[We recommend becoming familiar with the following before hand
http://anaphoria.com/mos.PDF
http://anaphoria.com/xen10pur.PDF
(http://anaphoria.com/xen9mar.PDF

I thought I would draw some attention to an application of E. Wilson's Purvi Modulation (http://anaphoria.com/xen10pur.PDF) that is useful if one already is working with a constant structure of ones own with a limited number of pitches. In fact I will show its application within a 12-tonescale since one rarely in microtonal theory do we run across other ways of treating it even though the application is not limited to 12 tone equal. Possibly it will have some use there too.

It application differs first of by applying these modulations to scale steps as opposed to specific ratios. While an advantage in our use here it should also be pointed out one sacrifices the ability to expand many of our most bedrock and simple scales into basically infinite tone space. Something we should always keep our eye on as a possibility.

So we will start with our bedrock diatonic and the 10 other 7-tone scales that have an augmented fourth found in the raga scales of India (see http://anaphoria.com/mos.PDF page 10 and (http://anaphoria.com/xen9mar.PDF page 3 under fig 1e.).

7 tones intervals	series of 5^{th}
0. 1 2 2 1 2 2 2	5 5 5 5 5 5 6
1. 1 2 1 2 2 2 2	4 6 5 5 5 5 6
2. 1 2 1 2 2 1 3	4 5 6 5 5 5 6
3. 1 1 2 2 2 1 3	4 5 5 6 5 5 6
4. 1 1 2 2 1 2 3	4 5 5 5 6 5 6
5. 1 2 2 1 2 1 3	5 4 6 5 5 5 6
6. 1 1 3 1 2 1 3	5 4 5 6 5 5 6
7. 1 1 3 1 1 2 3	5 4 5 5 6 5 6
8. 1 1 3 1 2 2 2	5 5 4 6 5 5 6
9. 1 1 3 1 1 3 2	5 5 4 5 6 5 6
10. 1 2 2 1 1 3 2	5 5 5 4 6 5 6

We will return to this series but it will be easier to show illustrate our process by working with the pentatonic complements of the above. Each of which can also be found as a subset within the 7-tone scale of the same number.

5 tones intervals	series of 5th
0. 3 2 3 2 2	5 5 5 5 4
1. 3 3 2 2 2	6 4 5 5 4
2. 3 3 2 3 1	6 5 4 5 4
3. 4 2 2 3 1	6 5 5 4 4
4. 4 2 3 2 1	6 5 5 5 3
5. 3 2 3 3 1	5 6 4 5 4
6. 4 1 3 3 1	5 6 5 4 4
7. 4 1 4 2 1	5 6 5 5 3
8. 4 1 3 2 2	5 5 6 4 4
9. 4 1 4 1 2	5 5 6 5 3
10. 4 1 2 3 2	5 5 6 3 5

In many of these, that which we can call the disjunction is not always clear. For instance, with 4. either the 6 or 3 could be traditionally treated of the disjunction. If we take the assumption further to the possibility of any interval can function as the disjunction, we can generate Wilson's Purvi Modulations treating each one being a unique way of looking at each scale.
If we look at this set of pentatonics and the possible disjunctions we are left with the following set of four interval sequences which we place in an order from large to small and show in parentheses At what step the pattern repeats

6 5 5 5 = 4.-10.- 9.- 7.- 4. =(-m3)
6 5 5 4= 3.-1.-2.-3. =(-M3)
6 5 4 5= 2.-5.-6.-6. =(-M3)
6 4 5 5= 1.-8.-8.-5. =(-M3)
6 5 4 4= 6.-3.-3.-2. =(-P4)
6 4 5 4= 5.-2.-1.-1. =(-P4)
6 4 4 5= 8.- 6.- 5.- 8. =(-P4)
6 5 5 3= 7.- 4.- 4.- 4. =(-P4)

6 5 3 5 = 9.-7.-7.-9. =(-P4)
6 3 5 5 = 10.-9.-10.-10. =(-P4)
5 5 5 5 = 0.-0.-0.-0. =(-M3)
5 5 5 4 = 0.-0.-0.-0. =(-P4)
5 5 4 4 = 3.-6.-8.-1. =(-T)
5 4 5 4 = 2.-5.-2.-5. =(-T)
5 5 5 3 = 4.-7.-9.-10. =(-T)

I leave it to the reader to write out and explore these.

Recalling the 7 tone scales we started with and extrapolating the pentatonics possible we discover 10 more. This will be useful in looking at the Purvi modulations of the 10 heptatonics.

	5 tones intervals	series of 5th
0.	3 2 3 2 2	5 5 5 5 4
1.	3 3 2 2 2	6 4 5 5 4
2.	3 3 2 3 1	6 5 4 5 4
3.	4 2 2 3 1	6 5 5 4 4
4.	4 2 3 2 1	6 5 5 5 3
5.	3 2 3 3 1	5 6 4 5 4
6.	4 1 3 3 1	5 6 5 4 4
7.	4 1 4 2 1	5 6 5 5 3
8.	4 1 3 2 2	5 5 6 4 4
9.	4 1 4 1 2	5 5 6 5 3
10.	4 1 2 3 2	5 5 6 3 5
11.	4 2 3 1 2	6 4 6 5 3
12.	4 2 1 3 2	6 4 6 3 5
13.	3 3 3 1 2	6 4 5 6 3
14.	3 3 3 2 1	6 5 4 6 3
15.	4 1 1 4 2	5 5 6 2 6
16.	5 1 3 2 1	6 5 6 4 3
17.	5 1 1 4 1	6 5 6 2 5
18.	5 1 4 1 1	6 5 6 5 2
19.	5 1 2 3 1	6 5 6 3 4
20.	4 2 2 2 2	6 4 6 4 4

The heptatonics give us this set these 6 interval sequences instead of 4 above.

6 5 5 5 5 5	6 5 6 5 5 5	6 5 5 6 5 5
6 5 5 5 5 4	5 6 5 5 5 4	5 5 6 5 5 4
5 5 5 6 5 4	5 5 5 5 6 4	6 5 6 5 5 4
6 5 5 6 5 4	6 5 5 5 6 4	5 6 5 6 5 4
5 6 5 5 6 4	5 5 6 5 6 4	5 5 5 5 5 4

Now we can catalog the pentatonics from the 6 term sequences

6 5 5 5 5 5 = 4.-0.-0.-10.-9.-7.
6 5 6 5 5 5 = 18.-7.-4.-10.-9.-7.
6 5 5 6 5 5 = 15.-9.-7.-
6 5 5 5 5 4 = 4.-0.-0.-1.-2.-3.
5 6 5 5 5 4 = 7.-4.-0.-0.-5.-6.
5 5 6 5 5 4 = 9.-7.-3.-0.-0.-8.
5 5 5 6 5 4 = 10.-9.-6.-2.-0.-0.
5 5 5 5 6 4 = 0.-10.-8.-5.-1.-0.
6 5 6 5 5 4 = 18.-7.-3.-1.-2.-19.
6 5 5 6 5 4 = 15.-9.-6.-14.-2.-3.
6 5 5 5 6 4 = 4.-10.-8.-12.-11.-3.
5 6 5 6 5 4 = 17.-18.-6.-2.-5.-6.
5 6 5 5 6 4 = 7.-15.-8.-5.-13.-6.
5 5 6 5 6 4 = 9.-17.-16.-5.-1.-8.
5 5 5 5 5 4 = 0.-0.-0.-0.-0.-0.

If we continue on this path we look at the compliments of the 20 pentatonics we likewise discover 10 more Heptatonics. Somehow these in turn contain no new pentatonic shapes we had not already encountered and we find a self contained set of scales that deserves it being thought of as an aesthetic unit.

Already we have taxed the resources within 12 as many of these modulations especially ones that repeat at the tritone, then the Major third and the minor third run into itself. Some like some such confinements so I will mention one more point of further exploration available. Looking at the 20 pentatonics there are the 10 we have not examined for possible Purvi modulations. These give us the 4 interval sequences we have not encountered before. I omit the ones that repeat 2 6’s in a row of being unusable. In a scale with a prime number one could continue.

6 5 6 5 =(-M2)	6 5 6 3 =(-M3)
6 5 6 4 =(-m3)	6 4 6 3 =(-P4)
6 5 4 3 =(-T)	6 4 6 4 =(-M3)
6 5 3 4 =(-T)	6 4 4 4 =(-T)
6 4 5 3 =(-T)	6 5 6 2 =(-P4)
6 4 3 5 =(-T)	6 5 5 2 =(-T)
6 3 5 4 =(-T)	6 5 2 5 =(-T)
6 3 4 5 =(-T)	6 2 5 5 =(-T)