●	●		●	●		■	■	■	■	■
●	●	●		●		■	■			■

The author has unprecedentedly discovered the infinite prime-first pair(Figures E&F) in this article, therefore it can describe with strong evidence why the law of filling out can prove（1+1）and（P+2）.(The original Chinese article is also attached for reference)

由于本文前所未有地发现了存在着无限的（素一对）(E、F 二图)，所以本文能够有根有据地来论述，填满定律为什么可以直接证明（1+1）以及（P+2)。(另附中文原文）

The Law of Filling Out that proves Goldbach（1+1）&（P+2）

填满定律证明哥德巴赫（1+1）以及（P+2）

The law of filling out is that all the blank spaces in the form of integer from finite to infinite, could be filled out regularly with the first number and second number, that is 1,2,1,2……For example:

填满定律是指在整数表里从有限到无限过程中的所有空格，
原本都是由第一数与第二数这二种数字无限重复 1,2,1,2。。。。。。
彼此在排列上是有规则地来填满。比如：

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	……

Thus it can be seen, the first number means the numbers whose arrears could be 1、3、5、7、9, the second number means the numbers whose arrears could be 2、4、6、8、0.

由此可见，第一数（单数）的定义是指任一尾数是 1、3、5、7、9 的数字，
第二数（偶数）的定义是指任一尾数是 2、4、6、8、0 的数字。

Also because, not only when 〔（greater even number）arranged behind〕 ÷ 〔（smaller first number）arranged front〕， their divisors are always repeated randomly, sometimes not divided, and other times divided;

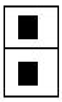
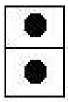
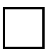
也因为，不仅〔排列在后的（大偶数）〕 ÷ 〔排列在前的（小第一数）〕，
它们的除数总是无规则地无限重复有时不能除尽，有时能除尽;

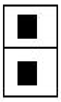
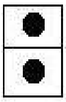
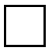
But also, even when 〔（greater even number）−1=（greater first number）〕 ÷ （smaller first number）, their divisors are also always repeated randomly, sometimes maybe prime numbers, other times maybe odd numbers.

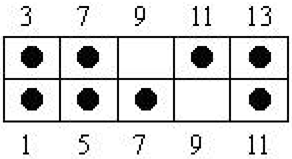
而且，即使是〔（大偶数）−1=（大第一数）〕 ÷（小第一数），
它们的除数同样也总是无规则地无限重复有时会是素数，有时会是奇数；

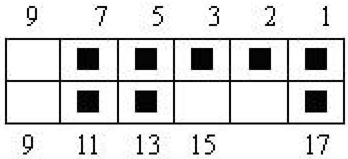
Therefore, in any number field, the multiplication of any two first numbers which are greater than 3, that is, the prime numbers are destined to be less than the first numbers in between 2, which shows:
Prime numbers or odd numbers are infinite, and they are random on the arrangement.
They can’t fill out the spaces in between 2 which belong to the first numbers.

所以在任何数域，两个不小于 3 的（第一数 x 第一数）的乘积，
即那类奇数在个数上注定少于每间隔 2 的第一数之运算答案表明：
素数或者奇数分别都是无限的；并且分别在排列上都是无规则的定义是，
分别在个数上全都填不满所有每间隔 2 原本属于第一数的空格。

Please refer to Figure A&B:  means Goldbach prime pair  means twin prime pair  means odd number

请参照 **A**、**B** 二图： 表示哥德巴赫素素对 表示孪生素素对  表示奇数

B图 

A图 

Please note, the two spaces which are paired from top and bottom lines in Figure A&B （prime number+ prime number）（first number+ first number）（prime number + odd number）（odd number + odd number）（prime number + first number）, are respectively called prime-prime pair, first-first pair, prime-odd pair, odd-odd pair, prime-first pair.

注一，A、B 二图上下二格相配对的（素数+素数）（第一数+第一数）（素数+奇数）（奇数+奇数）（素数+第一数），分别统称为素素对、一一对、素奇对、奇奇对、素一对。

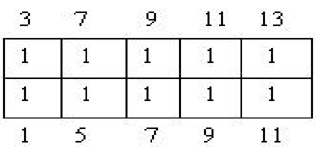
Please also note, the spaces within the two lines with equal numbers, are representing even numbers respectively; For example, the even number 18 has three prime-prime pairs including（1 + 17）、（5 + 13）、（7 + 11）, with the infinite increasing of spaces, the numbers are representing Goldbach prime-prime pairs and twin prime-prime pairs that exist infinitely.

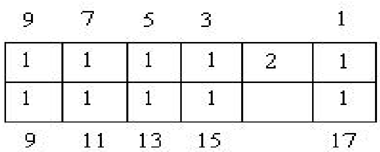
注二，A、B 二图上下二排数量相等的空格，分别表示偶数；

以 18 的偶数拥有（1 + 17）、（5 + 13）、（7 + 11）三个素素对的配对机会为例，随着数格无限增多，分别又能表示无限存在哥德巴赫素素对以及无限存在孪生素素对。

The author shall remind the readers, that any even number is the sum of two first numbers or twin first numbers that exist infinitely; To illustrate this, Figure C&D shows that the infinite spaces from the top and bottom lines could be filled out by the first-first pairs in between 2.

筆者特别要提醒读者：原本任一偶数都是二个第一数之和以及原本无限存在孪生第一数；为此 C、D 二图可说明：原本上下二排无限的空格，分别照样是由每间隔 2 的一一对来填满。

D图 

C图 

However, the reason why any even number is also the sum of (prime number+first number) or the twin prime-first pairs that exist infinitely, is because of the lack of odd numbers compared with the first numbers, that would cause odd numbers not able to fill out the spaces (on top line) which belong to the first numbers. Therefore, the spaces (on top line) must be filled out randomly by prime numbers and odd numbers; when the top line spaces are filled with prime numbers, that will compose the prime-first pair which can correspond with the top and bottom line spaces.

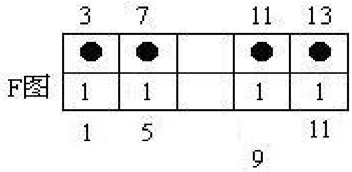
然而，之所以任一偶数也都是（素数+第一数）之和以及无限存在孪生素一对的原因是，
由于奇数在个数上少于第一数自然会造成，单凭奇数填不满（位于上格的）第一数的空格。
因此，（位于上格的）第一数的空格，必需要由素数与奇数，彼此无限重复地共同来填满；
如每当排到由素数来填入上格，这就正好组成上下两格相配对的（素数+第一数）的素一对。

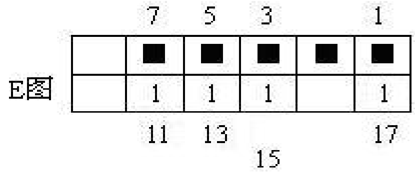
In other words, any numbers on the bottom line which can form pair relationships with the prime numbers on the top line, should be regarded as pure first numbers, when they become infinite big and could not be calculated by manpower to identify whether they are prime numbers or odd numbers; that is, we should regard the pair (prime number+first number) from top line and bottom line as a pair of pure prime-first numbers.

换句话说，任一能够跟位于上格的素数有上下两格配对关系的那些位于下格的数字，
当这些数字无限变大，人力没法用计算方式来确定它到底是一个素数还是一个奇数的时候，
我们首先应该毫无疑问把它看成是一个纯粹的第一数；也就是说，
我们首先应该理所当然地把上下两格相配对的（素数+第一数），看成是一组纯粹的素一对。

Please also be aware, the prime-first pairs in Figure E are （1 + 17)、(3 + 15)、(5 + 13)、(7 + 11), in fact, the first numbers within the bottom line are 17、15、13、11; Only 15 is the odd number. The prime-first pairs in Figure F are（3 + 1)、(7 + 5)、(11 + 9)、(13 + 11)，in fact, the first numbers within the bottom line are 1、5、9、11；Only 9 is the odd number.

请再注意：**E** 图的素一对是（1 + 17)、(3 + 15)、(5 + 13)、(7 + 11)，
事实上位于下格的第一数是 17、15、13、11；其中只有 15 是奇数。
F 图的素一对是（3 + 1)、(7 + 5)、(11 + 9)、(13 + 11)，
事实上位于下格的第一数是 1、5、9、11；其中只有 9 是奇数。

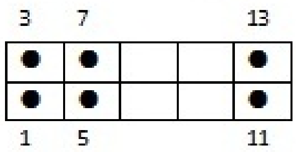




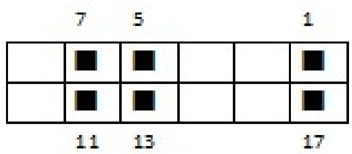
It is very clear from Figure G&H, that the reason why infinite prime-prime pairs （1+1）and（P+2） exist, is because of the lack of odd numbers compared with the first numbers, that would cause the odd numbers only could not fill out the spaces (on bottom line) which belong to the first numbers within the scope of prime-first pair numbers. It goes without saying, that the spaces (on bottom line) must also be filled out randomly by prime numbers and odd numbers; when the spaces on bottom line are filled out by prime numbers, they will form prime-prime pairs which correspond to the spaces from top and bottom lines.

问题在 G、H 二图中很清楚，之所以无限存在素素对即（1+1）以及（P+2）的原因是，
由于奇数在个数上少于第一数自然又会造成,
单凭奇数同样还是填不满在素一对的对数范围之中（位于下格的）那些第一数的空格。
不言而喻，那些第一数的空格，照常必需要由素数与奇数，彼此无限重复地共同来填满；
如每当排到素数又来填入下格，这就正好组成上下两格相配对的（素数+素数）的素素对。

H图



G图



Besides, the computing results that the prime numbers are less than the first numbers prove, that the prime numbers are randomly arranged; it also proves that the prime numbers could not be arranged regularly to form prime-odd pairs with odd numbers. The amazing thing is, the prime numbers on the top line are limited into two parts: one part will form prime-odd pairs with odd numbers, the other part will form prime-prime pairs with prime numbers.

何况，也即然素数在个数上少于第一数的运算答案表明：素数在排列上是无规则；
反过来验证，素数就不可能在运算答案的排列上是有规则地全部都会与奇数来组成素奇对。
美妙的是，素数的定义表现在上排的素数却始终局限于最多不超过只能分成二个部分：
即除了有一部分会与奇数来组成素奇对之外，另一部分那就肯定是与素数来组成素素对。

Again, the odd numbers are randomly arranged, which would also make (prime-odd pair)+(odd-odd pair) are randomly arranged. We could understand better, that even though they both are randomly arranged which makes them impossible to fill out the spaces belonging to the first-first pairs that are in between 2, but interestingly, the law of filling out tells us: when neither of them could not fill out the spaces that belong to first-first pair, these spaces will be filled out automatically by prime-prime pairs; therefore,

the author suggests: the common basis for [any even number could be written as the sum of two prime numbers] and [the infinite twin prime numbers] is directly from the law of filling out which will never leave out any integer within the table of integers.

再说，奇数在排列上是无规则当然会连带造成，包括与奇数有上下二格配对关系的（素奇对的对数）+（奇奇对的对数），它们二者在配对的排列上同样跟着也是无规则。
其实我们十分容易明白，虽然尽管它们二者在配对的排列上是无规则的定义是，:
单凭它们二者在对数上毕竟填不满每间隔 2 原本属于（一一对的空格）；但有趣的是，
填满定律告诉我们：每当碰到它们二者填不满的那些原本属于（一一对的空格），
不分年代无边界地那就只好自动要由（素素对）来填满它；因此，

筆者建议:〔任一偶数必定可以写成二个素数之和〕以及〔无限存在孪生素数〕的
共同依据直接来自在整数表里具有永不遗漏任一整数的填满定律。

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London 23th March 2015

周武昌
2015 年 3 月 23 日于伦敦