A HUNDRED POSTERS

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Dear Alan Davies -

I guess you received my ms. dealing with line spectra. Briefly, I observe that atomic weight and number cannot account for the order in the lines. I suggest that valence may have something to do with it, noting that noble gases are inactive and that, unlike the others, they seem to have lines in common (as example I give Helium and neon) In Tucson touring recently, I pursued the matter further. At the National Library I consulted a massive German tome, Kayser's work on line spectra in around nine volumes (these volumes consisting of numbers only, in Angstrom units) wherein I found that (my notes were stolen in Germany, so I cannot recall with certainty) Krypton and Xenon have lines in common

You may publish this

Best Regards,

Britton Wilkie

Line Spectra & the Periodic Table

A gypsy cart in the snow...
The traveling show of mythical monsters hidden behind decorative screens of swastika signs, of alchemic figures paralyzed in their understanding at the doorways of dream, has come to a halt. Unable to sell shares in hell or pawn grief's jewels, our mercurial operator puzzles coldly at his own shell game – essays to discard the shells, which appear as colored lines – and concern himself with the matter they cover, which seems as balls of music fast-expanding, as a dense pea irritating to the princess, as an unborn gravedigger's shroud and as an everlasting cloud in a flash of light most loud...

So–

Our gypsy mountebank has taken it upon himself to juggle with very small balls (so deftly does he bounce them about, that they change magically in number and color). So very small are they that I cannot see them. The gong that announces the performance ...

... is a tiny spark. With the light comes the image of concentric spheres of vibration about a center. When one of the outer spheres collapses to the inmost, invisible rays proceed. When the collapse is to the secondmost, visible rays proceed ... And so forth unto rays ever redder, waves ever longer. This orb of phantom vibration evaporates to reveal Mendeleyev's mineral cabinet on which vials of gas, bits of metal, curious rocks — in short, the elements — have been arrayed in little pigeonholes according to their weight — so that hydrogen lifts gently under the upper left-hand corner, while uranium weighs heavily in the bottom right-hand corner.

We can examine the array as columns up and down as well as rows left to right. The 8th column, the noble gasses, do not combine chemically.

Seeking understanding, we may follow threads connecting each pigeonhole with an imaginary balloon floating above it. Here our memory of concentric spheres of vibration changes form somewhat, rather as an orange turning suddenly blue, as the gypsy tosses it from one hand to the other.