



Analog Days: The Invention and Impact of the Moog Synthesizer

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Though ubiquitous today, available as a single microchip and found in any electronic device requiring sound, the synthesizer when it first appeared was truly revolutionary. Something radically new--an extraordinary rarity in musical culture--it was an instrument that used a genuinely new source of sound: electronics. How this came to be--how an engineering student at Cornell and an avant-garde musician working out of a storefront in California set this revolution in motion--is the story told for the first time in "Analog Days," a book that explores the invention of the synthesizer and its impact on popular culture.

The authors take us back to the heady days of the 1960s and early 1970s, when the technology was analog, the synthesizer was an experimental instrument, and synthesizer concerts could and did turn into happenings. Interviews with the pioneers who determined what the synthesizer would be and how it would be used--from inventors Robert Moog and Don Buchla to musicians like Brian Eno, Pete Townshend, and Keith Emerson--recapture their visions of the future of electronic music and a new world of sound.

Tracing the development of the Moog synthesizer from its initial conception to its ascension to stardom in "Switched-On Bach," from its contribution to the San Francisco psychedelic sound, to its wholesale adoption by the worlds of film and advertising, "Analog Days" conveys the excitement, uncertainties, and unexpected consequences of a new technology that would provide the soundtrack for a critical chapter of our cultural history.

Analog Days: The Invention and Impact of the Moog Synthesizer Details

Date : Published November 15th 2004 by Harvard University Press (first published 2002)

ISBN : 9780674016170

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Format : Paperback 384 pages

Genre : Music, History, Nonfiction, Science, Technology, Biography

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From Reader Review Analog Days: The Invention and Impact of the Moog Synthesizer for online ebook

Roland says

An interesting history of synthesizers, with a focus on Moog. Coming from no knowledge on how these things were built, all of this information was new to me. A great entry into this subject since even with zero technical knowledge I was able to understand what the authors were talking about when discussing the tech involved in building these instruments.

Maciek says

An excellent history of the birth of the Moog synthesizer, complete with technical overviews of the basic concepts of a synthesizer (a little hand-wavy, but most people with an understanding of the physics of sounds should have no trouble following it), the people involved, some background on Bob Moog's earliest competitors, and how synthesizers were seen both by serious avant-garde classical musicians and the hippy and rock star crowds. Really interesting, with a ton of endnotes and a discography.

N.J. Ramsden says

There aren't too many books on the history of the synthesizer, so it's nice, speaking as a complete nerd, to find something like this - focusing mostly on Moog and his company, it also contains a smaller quantity on brands such as ARP, Buchla, and EMS. Pinch & Trocco have given us 300 pages of - in favourable terms - conversational history. They focus mainly on the 1960s, when the development of modular systems was the zone of exploration, when synths were big, and alien, and a long way from cheesy preset machines that played rumba accompaniment.

Certainly there's interesting material here. The anecdotal feel lends a journalistic, magazine-like feel to the book that personally, I feel, while rendering an easy read, detracts from the integrity of the results. Most, but not all, references are cited. The relaxed tone also extends into relaxed detail sometimes, however, and there's a sense at times that either the authors do not really understand the technology they are writing about, or do not know how to successfully explain to their imagined readership what a synthesizer is and does. Which is odd. Who besides a synth-nut would want to read a book on the history of synthesizers? I don't know. But it does make reading the less tech-savvy parts a bit cringy: "a digital menu of pre-set buttons"? I don't know what that means, and I've been a synth nut for over 20 years.

Gripes aside, the book doesn't claim to be anything more than a readable study of Moog's invention and how things went from there. And it does deliver that. I can't vouch for any bias, but for the most part it feels pretty even-handed, and where there's a sense of bitterness or partisanship, it comes mainly from the interviewee quotes, though they're used sparingly and therefore will be subject to the usual caveats. This is a Moog-centric book after all.

It's a shame there was not less about Moog, actually, and more about the other manufacturers. Some of this feels like padding, and one chapter feels like a badly-structured listening guide, in particular. There's a sense

of focus on personalities rather than devices, so for readers desiring much insight into the synthesizers per se, this is a book of marginal interest. It's more of a look into the world that gave rise to these technologies, and the world-views that spawned different systems, and how they all ended up.

Which is interesting in itself. But not perfect, not by a long shot. I don't really know where I would pitch this book were I selling it. It's a synthesizer nerd's book, but not about synthesizers. It's a history book, but perhaps too anecdotal for academics. It's a coffee-table read about the 60s, but unless you're into the technology behind the music, I don't really know why you'd pick this up. It's a business study, but there's no lesson on how to make things work.

I came to this book as a synth-tech-nerd-collector-musician, so who knows. I feel like I've learned a few unimportant things from this book, but can't recall what they might be. Three stars, because I probably liked it, though it's kind of clumsy.

Patrick says

The best source on Robert Moog.

Michael says

Even though it is about Moog, this book changed the way I thought of the Buchla.

JBP says

I'm completely into old analogue synthesizers and this is the most detailed and comprehensive book I've seen on the early days of the musical instrument. I can't imagine anything being more detailed as this looks into the early days of both Robert Moog and Bob Buchla as they break sonic boundaries with their creations while combining sound + electricity to create the modern "synthesizer". Tons of terrific photos of wall sized systems, patches everywhere and people playing and turning knobs. Wonderful. Makes me wish I had all these old synths.

John says

An extremely interesting story about the origins of the synth in the 60s and early 70s; does a nice job of letting you know about the people involved, and the weirdly intersecting influences they all had. Unfortunately, the book is marred by clunky writing and in places, dodgy editing. Harvard U Press, I am surprised by this!

Brandon James says

One of my favorite subjects is analog synthesizers. How these authors managed to butcher not only parts of analog synthesist history as well as write such a poor book is beyond me. I fought my way through it hoping to glean some new information here and there, but ultimately came away very, very, dissatisfied.

Not even the discography is worth it.

For those who may know nothing about Moog, Buchla, ARP, EMS, etc, this might be a good read. For anyone else that has a basic knowledge of the history of synthesists and synthesizers, look elsewhere (where? you tell me!)

Oli Freke says

Great stuff - more than just an account of Robert Moog sticking transistors to circuit boards, this is a fully rounded account of the scenes that built up around the development of the synth in the late 60s and early 70s. Focussed mainly on the 'head' scene of San Francisco, the academic music guys, and the London rock and prog scene.

Really, really interesting.

Kevin says

My daughter recently attended Moogfest and chatting with her sparked an interest in learning more about Robert Moog and his synthesizer. I love music and am an electrical engineer by training, so my interest is both musical and technical. This is a great overview and history of not only Moog and his company's devices, but also other analog music devices leading up to and following the hey days of Moog modular and Minimoog synthesizers. I enjoyed the story and the facts, and the especially the account of the interplay between musicians, engineers, and sales people in the development of these devices. I also found very interesting the popular and famous artists who used the various synthesizers in their recorded and performance music. This is a great read for a musically oriented techie like me. I highly recommend it!

Sean Morris says

This book focuses specifically on the earliest days of analog synthesis as we know it today, from about 1963 to 1970. It follows the evolution of the synthesizer as an instrument from the relatively modest theremin to the engineering masterpiece that was the Minimoog Model D. It does touch on the activity of other synth manufacturers during this time, but in terms of era, that's the bulk of the book's scope. So, if you're looking for a history on the development of later synths (like the Prodigy, Prophet-600, etc), you won't find it here.

That said, the story of those early days in synthesis is a fascinating one, IF you already have an interest in synthesizer technology. If you don't, you'll probably find that there isn't much of a clear narrative that will hold your interest. But then again, if you're reading reviews of this book, chances are you're a synth nerd to some degree.

Much of the first half of the book deals with the simultaneous evolution of Buchla and Moog as instrument

designers, and how their design approaches were influenced by their cultural contexts and interactions with very different types of end-users. Pretty interesting stuff. The book then goes on to document the runaway success of Moog and its subsequent crash. Trocco details a few other episodes of synthesizer evolution - the rise of ARP and their rivalry with Moog, Tom Oberheim's invention of the polyphonic synthesizer, and the influence of Switched-On Bach.

If this book changed my thinking in any way, it's in how it opened my mind to atonal, unconventional music. Recorded material from someone like Buchla-user Morton Sunotnick is a challenging listen, but this book gives some context to his approach, and has helped me to "get" this early experimental music in a way that I wasn't able to before. I still tap out after three minutes, though.

Johnny Grabowski says

If you're looking for a technical book about analog synthesis, this is not the book you're looking for. If you're looking for perhaps the only book I've read that really tells the story of the musicians, designers, and communities that were a part of the development of the Moog and Buchla synthesizers, then this book is for you.

This book was far more enjoyable and readable than I expected it to be; it was much more about the people and the regional music cultures and community than it was about the technical aspects of analog synthesis or circuit design.

Highly recommended for anyone with an interest in early electronic music or synthesizers in general.

James Ethridge says

A must read for synth-nerds. Partially responsible for the continuing delusion that I can accomplish a fraction of what this man did.

Steven says

A bit more lightweight than might be expected, given its origins, but still an interesting look at the history of modern synthesizers. There are a few inaccuracies, mind you, and a few missing points (in their discussion of Hawkwind the authors fail to note that not only did Del Dettmar and Dik-Mik use the EMS VCS3, but they also built their own synthesizer gear; likewise they don't mention that Kraftwerk built much of their own equipment. Also absent is the connection between EMS and the BBC Radiophonic Workshop.) It's an easy read that does suggest some avenues for additional exploration, although it may also leave the reader wanting more -- they tell you little about Moog after Norlin bought the company in 1973, for instance.

David says

Nice overview of the early days of analog synthesizers. I would have liked more pictures, especially since

the writing doesn't go too deep in to any one subject. I'm reminded of how much I can't stand Wendy Carlos' disgusting evil musical opinions. Also, it was a lot of fun to think about the difference in approach between those first moog and buchla synths. It's kind of fun to imagine how things would have gone differently if moog had not started working on theremins.
