sociological contradictions. I'm drunk!"); or

(c) outright deceit inasmuch as he is playing the same old song, but no part of a political machine (as Caldwell most certainly is) should be able to see the world in terms this simple.

I believe that he does, though, and have always found in the Marshall Tucker Band's work the down-home sincerity advertised. Ever the most sanguinely country-oriented of Capricorn groups, they still get my vote as the band worthiest of stepping into the Allmans' boot tracks. They don't have the parent group's poetry, anguish, gritty edge—but they play with a ripplingly lyrical flow that I've always found irresistible in spite of nigh-total predictability. Their first album, "The Marshall Tucker Band," is still their best, and if you liked the formula in the first place you'll find this one more consistently satisfying than those in-between.

Sea Level, featuring Allman vets Chuck Leavell (keyboards), bassist Lamar Williams and drummer Jai Johanny Johanson, as well as a young guitarist from Washington D.C. named Jimmy Nalls, is the first splinter band formed since the Allmans' breakup. Their sound combines funk readymades, Mahavishnu fusion riffing (one way of disclaiming bumpkinism, I suppose), and patented Allman instrumental breaks. The singing is better than you'd expect, the Allman influence manages to temper (presumably) Nalls's more febrile tendencies, and Leavell's piano playing is as pretty yet limited as ever. They'd be nice in a bar, but as major league contenders their rock-oriented originals are just too slight; they're not really playing jazz either. Because there's a crucial difference between improvisation and riffing. Still, as bands making this kind of music go, they're buoyant, refreshingly unpretentious, and therefore a veritable Rippley's Believe It or Not candidate simply for not being lethally offensive. A good time was obviously had by all making this record, and I can't think of a better buy in wallpaper this year.

L.B.
BACKSTAGE PASSES: ROCK 'N' ROLL LIFE IN THE SIXTIES. By Al Kooper with Ben Edmonds. Stein and Day Publishers, 254 pages, $12.95 cloth, $7.95 paper.

An editor at a major New York publishing house recently told me that rock books aren't selling any more. I can see why. After such major critical works as Greil Marcus' Mystery Train, historical reference books like The Rolling Stone Illustrated History of Rock & Roll, and perceptive looks at touring and the recording industry by Robert Greenfield in S.T.P. and Geoffrey Stokes in Star-making Machinery, there isn't a whole lot left to tell. One would think the potential readership's curiosity would be exhausted.

Al Kooper was hardly a household word in his prime as a performer. I have followed his career closely, but was frankly surprised to hear that he was writing an autobiography. The sessions he played with Bob Dylan have been covered before, his output in the last five years has been terrible to mediocre, and considered by many an also-ran. Still, Kooper's life of-the-moment aspect of the generation's music. It was Louis Armstrong in the '20s and '30s, Charlie Parker in the '40s and '50s, and John Coltrane's second wife, Alice, is an accomplished performing student of Coltrane. And while the two elements are presented in a strangely split manner. Some of it, though when she first played piano with him she was Alice McLeod. Similarly, the principal strands that weave through the book. And while the two elements may seem disparate at first, in Coltrane's later years the one became inextricably involved with the other.

Coltrane's religious feelings through lengthy quotations from Professor Fela Sowande, the Nigerian composer and folklorist. But the statements apply less to Coltrane than to an explanation of his religious heritage. This and his music are the principal strands that weave through the book. And while the two elements may seem disparate at first, in Coltrane's later years the one became inextricably involved with the other.

COLE has done a painstaking job of analyzing the recordings, looking at them almost phrase by phrase (with the help of Andrew White's transcriptions). But his subject's life and development are presented in a strangely split manner. Some of it is extremely personal. Cole recalls his reactions to Coltrane when he first heard him play in 1955. But they did not meet until 1961 and, even afterward he has a similar story to tell, and many of them (Carole King, for instance) would have a similar story to tell, and many of them (Carole King, for instance) would presumably deliver it with more candor, color, and insight. Kooper's life-of-the-party narrative style ("Every night after the other clubs closed, jam sessions with personnel that would make your stars hand on end took place until de sun came up.") attempts to cloak events in a significance they don't merit. In fact, the book's main virtue is the photographs (including some of Alice Ochs's best Dylan in-group shots), most of which have never appeared in print before. The breathless prose, hideously inflationary price, and non-story mark Backstage Passes as a strong contender for early re-maindering.


It seems to happen every twenty years—a jazz musician comes along whose influence is so pervasive that it colors every aspect of the generation's music. It was Louis Armstrong in the '20s and '30s. Charlie Parker in the '40s and '50s. and, over the last two decades, John Coltrane. In a way, Coltrane signifies what Parker might have been. Not that Parker didn't leave an impressive heritage. But the burden of drug addiction and alcoholism, carried by both musicians, drained and destroyed him. Coltrane, on the other hand, turned himself around, got clean, found a sense of discipline in his profoundly religious nature and, in the process, reached his highest creative levels. What, one wonders, might Parker have done if he had achieved as drastic a change in his life style?

Coltrane's story, unlike Parker's, is upbeat and inspirational—a potential guiding light. He was author Cole's second jazz idol (Cole's first was Miles Davis, about whom he has already written a book), and is treated with an admiration that verges on adoration. Unusually strong attention is given to Coltrane's religious feelings through lengthy quotations from Professor Fela Sowande, the Nigerian composer and folklorist. But the statements apply less to Coltrane than to an explanation of his religious heritage. This and his music are the principal strands that weave through the book. And while the two elements may seem disparate at first, in Coltrane's later years the one became inextricably involved with the other.

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The author has an easy narrative style and enthusiastically rushes along, lingering on points that interest him and—unfortunately—all but dismissing those that don't. He inclines to casualness in his assumption that the reader knows the un-mentioned—a fault that either he or his editors could have corrected. For example, Coltrane's second wife, Alice, is introduced only by her first name, although when she first played piano with him she was Alice McLeod. Similarly, Cole alludes to "all the pros and cons about [Coltrane's] music with Johnny Hartman" without mentioning what those pros and cons were. His discussion of Coltrane's death consists of a fifteen-line paragraph, three lines of which are devoted to Coltrane and the remainder to what Cole and his wife, newlyweds on their honeymoon, did on that day. This personal point of view admittedly has its merits, but in sum the book tells us almost as much about Cole as it does about John Coltrane.

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3. Sony's 3-head system offers the most precise tape/head alignment possible. All three heads are made of ferrite and ferrite—a super-strong formulation that lasts up to 200 times longer than standard perm-alloy. Head surfaces are mirror-smooth for friction-free tape travel and optimum tape/head contact. Incredibly close tolerances in the head gap assure widest frequency response.

4. **Direct coupling of playback head with the FET first-stage reproduction amplifier significantly reduces distortion, improves signal/noise ratio and frequency response linearity.**

Also available: The Sony EL-5 Stereo Elcaset Deck includes many of the same high-performance features of the Sony EL-7 at a lower price.

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*Memory tape counter provides automatic sequential rewind and playback immediately after recording from a specific spot on the tape.*

*Timer activating capability, in conjunction with an external timer, turns on/off playback or record mode unattended.*

*Illuminated "feather-touch" solenoid operation. Logic-controlled system allows instantaneous mode change, bypassing stop.*

*A r-cushion eject slowly opens tape compartment door, thus minimizing wear on eject system.*

*Dolby Noise Reduction System includes 25 \mu\text{S} de-emphasis circuit for Dolby FM, as well as controls for standard Dolby applications.*
THE INTEGRATED DC AMPLIFIER HAS ARRIVED.

Gone is phase distortion. Gone is time-delay distortion.
The Kenwood KA-9100 integrated DC amplifier is here.

Its response is flat down to 0 Hz. It has three power supplies. The Total Harmonic Distortion is 0.03% over the full frequency range of 20-20k Hz. The Signal-to-Noise ratio is 83 dB at 2.5 mV. It has the best phono sensitivity (0.8 mV) of any integrated amplifier. For better heat dissipation, the KA-9100 has large heat sinks on either side.

It is an amplifier so advanced even the pre-amp has its own power supply. It is the next generation Kenwood. The unit all others will be measured against. Just as they were when we pioneered dual power supplies.

The KA-9100 integrated DC amplifier. With 90 watts per channel, minimum RMS, at 8 ohms from 20 to 20,000 Hz with no more than 0.03% Total Harmonic Distortion.

And, as if all that wasn't enough, it costs less than $500.*

KENWOOD

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*Circles 30 on Reader Service Card for more information.