Subject: Re: Different classes
Posted by Wayne Parham on Wed, 18 Jul 2018 21:53:50 GMT
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I agree with Bruce in this matter, 100%.

I would add that there are some classes that are definitely wrong for hifi audio because they generate a lot of distortion. Examples are Class B and C. Neither are suitable for an audio amplifier.

But nobody would be talking about those types of amps in the context of audio - They're used for different purposes, mainly RF communications and power circuits. Where you will find discussions about audio amp classes, its usually Class A versus Class A/B, and/or Class D versus Classes A and A/B. There are advocates for each type of amplifier.

And with tube amps - where Bruce is an expert - there are a lot of topologies and technologies within each class. There are transformer-coupled, capacitor-coupled and even direct-coupled stage interconnects. There is Parafeed versus output transformer primary-feed. There are even tube amps without output transformers.

Also germane are all the types of negative (distortion cancelling) feedback: No feedback, interstage feedback and global feedback. And ways of achieving it, like grid coupled (presented from the plate), cathode coupled (usually presented as a cathode resistor), and distributed load or Ultra-Linear, using a transformer tap connected to the grid.

Some of those topologies apply to solid state amps too, like some feedback techniques. But many don't apply, like those that use an output transformer. Solid state designs employ different techniques; Some that are wholly different, like digital amps.

Long story short: There's much more to evaluate than just the "class" of the amplifier.