The Power of 1,2,3,4

I have always felt that hidden within this seemingly random world that we live in lies some kind of an orderly system, something that guides our paths and gives order to our chaotic lives. This belief is why I always say to myself, "everything happens for a reason" when something bad or surprising happens. For some reason I never think that when something good happens, but then I guess it's hard to notice when things seem to be going along as we want expect them to. Life is amazing to me. Everything on Earth and in the Universe is a complex system, if you look close enough. The smallest leaf on the largest tree has the same pattern of growth as every other leaf on that tree and even the tree itself. Systems and order are present everywhere we look, stretching out far into the universe. Yet, life to me always seems so random and out of control. There must be some kind of balance between order and chaos in our world, otherwise how would we even be here?

A simple system is one that acts periodically and then returns to the same point over and over again. One example would be a pendulum. It continues to move from side to side always returning to the starting point and then repeating. But when change is introduced to the system, then complexity forms and chaos is generated. Chaos theory states that iteration, repetition, generates chaos. Repetitive and small changes within the system can be a subtle form of order. Multiple iterations create so many subtle changes over time that it is difficult for the underlying order to be obvious. Reductionism theory states that chaos is complexity so great that it can't be tracked and that is why we are unable to notice the order that is present.

I am interested in the idea that things that are seemingly random and chaotic in their makeup are actually formed by an underlying order or system. Rules are followed that then create a pattern. In my mind I created a simple system made up of four numbers. From a starting point, each number represents a movement, first up, then to the right, then down, and then to the left. For the numbers 1,1,1,1 the point would move up one unit, to the right one unit, down one unit and to the left one unit eventually making its way back to it's starting position.



If a slight change were made to the set of numbers then the point would end in a different location. For example the numbers 1,1,1,2 would make the end point different.



Of course, some sets of numbers would not change the end point such as 4,4,4,4 or 2,3,2,3. I then considered a whole system of sets of numbers that would be comprised of all of the possible configurations of the numbers 1,2,3, and 4. Thus, I came up with the following:

1111	1311	2111	2311	3111	3311	4111	4311
1112	1312	2112	2312	3112	3312	4112	4312
1113	1313	2113	2313	3113	3313	4113	4313
1114	1314	2114	2314	3114	3314	4114	4314
1121	1321	2121	2321	3121	3321	4121	4321
1122	1322	2122	2322	3122	3322	4122	4322
1123	1323	2123	2323	3123	3323	4123	4323
1124	1324	2124	2324	3124	3324	4124	4324
1131	1331	2131	2331	3131	3331	4131	4331
1132	1332	2132	2332	3132	3332	4132	4332
1133	1333	2133	2333	3133	3333	4133	4333
1134	1334	2134	2334	3134	3334	4134	4334
1141	1341	2141	2341	3141	3341	4141	4341
1142	1342	2142	2342	3142	3342	4142	4342
1143	1343	2143	2343	3143	3343	4143	4343
1144	1344	2144	2344	3144	3344	4144	4344
1211	1411	2211	2411	3211	3411	4211	4411
1212	1412	2212	2412	3212	3412	4212	4412
1213	1413	2213	2413	3213	3413	4213	4413
1214	1414	2214	2414	3214	3414	4214	4414
1221	1421	2221	2421	3221	3421	4221	4421
1222	1422	2222	2422	3222	3422	4222	4422
1223	1423	2223	2423	3223	3423	4223	4423
1224	1424	2224	2424	3224	3424	4224	4424
1231	1431	2231	2431	3231	3431	4231	4431
1232	1432	2232	2432	3232	3432	4232	4432
1233	1433	2233	2433	3233	3433	4233	4433
1234	1434	2234	2434	3234	3434	4234	4434
1241	1441	2241	2441	3241	3441	4241	4441
1242	1442	2242	2442	3242	3442	4242	4442
1243	1443	2243	2443	3243	3443	4243	4443
1244	1444	2244	2444	3244	3444	4244	4444

I began with the first set of numbers and moved the point as indicated. Then I moved down the column to the next set of numbers and, using the end point of the previous number set as my starting point I moved the point again. I continue to move the point through every set of numbers in the system. That was when I created my first "number drawing" (see *Original 1*). One interesting thing about this exercise was that when I got to the end of the drawing I had found myself right back at the very first starting point. So, within this odd and rather chaotic looking image there was an underlying simple system.

My next step was to change the order of the number sets slightly. I did this by moving through the numbers horizontally rather than vertically. This produced a different although not completely unfamiliar drawing (see *Original 2*).

I concluded that by making changes in the order of the number sets and then moving the point around different images would be created. Even slight changes in the order could make completely new images. Further, I concluded that I could set rules that make changes to the actual sets of numbers, not just the order and then even more images would develop. Over time I created 55 images. However, it occurs to me that the number of images is infinite. While in many cases similarities in the drawings would occur they would still be different, even if only slightly. No one image would be exactly the same. And in many cases, I always ended back at the starting point.

It was exciting to make these drawings because while making them I never knew until the end what I would get. I just followed the rules laid out by the system and the images created themselves. When I made them I felt as though I was pulling them out of a world that is not normally visible to us. These numbers and the sets of numbers already exist. They are out there; my method of drawing just gives them visual form. I am making corporal images that live within their own ordered universe, unseen to us.