

Ridge (1974) was a disappointment by comparison. By 1975 Oldfield had returned to form with *Ommadawn*, an elaborate album of instrumental timbres featuring Celtic harp and bodhran, Greek bouzouki, synthesizers, Northumbrian pipes and African drumming. As with *Tubular Bells*, *Ommadawn* featured Sally Oldfield on backing vocals but expanded the contributors to timpani, brass, strings and the sound of uilleann pipes courtesy of The Chieftains' Paddy Moloney. Even Oldfield's brother Terry played the pan pipes. The African drummers of Jabula came into their own on the drifting finale of the nineteen-minute 'Part One'. They would be heard again on Oldfield's 1978 double-album *Incantations*. By 1984 Oldfield was making great folk-rock songs with Maggie Reilly such as 'To France' and that year he also scored Roland Joffé's award-winning film *The Killing Fields*. Yet his first success would not go away and in 1992 Warner Bros. encouraged him to record *Tubular Bells 2* using modern digital techniques. Even The Orb acknowledged Oldfield's importance by remixing part of this. While living in Ibiza, Oldfield was inspired by rave culture to record the beat-oriented *Tubular Bells 3* (WEA 1998).

LISTENING

During the faddish 1970s the original *Tubular Bells* was even remixed for quadraphonic listening. The analogue CD issue from the late 1980s still sounds great but a superlative boost in quality was achieved by Simon Heyworth and Tom Newman for Virgin's twenty-fifth anniversary gold edition of 1998 (which includes rare photos in a de-luxe booklet). *Ommadawn* is another great disc while an excellent overview of Oldfield's Virgin years can be found in the *Elements* CD boxed set of 1993.

THE GERMAN SCENE

One of the great mythologies of rock literature is how German rock and electronic music from the early 1970s came to be known as 'krautrock'. In 1993, in an article about the rebirth of the German band Faust, former jazz journal *The Wire* stated that it was 'the London music press, with characteristically snide xenophobia, which dubbed it "Krautrock"'. Over a year later the same magazine ran a leader article about 'krautrock' as if it was a *de facto* term, with large excerpts from a highly personalized account of 'The Great Cosmic Music, 1968 Onwards' by the eccentric English indie musician Julian Cope.

In response I wrote a letter to the magazine which described the word 'krautrock' as an 'Anglophile term derived from a post-war hangover'. In reply *The Wire* contended rather speciously that such groups as Cluster and Can had adopted the term. In fact this was never the case (though Faust did name a track 'Krautrock' when they recorded their fourth album in England in

1973). Moreover most writers accuse the eminent British musicologist Ian MacDonald of inventing the label during the early 1970s when he wrote about German music in the *New Musical Express*. In fact during December of 1972 MacDonald published three articles consecutively titled 'Germany Calling', two of them double broadsheet pages. In not one line did he mention the term 'krautrock'!

Instead MacDonald gave a jaw-droppingly accurate description of German rock of the late 60s and early 70s. For openers he stated that in the UK there was a total ignorance of continental rock. Secondly, there was a strong revolutionary spirit among Germany's youth since 1968. They disliked rich Anglo-American groups playing in their country and a lot of students demanded free entry. The concept of 'the revolutionary head' was paramount, a concept which 'challenged every accepted English and American standpoint'. The roots of new German rock were thus traced to a rejection of all previous forms, an acceptance of open improvisation, with 'no leaders'. Hence guitar heroes and singer-stars were out, group instrumental expression was in. MacDonald dubbed the resultant music 'tonally free sound improvisation'.

In this setting it was no wonder that electronics took over, 'the other-worldly capacities of the synthesizers' as MacDonald described them. He feared the dematerialization of humans as machines became more and more important to the Germans, Kraftwerk of course following the 'Man Machine' concept to its furthest extreme as they famously celebrated the coming of 'The Robots' and a 'Computer World' in their music. In great detail MacDonald went on to elucidate the various labels and the importance of the group studio where anything could happen. Fascinatingly, he pointed out that managers had to play in the band according to German law at the time and, more interestingly, the Arbeitsamt (Labour Exchange) did not allow any musician to be unemployed. If he or she was kicked out of a group, its officials quickly found another group to take them on.

Importantly, MacDonald noted that a lot of new German music was ignored in Germany until it found critical favour in the UK. As he sifted through band histories he laced his detailed observations with much humour. Records which Julian Cope would later ludicrously drool over in his *Krautrock sampler* (1995) were stylishly dispatched to oblivion. Of the early jams of Munich commune Amon Düül MacDonald said: 'The most valuable sociological inference to be made from these execrable records is that the early years of German rock coincided with a colossal boom in the sale of bongoes!' Most surprisingly, he did not go the standard route and had things to say about unknowns such as Mythos, Limbus 4, Embryo and the 'quite mortifying' Floh De Cologne. He found Kraftwerk lacking in any emotion and saw a future for a type of new German Romanticism based on a meeting of Wagner and the Moog synthesizer.

If MacDonald found Kraftwerk 'heartless' he considered NEU! to be 'tender', but reserved great praise for Can, the most powerful example of

German rock, some of their music 'as hypnotically engrossing as Bob Dylan's "Sad Eyed Lady Of The Lowlands"'. Cluster, Tangerine Dream, Klaus Schulze, Amon Düül and such were all given their due but he was genuinely impressed by Faust, who with their 'self-designed equipment made truly avant-garde music'. MacDonald presciently saw the mixture of revolutionary ideas and inadequate techniques as a genuinely strong basis for innovation. Nowhere did he ever mention the word 'krautrock' and I have to conclude that subsequent articles and arguments deriving the epithet from this source are pure myth.

CAN

The most potent expression of German experimental rock undoubtedly came from Can, a group of highly experienced composer-musicians formed in Cologne after the Paris youth riots of the summer of 1968. Can's approach to limitation and 'instant composition' soon became legendary, all facilitated by recording their own music in their own time at self-built studios in a castle and a cinema. With the basis of an ethnically derived rhythm section, tape collages and electronic keyboards were all absorbed into a mix which openly acknowledged the influence of Stockhausen, Cage, Pierre Schaeffer and American Minimal music. Normal rock and blues references were relegated to the background while New Music ideas were brought to the fore. Can believed in finding a new language through constant experimentation and improvisation, and thus album tracks often took up entire sides of LPs. Continuously testing the parameters of sound, they were one of the loudest groups in the history of rock but were capable of beautiful and elegiac compositions. A direct influence on the likes of Joy Division and New Order, Cabaret Voltaire, The KLF and The Orb, Can became a touchstone for what was most creative in modern music.

Founder Irmin Schmidt, born in 1937, had a strong background in classical music – piano and French horn – and had attended many music schools, including the Essen Academy, from which he graduated with a superlative distinction. He conducted the Vienna Philharmonic but on hearing the new sounds of Messiaen, Feldman and Cage opted to study ethnic music. During the 1960s he worked with Stockhausen and Cage at Darmstadt, where he met Holger Czukay and Jon Hassell. Having worked in art journalism and written music for various media, Schmidt journeyed to New York in 1966 and met the Minimalists Young, Reich and Riley. This meeting convinced him to form a new kind of group.

Back in Germany, Schmidt contacted flautist David Johnson and Holger Czukay. Born in 1938, Czukay was Polish with a background in choral music. After the war he had famously blown up a Russian ammunition dump just to hear the sound of the explosion. He had worked in an electrical shop, studied bass at the Berlin Academy and worked with Stockhausen, who inspired his

interests in tone building and sound analysis. In 1966 in Switzerland he met Michael Karoli, a Bavarian guitar player. Karoli, born in 1948, was a multi-instrumentalist from the age of four; by the early 1960s he could play anything on electric guitar from Mozart to Arabic music. He had a particular love of gypsy music and played the violin. To complete the line-up Schmidt rang free-jazz drummer Jaki Liebezeit, born in Dresden in 1938. Liebezeit could play piano and trumpet but turned professional drummer in Cologne after leaving high school. During the early 1960s he played cool jazz with Chet Baker and others in Barcelona before returning to Germany in 1966 and the free-jazz movement. Tired of formless music, he joined Can after impressing Schmidt with the depth and variety of his orbital drum technique.

Experiments began in a Cologne flat but were soon moved to Schloss Nörvenich, a castle in the suburbs, where the group, first known as Inner Space, played a music which incorporated the taped sounds of Gregorian chant and the Paris riots of 1968. Czukay played bass but was technically responsible for tape manipulations and mix-downs. With only a few microphones and two two-track tape machines the group were forced to produce their music live. Irmin Schmidt played organ and keyboards. The arrival of an American sculptor and musician, Malcolm Mooney, precipitated the exit of David Johnson and a change of name to Can.

The process of playing live for long periods of time, allowing Czukay to edit the results, produced the debut album, *Monster Movie* (1969), credited to The Can. Issued first on a small Munich label, it was quickly taken up internationally by United Artists. Undoubtedly an impressive first album, this was the most dynamic and powerful rock music ever to come out of Germany. Can played with an intensity as if it was their last breath. The meshing of instruments was fabulous to hear – Czukay and Liebezeit laid down a heavy, thick rhythm section while Karoli literally insinuated his spidery sustaining Fender guitar in between that and Schmidt's Ambient organ sounds. The music reached a peak of innovation on the side-long 'You Doo Right', a droning repetitive rock tribute to Minimalism. With the majesty of the hypnotic 'Mary Mary, So Contrary', nobody, but nobody sounded as good as Can.

After the recording of some more sessions vocalist Mooney suffered a nervous breakdown and was replaced in the summer of 1970 by Damo Suzuki, a Japanese busker the band spied during a trip to Munich. On *Soundtracks* (Liberty 1970) Mooney was heard on some fine ballads but the almost opiated performance of Suzuki on the groove-laden fourteen-and-a-half-minute 'Mother Sky' was a revelation. Working far into the night, Can created some of the most distinctly potent music of the era with *Tago Mago* (Liberty 1971). They were capable of wonderful shimmering music which entranced the listener ('Paperhouse') and Schmidt was performing some remarkable feats of electronic wizardry like the detonating explosions derived from a modified Farfisa organ and Alpha 77 synth on the brilliant 'Oh Yeah'. Again 'Hallelujah' was a side-long locked groove which merged the constancy of machine music

with ancient ethnic beats. Hildegard Schmidt, Irmin's wife and Can's manager, insisted on the group including a second disc of free-form instrumental music with the album.

So popular were Can in 1971 that they even had a number-one hit single in Germany, 'Spoon', taken from their next album, *Ege Bamyasi* (UA 1972), which was recorded in their new studio, a converted cinema about twenty miles from Cologne. The album's short pieces, specifically 'One More Night' and 'Sing Swan Song', revealed Can as masters of trance-inducing dexterity. The record also featured one of the first uses of drum-machine patterns, adapted from Schmidt's Farfisa organ. Reviews, particularly in the UK, recognized Can as the finest experimental rock band of their era. After time off the group returned with arguably their best record in *Future Days* (UA 1973), an album which found them expressing environmental sounds through their instruments and using tape loops of Indian birdsong. The title track alone sounded as if it were recorded in a mist, the production slowly uncovering another of Can's erotic grooves.

Can's idea of 'instant composition', playing in unison 'like an orchestra', was only possible because of the wealth of musical ability of the participants. Irmin Schmidt said: 'We always rejected the term improvisation.' The departure of Damo Suzuki allowed Karoli to play more violin and sing. The new Can sound was even more atmospheric as evinced on the descending semi-tones of the soundtrack piece 'Gomorrha' (1973), a mood and sound which would resurface on their next mighty album. Again *Soon Over Babaluma* (UA 1974) was a classic, with a whole side devoted to the explosive 'Quantum Physics/Chain Reaction', which concluded in the arena of volume-manipulated, tape-edited Ambience.

And this is really the end of Can's great period. A switch to Virgin and to sixteen-track recording resulted in *Landed* (1975), with only the Ambience and collage of 'Unfinished' coming close to their previous experiments. Subsequently they worked with David Gilmour of Pink Floyd and musicians from Malaysia, Jamaica and Ghana. Fully exploring their interest in folk and ethnic music, Can played out the 1970s with a series of diminishingly interesting albums. The release of *Cannibalism* (UA 1978), a first-rate compilation of their music up to 1974, highlighted the lack of genuine discovery in their late-70s work and coincided with the break-up of the group. Having shown that the ideas of Stockhausen, Cage and the Minimalists could be adapted to rock to produce new and startling results, Can became a legendary influence on subsequent generations of exploratory musicians.

LISTENING

In 1980 Hildegard Schmidt reissued the original Can albums on Spoon, and these vinyl pressings are the very best place to hear Can albums like *Monster Movie* (1969), *Future Days* (1973) or *Soon Over Babaluma* (1974). In 1989 Mute in London reissued the first six Can albums, up to 1974, on CD, but *Tago Mago*

in particular is better on record. In 1991 the same company reissued the Virgin Can catalogue on disc, including the excellent out-takes compilation from 1976 *Unlimited Edition* (which includes 'Gomorrha'). Between 1986 and 1988 the original Can with Malcolm Mooney reunited at the old studio for a new product, *Rite Time* (Phonogram 1989), filled with the new beat sensibility of House music. A logical extension was the Can remix album *Sacrilege* (Mute 1997), which saw musicians as diverse as Brian Eno, Sonic Youth, The Orb and A Guy Called Gerald take original Can songs and put them through their own personal electronic processes.

To celebrate Can's enduring legacy, Spoon and Mute collaborated to release *Can Box* (1999), a huge extravaganza comprising a double CD, 480-page book and video archive material.

FAUST

Much loved by the British rock intelligentsia, Faust were one of the most extreme rock groups ever to come out of Germany. Unfortunately, the bulk of their music was and still is unlistenable. More a socio-political experiment in hippie and free-music aesthetics, Faust had the dubious honour of being nominated the best 'krautrock' band of all time – an unattractive epithet which they nevertheless acknowledged on their fourth Virgin album, released in 1974. Their popularity in the UK stems from their adoption of the noise + melody + accident = cool music aesthetic of The Velvet Underground. As far as I'm concerned their true importance lies in their use of tape-collage and chance, a sort of rock-soup meeting of Cage and Stockhausen and the fact that they sold 100,000 copies of these tape experiments in 1973 to an unsuspecting audience.

The background to Faust makes pretty funny reading. Two underground Hamburg bands meet a middle-class revolutionary magazine editor named Uwe Nettelbeck in the late 1960s. He has persuaded Polydor records that the sound of youthful unrest would sell. With two drummers, the Frenchman Jean-Hervé Peron on bass and guitar and various others on keyboards and tapes, the groups merge into Faust and are given money by Polydor. They get a house in the country and settle down to a diet of pure LSD 25 and electronic experiment. Polydor, thinking that more money will improve the sound quality, provide them with the means to convert an old school house in Wumme (between Bremen and Hamburg) into a state-of-the-art studio. Sound engineer Kurt Graupner customizes synthesizers and sound effects into black boxes which can be triggered at will. Tape is the chief tool, and Gunther Wusthoff its main manipulator. The group live in the studio, growing their own marijuana and recording in bed!

Faust (Polydor) 1971, marketed in clear vinyl with a clear-perspex sleeve, was the first result of Faust's collage-improv rock. It began with excerpts from The

Beatles and The Stones and went downhill all the way to the end. *So Far* (Polydor 1972) improved on the raggedness of sound, but sounded like the dope-rock it was. Faust's real strength lay in their studio experiments and their ability to collage these into a meaningful whole. Attracting the attention of American violinist Tony Conrad (who had played with the pre-Velvet Underground Dream Syndicate), they then recorded an experiment in repetitive music titled *Outside The Dream Syndicate* (Caroline 1973). Alienated from Polydor, they were picked up by the fledgling Virgin label, who marketed *The Faust Tapes* (1973) for all of 49p. The album sold in six figures and brought German rock to a mass British audience. The album would be Faust's best stab at capturing the open experiment of their studio excursions. Not just a jumble of studio out-takes, instead *The Faust Tapes* seemed to lay out in a series of twenty-six edits the grand electro-acoustic sweep of their vision.

Plagued by German revolutionary factions, the group opted to tour the UK in a disastrous on-stage experiment in pure noise. A final Virgin album, *Faust 4* (1973), was recorded in England at the Manor but the game was up. A fifth album was attempted in luxurious surroundings in Munich but the group folded, heavily in debt. Various sporadic albums of unreleased material appeared on the London-based avant-garde Recommended label during the 1980s. Since 1990 Jean-Hervé Peron has led a slimmed-down Faust on various American and British concerts, all of which have featured radical takes on 'performance'. In 1994 they played in Death Valley in California and in London for some gigs in 1996 they brought amplified power tools, an arc-welder and hay-threshing machinery on stage.

LISTENING

The Faust Tapes (Re CD 1993) is well worth the effort for its ability to amble along Ambiently in the background. Snippets of French, English and German dialogue often intrude, occasionally an excerpt from a tune comes into view, but it's the whole that really counts. Capable of many plays, it always sounds strangely different each time. *Faust 4* (Virgin CD 1992) arcs from the noise-mantra 'Krautrock' to the relative quietness of 'Run'. Approach 1990s albums of new material on Table Of Elements with extreme caution. In 1998 an album with the wacky title *Faust Wakes Nosferatu* appeared on Think Progressive discs.

NEU!

One of the most overrated bands in the history of rock, NEU! impressed English and German critical consciousness with their stripped-down metronomic beats, no-nonsense album covers and a sense of primalism in the early 1970s. With the release of their third album, *NEU! '75*, the group reached their peak as

machine-like drumming, chilly synth textures, abrasive industrial rock and pieces of pure tape-manipulated Ambience combined to blueprint a uniquely introspective and German sound. Often credited as being a template for English punk rock, NEU!'s music never wholly convinced. What did, though, was the talent of guitarist and keyboardist Michael Rother, whose work with Harmonia (Brian Eno's favourite group of the 1970s) and subsequent solo recordings revealed a true maestro of electronic and Ambient sound.

NEU! (meaning 'NEW!') emerged from the industrial heartland of Düsseldorf. Michael Rother and Klaus Dinger had, in fact, been closely involved with Kraftwerk and the music they had been recording with engineer-producer Conny Plank in the Star studio in Hamburg. Leaving Kraftwerk in the summer of 1971, Rother and Dinger went back to Hamburg to record an album with Conny Plank which was released on the experimental Brain label. Simply titled *NEU!*, it went on to sell 35,000 copies, wrapped in a plain white sleeve on which a sharply underlined 'NEU!' was scrawled in red. It opened with a fiercely stripped-down mechanistic beat and rhythm guitar with the odd treated synthesizer surfacing and disappearing back into the mix. The track 'Hallogallo' defined the NEU! sound. Elsewhere there were the timbres of cymbals distorted by tape recorders, the sound of a boating journey augmented by eerie electronic tones ('In Luck'), the disconcertingly noisy entry of a pneumatic drill, some grinding slow rock and finally, on 'Dear Honey', the whole is deconstructed between pained slow-motion vocal and pure tone before returning to the Ambience of boats on water.

Unwisely the group then rush-recorded *NEU! 2*, an album so appalling in its results that Rother left the group. In fact the recording seemed to be dominated by Dinger's monotonous drumming, its entire second side mostly taken up with speeded-up and slowed-down versions of a single track, 'Newsnow'. Disaffected, Rother joined Cluster in an old farmhouse near Hanover and began recording. According to Hans-Joachim Roedelius of Cluster, at one time it was NEU! and Cluster all in one room but it didn't work out and Dinger exited to form La Düsseldorf with his brother. Anyway Rother and Cluster formed Harmonia and recorded two albums for Brain, of which the second, *Deluxe* (1975), is the best – a recording which seemed to take the autobahn fantasies of Kraftwerk and make them more intricate.

Impressed with this new atmospheric sound which combined electronics and rock instrumentation to make self-contained instrumental soundscapes, Brian Eno performed with Harmonia in 1974 and joined them in their home studio in 1976 for an Ambient album, *Harmonia 76*, left unreleased until 1997. Meanwhile Rother joined Dinger's musicians for a new NEU! album, *NEU! '75*, recorded wisely with Conny Plank. With two extra drummers, Dinger now concentrated on guitar, piano and organ, with Rother taking his usual keyboards and guitar synthesizer role. The spatial quality of the music, particularly on 'Isi' and 'Fare Thee Well', was quite impressive and the album showed the group had not run out of potential. Again the record

appeared in a simple sleeve, this time all black with the underlined 'NEU!' scrawled in white.

Subsequently Dinger made records with La Düsseldorf and Rother engaged himself with more exotic Ambient tableaux with the drummer from Can, Jaki Liebezeit. *Flaming Hearts* (Sky 1977) was again recorded with Conny Plank and was prettier than most NEU! music, lacking Dinger's obvious austerity. *Starvalley* (1978) and *Catmusic* (1979) followed a similar vein and Rother continued to record into the 1990s. Unfortunately, during that decade dubious items put out as *NEU! 4* (1996) and *NEU! Live* (1996) came from Dinger's dusty tape pile and should never have seen the light of day.

LISTENING

Though the early NEU! catalogue was officially released on United Artists in the 1970s it only appeared in the mid-1990s on bootleg Germanofon CDs. Harmonia's *Deluxe* (1975) is worth searching for on import CD. The group's 1976 album *Tracks And Traces* (Sony 1997) features 'Lüneburg Heath', a location near which Faust had their Wumme studio. Michael Rother's *Flaming Hearts* appeared on Random Records in a laudable 1993 CD edition which included Ambient remixes of the title track. Avoid all latter-day product on Captain Trip CDs, especially *NEU! 4*, taken from aborted 1986 NEU! sessions.

TANGERINE DREAM

In the rock era they were the ultimate synthesizer group, who produced an other-worldly music which drew vast crowds to cathedrals and amphitheatres. Like Stockhausen, they believed in a total electronic music and harnessed embryonic analogue synthesizers to create vast instrumental sound tapestries. During the 1970s many rock musicians used the evolving synthesizer to support both acoustic and electric instruments but Tangerine Dream stood almost alone in placing all their faith in electronica. As time passed they became the virtuosos of the sequenced rhythm, their own research leading directly to sampling technology and sequencing software. By the 1990s Tangerine Dream were fêted as the forerunners of Techno music, their beautiful warm landscapes championed by Mixmaster Morris and Future Sound of London to name some.

Before Tangerine Dream recorded their benchmark synthesizer album *Phaedra* for Virgin in 1973, they had spent six years developing their unique sound. Founder Edgar Froese was born in Lithuania in 1944 and studied classical music while young. In his teens he went to West Berlin to study painting and sculpture. By his twenties he was playing bluesy guitar and even visited arch-Surrealist Salvador Dalí in his Catalonian home on several occasions. There Froese was struck by Dalí's 'melting images' and felt the painterly technique

could be applied to music. At that time Berlin was buzzing with the new musical theories of Cage, Stockhausen and Xenakis, who all often lectured there. On hearing Jimi Hendrix and particularly The Beatles' *Sgt. Pepper*, Froese formed Tangerine Dream in 1967.

Froese was soon drawn to Berlin's Zodiak Free Arts Lab, established by Hans-Joachim Roedelius and cellist Conrad Schnitzler in 1968. In this experimental club strewn with tone generators and amplifiers, early Tangerine Dream shows mimicked the Pink Floyd sound of 'Interstellar Overdrive'. By 1969 Froese was playing with Schnitzler and a young drummer, Klaus Schulze. The three recorded *Electronic Meditation* (Ear) on a two-track tape machine in a factory. Though it owed an obvious debt to Pink Floyd's *A Saucerful Of Secrets*, it was much more risqué. Schulze has called it 'the primary electronic album', a recording where unusual sound sources like an office calculator jostled with the sounds of Farfisa organ and strings, all modulated by reverbs and delays. By 1970 Schulze had embarked on a solo career and the following year Froese recruited Berliner Christoph Franke, one of the ablest musicians in Germany. Franke, born in 1952, came from a family of musicians and was building his own studio by the age of fifteen. By the time he met Froese in a Berlin studio, the nineteen-year-old Franke had studied trumpet, violin, piano and composition and was considered the best young drummer in the country.

Franke impressed Froese with his collection of Stockhausen and Ligeti recordings. The result was the meditational electronic feast of *Alpha Centauri* (Ear 1971), a record made on eight-track with Hammond and Farfisa organs, flutes and the EMS VCS3 Synthi, a new dimension in the Tangerine Dream sound. The group had made their first 'space-rock' album.

Soon after Peter Baumann joined the group. Baumann had studied at the American School in Berlin, played organ, liked Surrealist art and had an acutely structuralist approach to composition. For many the trio of Froese, Franke and Baumann became the classic Tangerine Dream line-up. Working in an eight-track studio in Cologne, they produced *Zeit* (meaning 'time') (Ear 1972), a wafting double-album Ambient-classical creation using two VCS3 Synths, four cellos and a large Moog Modular synthesizer courtesy of Florian Fricke. Recorded in the same studio, *Atem* (meaning 'breath') (Ear 1973) had a dense ritualistic air heightened by the first use of an out-of-tune Mellotron.

At this stage Tangerine Dream were like a group of lab technicians hunched over their growing armoury of keyboards and synth modules. Baumann took a sabbatical in India and Nepal while Froese and Franke made a 'sound research' album called *Green Desert* in Berlin. Unreleased until 1986, this boasted one of the first drum sequencers, a PRX rhythm controller from Italy and a MiniMoog synth. Its advanced, accessible sound was lapped up by Virgin, who immediately signed the group. Franke had for years been experimenting with a Moog Modular synth which The Rolling Stones had sold to Hansa studios in Berlin. He found it difficult to rig up but was fascinated by the endless rhythms or sequences it could generate. The sound reminded him of the repetitive metres

of Indian classical music and with it he knew he could build a music of 'dreams and meditations'. With \$15,000 of the Virgin advance Franke bought the synth from Hansa, his first 'big Moog'. History in the making.

The driving bass notes of the Moog were the key feature of *Phaedra*, Tangerine Dream's debut Virgin album, recorded at the Manor studios over six weeks at the end of 1973. Having produced Mike Oldfield's *Tubular Bells*, Virgin was committed to instrumental music and not disappointed with *Phaedra*, which went Gold in seven countries and stayed on the UK charts for fifteen weeks after its release in early 1974. The mythological washes and aquatic eddies of burbling VCS3, foresty double-keyboarded Mellotron Mark 5 and the finale of Romantic flute drones were all achieved in painstaking fashion. The aim was to achieve a human, emotive music using only electronic means. This aim achieved, Franke purchased another big Moog from the English pop group The Moody Blues. The Moogs had red light displays and with the blinking lights of their VCS3s and PRX console, the three-man Tangerine Dream made an impressive sight live.

At the time Peter Baumann asserted that Tangerine Dream were always moving closer to the 'colour of sound'. For *Rubycon* (1975), again recorded at Virgin's Oxfordshire studio, the group added a Modified Elka organ and an Arp synth to their battery of Mellotron, Moogs and VCS3s. Spliced into two seventeen-minute tracks, *Rubycon* openly paid homage to Stockhausen (opening of 'Part 1') and Ligeti (opening of 'Part 2'). Other highlights were the characteristic Moog sequences, backwards-taped piano sounds and the elegiac slow finale. Though a touring sensation, Tangerine Dream had extreme problems transporting their equipment, particularly Franke's double Moog set-up, which was damaged on a subsequent Australian tour and gave him a nasty electric shock when plugged in. After that Tangerine Dream worked on developing a safe transportation system for electronic instruments. The live album *Ricochet* (1975) boasted extensive sixteen-track overdubbing from cathedral concerts in Europe that year.

The year 1976 began with Tangerine Dream recording a soundtrack for William Friedkin, the director of the classic horror film *The Exorcist* (1973). In a small Berlin studio with an eight-track Ampex recorder, thirteen short compositions, full of throbbing suspense, were created for *Sorcerer*. Unusually the film was shot around the resultant music. In late summer of 1976 the group tried out Audio Studios in Berlin for their next studio album, *Stratosfear*. A favourite among fans, the record mixed electronic instruments with acoustic sources like harpsichord, guitars and harmonica. Though an orchestral studio, Audio proved a jinxed location, the recording process costing a small fortune owing to faulty multi-tracks, exploding Dolby units and a mixing desk which spontaneously combusted. Baumann also had many problems with a new Projekt Elektronik computer sequencer which had taken a year to build in Berlin. Despite the problems, *Stratosfear* (1976) was Tangerine Dream's most accessible album up to then.

American tours followed in 1977, the group adding new equipment such as an Oberheim eight-voiced polyphonic synthesizer and first digital synth from Wolfgang Palm, the PPG Wave, which Tangerine Dream were investing in. With their synth racks on wheeled metal boxes and help from Projekt Elektronik, their sold-out America jaunts were successful enough to record on four-track. The resultant *Encore* (1977) cut stylistically across ten years of Dream music, from Froese's Gibson guitar solos to pure Ambient sound-paintings. The last date of the tour in Colorado that autumn saw the surprise exit of Peter Baumann, who wished to pursue a solo career in electronic music. After a period of instability which included the recording at Hansa of the futuristic *Force Majeure* (1979), containing the Techno excursion 'Thru Metamorphic Rocks', Tangerine Dream stabilized once again with new member Johannes Schmoelling.

A young sound engineer with an interest in piano and organ music, Schmoelling was also keen to develop electronic collages. When he met Froese he was mixing sounds for Philip Glass's opera collaborator Robert Wilson at a Berlin theatre. Schmoelling was an excellent technician and pianist and injected 'more structured elements and composed melodies' into the music. Franke taught him how to use the MiniMoog and their first studio album, *Tangram* (1980), revealed an extensive use of new polyphonic synthesizers, including the Roland Jupiter 8, which Chris Franke helped design. Moreover Franke's cinema space in Berlin had become a \$1.5-million complex full of twenty-four-track recording equipment. Approached by talented director Michael Mann to score the suspenseful heist thriller *Thief* (1981), the group produced a soundtrack that made them famous in America, particularly for the organic quality of the electronic music on display. The album also boasted one of the early uses of Bell Laboratories' GDS computer synthesizer.

The Fairlight Computer Music Instrument, drum loops, long tape loops and extensive use of voice synthesizer, or vocoder, characterized Tangerine Dream's 1981 album *Exit*, a cutting-edge electronic release whose lyrical melodicism was years ahead of the work of any of their rivals. The evolution of digital sampling and sequencing technology from PPG Wave and the Japanese Roland company allowed greater progress in the Tangerine Dream sound. Another Michael Mann film, *Risky Business*, benefited from the Roland MC-8 sequencer, which could store thousands of musical notes. Programmable sequencers also facilitated a more Minimalist sound in the vein of Philip Glass and Steve Reich, and pulsations were heard to their fullest effect on the soundtrack to Mann's Gothic sci-fi thriller *The Keep* (1983). Sampled drum sounds, electronic sitar and tabla sounds were just some of the lush textures which made up the eloquent *Hyperborea*, also released in 1983.

As the years progressed Tangerine Dream consolidated their lead as researchers and innovators in electronic music. Froese built up an extensive sound library while Franke would leave to work with Steinberg on the CUBASE Audio computer sequencing software, one of the most popular computer-music

tools ever invented. Johannes Schmoelling had left in 1984 and developed his own studio in Berlin. His replacement was a young Austrian classical musician, Paul Haslinger, whose computer-software expertise helped shape the three-month creative process of *Underwater Sunlight* (Jive 1986), an album which included the formidable Ambient masterpiece 'Song Of The Whale'. The pressure of touring and soundtrack work proved too much for Chris Franke, who left in 1988 to work in Los Angeles with Steinberg. His 1991 Virgin recording *Pacific Coast Highway* revealed his sonorous instrumental abilities outside the group. The 1990s saw Edgar Froese work with his son Jerome, a computer and synthesizer enthusiast and, for five years, with former Austrian model, classical keyboardist and saxophonist Linda Spa. *Goblin's Club* (Castle 1996), using Korg and Roland keyboards plus an exotic list of sampled acoustic sources, was a convincing return to form. Two latter-day film soundtracks, *Oasis* (1997) and *Great Wall Of China* (2000), both released on TDI and both credited to Edgar and Jerome Froese, show Tangerine Dream to be the masters of flawless chugging electro-Ambience. By now the group had studios in Vienna and Berlin and one of the most formidable equipment stores in the world, so it was no idle boast when Froese told me in 1994: 'Tangerine Dream's music is a diary of the history of musical instruments in the 1970s, 1980s and 1990s.'

LISTENING

In 1994 appeared *Tangents*, a five-disc reappraisal of the Virgin years, 1973–83, which was extensively remixed and remastered by Edgar Froese himself. The period 1994–5 saw the release of the individual remastered Virgin discs, of which *Phaedra* (1974), *Rubycon* (1975) and *Stratosfear* (1976) come highly recommended. In 1996 another five-disc box (again remixed by Froese) covering Tangerine Dream history before and after their Virgin decade was released by Castle Communications. Individual remastered albums also appeared, including the fascinating *Alpha Centauri* (1971) and *Zeit* (1972) and the impressive *Poland* (1984) and *Underwater Sunlight* (1986).

Peter Baumann's contribution to electronic music should not be underestimated. In 1976 he contacted E-Mu systems in America to develop a combined computer and analogue synthesizer. His first two solo albums for Virgin, *Romance '76* (1976) and *Trans-Harmonic Nights* (1978), were full of edgy sequenced lines which pre-dated UK electro-bop and House music by years. During the 1980s he set up the New Age label Private Music in the US, eventually signing Tangerine Dream in 1988. Unfortunately, this gifted musician left the music business in the 1990s, his solo gifts duly celebrated on the Virgin compilation *Phase By Phase* (1996).

Surprisingly, Edgar Froese also had a solo contract with Virgin during their successful Virgin period. The amorphous, bubbling quality of *Aqua* (1974) was enhanced by the three-dimensional 'Artificial Head' recording system developed in Germany. *Epsilon In Malaysian Pale* (1975), recorded after a trip to

Southeast Asia, was a veritable homage to the Mellotron. The well-structured *Stuntman* (1979), recorded at Hansa studios in Berlin, saw Froese use the Roland Guitar synth and various sound waveforms produced by new PPG equipment. His last Virgin solo, *Pinnacles* (1983), was an even more streamlined use of digital sampling and Korg and Roland polyphonics, influenced in mood by a trip to the Australian outback. In 1995 Virgin released a collection of remastered and remixed material from Froese's solo tape banks titled *Beyond The Storm*.

POPOL VUH

No one ever forgets the opening scene of Werner Herzog's spellbinding movie *Aguirre, Wrath Of God* (1972). An angelic choir is heard as we travel through the clouds of the High Andes. Slowly the mist clears to reveal a giant mountainside from which tiny figures descend. There is the sound of a strange keyboard instrument, in this case a Mellotron, and the sight of heavily armoured conquistadors blindly thrashing their way through jungle highlands in search of El Dorado. The music is shrouded in an air of mystery, its makers Popol Vuh probably the most mysterious group to emerge from German rock of the 1970s. Over dozens of albums Popol Vuh drew on Oriental and Indian philosophies to create mantras in sound, using both acoustic and electronic instruments. Their almost mystical sound became a key ingredient in the films of German director Herzog. The music eventually transcended all fashion so that by the 1990s it was able to absorb Trance and Techno styles without losing its unique identity.

Popol Vuh has always been driven by musician and composer Florian Fricke, born near the German-Swiss border in 1944. He studied classical piano in Freiburg and composition at Munich Conservatory. While still a teenager he transferred to film school, where he met Herzog and bonded a fruitful friendship. He even played jazz-rock with the future founder of ECM, Manfred Eicher. During the late 1960s he followed the hippie trail to Nepal, taking in Africa and India before studying Tibetan choral music in the Himalayas. He returned to Munich and in 1969 bought one of the first big Moog synthesizers in Germany. With this he founded Popol Vuh, a group whose name derived from the sacred book of the Mayas. Their debut album, *Affenstunde* ('time of the monkeys'), was released on Liberty in 1971 to great acclaim. Recording natural elemental sounds, Popol Vuh combined these with electronic Moog drones to great effect. At the time the synthesizer's inventor, Robert Moog, commented: 'This is beautiful music.'

Another meditation on the sixty-one-keyed Moog followed, its spooky sound driven by conga drums and climaxing in a celestial coda for percussion, electric piano and splashing water. Titled *In Pharaoh's Garden*, it was released by Pilz in early 1972, the year that Fricke contributed Moog synth solos to Tangerine Dream's fourth album, *Zeit*, and wrote the music for *Aguirre, Wrath*