Evolvational Arts and Literature for Bilingual Poems: 中英名詩對譯

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This is a collection of bilateral translation of known poems and some of my own.

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序

我是學數學的，對詩作是外行。說來有趣，促成這兩者的連結，竟然是數獨。我從教書職場退休前後，一頭鑽進了數論的研究，用組合的方法拼湊十年，終於兜弄出相當美妙的成果。在這段單打獨鬥的歲月，三不五時都需以破解數獨迷陣調劑身心。在七十三歲徒手破解史上最難數獨之後，轉而用組合拼湊的故技，進行中英名詩的雙向試譯。因此不揣粗陋，集結成冊，供諸於同好，敦請笑納與指正。

巴斯卡三角形鮮
展示數字多自然
渴望夢想成篇寫
數之內斂我見焉

Nothing is more impressive than the Pascal triangle
It displays those numbers ever so natural and simple
I have long dreamed of writing a prospective article
To show the inner beauty of numbers from my angle

迷宮巧門四處築
一切設障不難除
無事且登三寶殿
閒情逸致玩數獨

Maze with clues has been built in every foreseeable place
All barriers could be removed without any frustrating face
In idle time please come to visit the three treasures palace
Relax your mood and nerves and indulge in Sudoku space

Keywords: Poems, Chinese, English, Translation.
李白

靜夜思    Silent Night Thoughts

床前明月光    Bed side bright moon light
疑似地上霜    Looks like frost laid down
舉頭望明月    Lift face watch bright kite
低頭思故鄉    Nod head catch home town

我重新組合「靜夜思」成下詩。

舉頭疑月光
Lifting my head to doubt moonlight
低頭地上霜
I look down the ground frost alright
床前明月望
By my bedside I saw the moon bright
明是思故鄉
In fact, I missed my hometown, right?
月下獨酌

花間一壺酒
獨酌無相親
舉杯邀明月
對飲成三人
月既不解飲
影徒隨我身
暫伴月將影
行樂須及春
我歌月徘徊
我舞月零亂
醒時同交歡
醉後各分散
永結無情遊
相處邈雲漢

The Moon and Lone Drinker

Pot of wine sits amongst flowers
Drink alone with no party goers
Lifting glass invite bright moon come
With my shadow cheer the threesome
Since bright moon knows drinking not
Shadow chases me unwillingly but hot
Just let the shadow accompany Moon
Enjoy Spring time before fading soon
I sing and Moon simply wandering
I dance and shadow tacitly tangling
While awake we all rejoice together
Till drunken each parts like stranger
Forever tie to such hopeless romance
Despite of the lingering long distance
關山月

蒼茫雲海間
Boundless between the clouds and the sea
沓嶂凌蒼間
Layers of bens override the skyline you see
身登青雲梯
I feel like climbing up the green cloud stairs
盡覽天地寬
To clearly behold the width of sky-land airs

李白「憶舊游寄譙郡元參軍」詩中，上下兩句天成的對聯並英譯如下。

一溪初入千花明
Tiny brook breaks through all flowers bright
萬壑度盡松風聲
Deepen hollow swallows up pine winds silent
杜甫

閣夜

歲暮陰陽催短景
In the evening of the year Sun and Moon cut short daylight
天涯霜雪霽寒宵
At the edge of the sky frost and snow clear in the cold night
五更鼓角聲悲壯
The sound of horn reveals tragic near the daybreak
三峽星河影動搖
In Three Gorges the reflections of Milky Way shake
野哭幾家聞戰伐
Wails in the wildness spread as the news of war heard
夷歌數處起漁樵
The folk songs rise from the fishermen n' loggers herd
臥龍躍馬終黃土
Generals either loyal or rebellious all have turned to dust
人事依依漫寂寥
Words or letters from kith and kin far away have also lost
登鹳雀樓
Mounting Crane Sparrow Pagoda

白日依山盡 (意猶未盡兮)
White sun clings to that hill top tree

黃河入海流 (還在續流乎)
Yellow River flows in the sea

欲窮千里目 (看個真切吧)
To far reach your thousand mile eye

更上一層樓 (眼界開闊了)
Step up further one story high
崔顥

黃鶴樓

昔人已乘黃鶴去
By goers have ridden yellow crane away
此地空餘黃鶴樓
Here tagged mere w' yellow crane story
黃鶴一去不復返
Yellow crane has gone will never return
白雲千載空悠悠
White cloud thousand years vain in vain
晴川歷歷漢陽樹
Clear sky wander over Han young trees
芳草萋萋鸚鵡洲
Fine grasses derive n' thrive parrot isles
日暮鄉關何處是
Near dusk home land wherever could be
煙波江上使人愁
Smoky waves on river let me worrisome
張若虛

春江花月夜
Spring River Flower Moon Night

春江潮水連海平，
The spring time waves in rivers towards the sea subsided，
海上明月共潮生。
The bright moon above the sea with waves mutually fated。
灩灩隨波千萬裏，
The billow accompanying hundreds of thousand wavelets，
何處春江無月明！
In whereabout spring river without the bright moon exists！
江流宛轉繞芳甸，
The river wishy-washy circles around the fragrant borough，
月照花林皆似霰；
The moon shining the flower bushes just like sleets though；
空裏流霜不覺飛，
In the hollow the liquidating frosts do not seem like on flight.
汀上白沙看不見。
White sands contained in the sandbanks are all out of sight.
江天一色無纖塵，
Both the river and the sky seem uniformly colored and clear，
皎皎空中孤月輪。
In the glistening white sky is the moon wheel lone to appear.
江畔何人初見月？
By the riverbank who the hack was the first to see the moon?
江月何年初照人？
Whatsoever month and year was the moon first to shine men?
人生代代無窮已，
The life of mankind generation after generation relays forever，
江月年年望相似。
The moon and the river year in and year out looked just similar.
不知江月待何人，
Don’t know the moon n’ the river awaited for which passenger.
但見長江送流水。
Simply saw the Yangtze River bidding farewell to flowing water.
白雲一片去悠悠，
Up in the sky I see a blob of white cloud leisurely floating away.
青楓浦上不勝愁。
By the Green Maple Shore the insurmountable is my worry way.
誰家今夜扁舟子？
Which household holds the boat duty of the vigilant for tonight?
何處相思明月樓？
Where is the lady lovesick in her chamber under the moonlight?
可憐樓上月徘徊，
Pitifully the moon lingering back and forth around her chamber，
應照離人妝鏡臺。
The moonbeam on the mirror stand must reflect that wanderer.
玉户帘中卷不去，
It curls in the curtain of the jade chamber no way away to turn.
捣衣砧上拂还来。
Wiping it off the washing stone in vain since its repeated return.
此时相望不相闻，
At the meantime they mutually watch without communications，
愿逐月华流照君。
Chasing the glory of the moon the man could see the emotions。
鸿雁长飞光不度，
The gigantic swan geese long flied but not enough for transition，
鱼龙潜跃水成文。
The fish dragons diving up just caused the water transformation。
昨夜闲潭梦落花，
Last night the leisurely pond has dreamed of flower petals falling，
可怜春半不还家。
She pitifully missed him at home since the half gone of the spring。
江水流春去欲尽，
The water of the river flowing with the spring to its end is a must，
江潭落月复西斜。
The deep ponds reflecting the setting moon further slanted west。
終南別業

中歲頗好道，
At the mid-age I was one of Zen-Tao practitioners,
晚家南山陲。
My home settled for good by the south hill borders.
興來每獨往，
When it comes for pleasures I always go by myself.
勝事空自知。
Delightful occasions are often sufficient for oneself.
行到水窮處，
Once I was fortunately able to reach the creek’s end,
坐看雲起時。
Up rolled the cloud when I was sitting at my rear end.
偶然值林叟，
Sometimes I’d come across an old sage in the wood,
談笑無還期。
Chats n’ laughs not worrying home as long as I could.
曹操

短歌行

對酒當歌，
While drinking we must sing，
人生幾何！
The human life is not a thing！
譬如朝露，
It simply likes a morning dew，
去日苦多。
Wasted days are quite a few。
慨當以慷，
I regretted not to be generous，
憂思難忘。
My worry has been memorious。
何以解憂？
How to get rid of that sucker？
唯有杜康。
We can only rely on the liquor。
青青子衿，
Your outfits are so impressive，
悠悠我心。
That my heart is held captive。
但爲君故，
Only for the sake of your own，
沉吟至今。
I’ve pondered yet to be known。
呦呦鹿鳴，
Cowards sound as deer babies，
食野之苹。
Eating apples like crying babies。
我有嘉賓，
My house is blessed with hopes，
鼓瑟吹笙。
Playing lutes and blowing pipes.
明明如月，
Whoever as bright as the moon，
何時可掇？
I could fortunately acquire soon？
憂從中來，
The worry comes from my inside!
不可斷絕。
It is in essence unlikely to subside.
越陌度阡，
By crisscrossing allover our nation，
枉用相存。
I would invite you for collaboration.
契闊談宴，
Longtime no see let’s chat n’ cheer，
心念舊恩。
To anew our old-day grace my dear.
月明星稀，
Stars so few since the moon is bright，
烏鵲南飛。
Southbound birds are already in flight.
繞樹三匝，
Circling around the tree triple-loop.
何枝可依？
Not knowing which bough to scoop.
山不厭高，
Hills are never deemed to be too tall，
海不厭深。
Sea is never fretted to be deep at all.
周公吐哺，
The wise King nourishes the talents，
天下歸心。
Just so the whole Kingdom benefits.
水調歌頭

明月幾時有
Bright moon what time by
把酒問青天
Holding wine ask blue sky
不知天上宮闕
Not certain palace up soar
今夕是何年
T'night could be what year
我欲乘風歸去
I want riding wind thereof
又恐瑤樓玉宇
But fear jade tower's roof
高處不勝寒
High above not cold proof
起舞弄清影
Up dance play my shadow
邵雍
牡丹吟

牡丹花品冠群芳
Peony flowers being champions in style
況是期間更有王
Among them exists one king meanwhile
四色變而成百色
Four turn into hundred color increments
百般顏色百般香
Hundred colors smell as hundred scents

久彌
星星

夜
Night
黑暗的大謊
Black white lie
遮掩光明
Covering the light
幸喜漏洞滿天
Delightful holes all over the sky

觀浪
曹恆平

白浪衝岸石
White waves splash upon shore rock slate,
前後恐至遲
One dashes another lest getting there late;
閒人呆坐看
An idle by-passer simply sits still watching,
久望湧來詩
Poetic rhythms well up during long gazing.
餘光中
雀斑美人
Freckle-faced Beauty

對著地球的背日面失眠
Facing the earth’s counter sunny side I couldn’t sleep
那下面全熄燈了吧，人間
Those down below must be completely lights off, the human world
森羅的宇宙亙古不變
The forest-like intricate universe is hitherto totally unchanged
知名的，無名的億兆星斗
Known, unknown billions of trillion stars
一叢叢，一蔟蔟，一渦渦
By bushes, by bunches, by bundles
無量數的密碼，燦燦的暗號
Uncountable number of secret codes, twinkling obscure signals
聖人與天才，誰能解破
Saint or genius, who can decode
標點著詭譎的，唉，永恆之臉
Punctuating mysterious, Ai, immortal face
阿姆斯壯來了又去了，留下
Armstrong came and went, left behind
驚疑的足印，寂寞的旗
Astounding foot prints, the solitary flag
不停的隕星雨徹夜來襲
The ceaseless meteor storm has raided overnight
不眠的天文鏡仍張望
Sleepless astronomical telescopes are still eye-openly searching
偷窺我無可隱密的裸體
To peek my conceal-less nudity
無水來滋潤，無雲氣可披
No water to nurture, no cloud to cover
笑我的隕星穴是麻臉衛星
Teasing my meteor bunkers to be spotty face satellites
衛星紛紛，從各國升入了浩氣
Satellites razzle-dazzle, risen from various nations into the space
外太空的忙碌更顯得荒寂
The busy chaos of Outer Space even appears to be desolate
古代詩人用唯美的名字
Ancient poets used utterly pretty names
百般仰讚我，用埃及，波斯
To praise me up enthusiastically, using Egyptian, Persian
希臘的音韻，卻有位詩人
Greek rhymes, yet another poet
夜夜在海峽望我的頸硬
Watching me nightly from Taiwan Strait to his stiff neck
取的名最好，喚我作雀斑美人
Who named me the best, called me freckle-faced beauty
碧海青天，誰體會有多孤單
Green sea blue sky, who the heck can understand how lonely I am
寧靜海邊，風暴洋上
By the silent seashore, on the stormy ocean
古來的神話，最貼心的一則
Out of those ancient myths, the most touchy one
是逃世的姮娥逃出那下界
Was the evasive palace maid escaped from the lower world
雀斑點點，不知哪一顆
Freckles scatter, don’t know which one
是她，在那瘋狂的一夜
Is she, during that frantic night
乘著火隕星來投奔所撞成
Rode a meteor into my arms as a result
有時，我真想攬月，啊不
Sometimes, I really like to hold the moon, Oh no
真想用反照的地球為鏡
Really like to use the reflecting earth as a mirror
照一照自己的傳說
To reflect my mythical stories
看滄桑歷盡後，究竟
Look at my post-storied self, how
還剩下多美，記不清
Much beauty still remains, don’t remember
星譜上我已經多少萬歲
In the star spectrum I’m already how many million years old
捲珠簾
Rolling Beaded Curtain

鐫刻好每道眉間心上
Engrave each n' every eye brow precisely imprinted

畫間透過思量
Making sure all the strokes be thoroughly pondered

沾染了墨色淌.
Contaminated by the dark color of ink flows soaked

千家文都泛黃.
Volumes of thousand words turn yellowish n' blurred

夜靜謐窗紗微微亮.
Night so quiet the window curtain shimmery shined

拂袖起舞于夢中徘徊
Raising sleeves and dancing in the dream wandered

相思蔓上心扉
Yearning desire upon the doorstep of heart crepeed

她眷戀梨花淚
Longing for passions her pear blossom tears dropped

靜畫紅妝等誰歸
Tacitly fixing the rouge awaiting for whoever returned
空留伊人徐徐憔悴
Leaving the beauty alone only leads gradual haggard
啊胭脂香味
Ah such scent of the rouge powdered
卷珠簾是為誰
To whom up the beaded curtain rolled
啊不見高軒
Ah seeing not the window high opened
夜月明此時難為情
Moon shines at night lest passion faded
細雨落入初春的清晨
Drizzles in the early spring morn tapped
悄悄喚醒枝椏
Whisper to the twigs and branches be awakened
聽微風耳畔響
Hearing the breeze light wind ear sides sounded
嘆流水兮落花傷
Sigh for water flowing by falling petals saddened
誰在煙雲處琴聲長
Who is amid misty clouds playing pieces lingered
You say that you love the rain,
but you open your umbrella when it rains.

喜雨卻撐傘

You say that you love the sun,
but you find a shadow spot when it shines.

悅日反投陰

You say that you love the wind,
but you close the windows when it blow.

戀風豈關窗

This is why I’m afraid,
you said that you love me too.

愛我令我憂
A. R. Ammons

Beautiful Woman

美人遲暮

The spring in her step has turned to fall

春盈蓮步轉沉秋
Longfellow

The brook and the wave

The brooklet came from the mountain,
小溪流下山潺潺
As sang the bard of old,
頗似古來詩人吟
Running with feet of silver
奔波用銀色的腳
Over the sands of gold!
走過一片沙粒金
Far away in the briny ocean
而在老遠的海上
There rolled a turbulent wave,
滾跑著洶湧的浪
Now singing along the sea-beach,
一時沿海灘歌唱
Now howling along the cave.
一時經洞穴嚎盪
And the brooklet has found the billow,
小溪總算遇巨浪
Though they flowed so far apart,
雖相距老遠浮蕩
And has filled with its freshness and sweetness
已充滿其鮮與甜
That turbulent bitter heart!
那顫而楚的心臟
Through primrose tufts, in that green bower,
穿越報春花簇叢，進入那綠色涼亭，
The periwinkle trails its wreath;
長春花追其蹤跡；
And 'tis my faith that every flower
而那是我的信念，意即每一片花朵，
Enjoys the air it breathes.
樂享飄香空氣中。
The birds around me hopped and played,
眾鳥繞我跳而嬉，
Their thoughts I cannot measure;
其思想難測其一；
But the least motion which they made,
但其最少的動作，
It seemed a thrill of pleasure.
已似喜悅之至極。
The budding twigs spread out their fan,
萌芽嫩枝张扇开，
To catch the breezy air;
攔截微風空中來；
And I must think, do all I can
堅定我心全力做
That there was pleasure there.
確保此處盡開懷。
If this belief from heaven be sent,
若此信念自天來，
If such be Nature's holy plan,
若彼乃自然聖裁，
Have I not reason to lament
則余無理由自嘆
What man has made of man?
何樣人造自娘胎？
William Blake

The Tiger

Tiger Tiger, burning bright,

In the forests of the night;

What immortal hand or eye,

Could frame thy fearful symmetry?

In what distant deeps or skies.

Burnt the fire of thine eyes?

On what wings dare he aspire?

28
What the hand, dare seize the fire?
哪隻手敢掠其炎
And what shoulder, and what art,
何等臂力及巧手
Could twist the sinews of thy heart?
能扭轉心的筋肉
And when thy heart began to beat,
而其心開始怦跳
What dread hand? and what dread feet?
好恐怖的手和腳
What the hammer? what the chain,
何種鎚頭何種鍊
In what furnace was thy brain?
何烤爐中將腦煉
What the anvil? what dread grasp,
握何鐵鑽猛力抖
Dare its deadly terrors clasp!
膽敢把那兇徒鈎
When the stars threw down their spears
當眾星射下其箭
And water'd heaven with their tears:
並朝天灑其淚線
Did he smile his work to see?
他笑看其計得售
Did he who made the Lamb make thee?
造綿羊也造惡獸
Tiger Tiger, burning bright,
老虎老虎燃火熠
In the forests of the night;
在森林中的長夜
What immortal hand or eye,
哪位神的手或眼
Could frame thy fearful symmetry?
能限縮可怖雙焰
Dorothy Small

Balance
Ying-yang
If you take from it
Put it back
Seesaw
Give and take
Take and give
Harmony
Plant
Life
Harvest
Death

平衡
陰陽
如你拿去
請歸原位
拉鋸
揀而得
得而捨
合諧
耕耘
生命
收穫
死亡

人
出
入
爭
受
授
和
成
住
壞
死
曹 恆平

高爾夫
Golf

小白球
A little white ball
進進出出
Going in and out
無論如何揮桿
No matter how you swing the club
激情過後
After all the excitement
十八個洞
Those eighteen holes
還得靜靜躺著
Could‘ve done nothing but lie still
籃球

神射天鈞
豈是上帝的傑作
鐵杵成針
還須日夜苦來磨
前清國手
講古你有沒搞錯
回首前塵
總共只有百年多
每次進籃
沿梯取球真囉嗦
空中飛人
柔身灌籃網自破
魔術上場
歡聲笑語滿角落
意至球中
眾人喝彩樂呵呵

Basketball

The swish or sky hook
Not a masterpiece of God
You know what it took
To refine needle from rod
Yao Ming from Ming Dynasty
You must have been kidding
One hundred years and twenty
Way back the very beginning
Each shot made in bucket
Ball needs be taken down
Who will dunk the basket
Air Jordan comes to town
Magic show must go on
The Coliseum is fully packed
Shots launch in right on
Joyful fans are totally rocked
The Fly’s Eyes

Under the sky
We breathe nose to nose
Coexisting for several thousand years of civilization
Don’t you dare to snub
We flew all over your
Kitchen, living and bed rooms
Witnessing your so-called civilization
Standardized patterns of mouthful justice and artful scandal
Practiced universally from the ancients to the moderns
Mighty swords of kung-fu masters
西部牛仔的神槍
Or lightening guns of western cowboys
比的無非是眼明手快
Have fought for nothing but the hand-eye coordination
如今的電玩也不例外
Even today’s video games are of no exception
電腦時代的明天
In the future of the post-computer era
人們只要學會按鈕就行
You need only learn how to push buttons
一切學問都濃縮在口袋裡
‘Cause all the knowledge would be self-implemented
學位將成為歷史名詞
And all the schools would become self-terminated
漸漸的你們會發覺
Gradually you will soon find out
這些一直被你們忽略了的
These hitherto you have neglected
飛蠅
Flying flies
竟然是你們文明的極致
Have destined to be the limitation of your civilization
哈！哈！
Ha! Ha!
Parallel Eternities

Endless stream of time string
Never itself slices the trend
Millenniums cut by human being
Sun moon chase minute second
Computer brain stimulates human brain
Thousand heads become palm handled
Computer down triggers information drain
Global village is completely dwindled
文學的寶殿
The treasure palace of literature
永續傳承
Legacies forever enhance its place
筆傳萬古
The pen transmits writing future
詩詞逐字句
Poem prose drive word phrase
網際盪網路
Internets facilitate websites’ easy accesses
萬緒出籠
Millions of ideas appear multisided
捷報頻傳
Frequent triumphs dispatch instant successes
千年蟲皆沒
Millennium bugs go deathly subsided
病假
Sick Leave

在你假病中
While lying in bed and calling in sick
真病也許在萌芽
Your sickness might start growing
當你怠工偷笑時
As you make grimace pretending sick
魔鬼或也在一旁偷笑
The devil may stand by grimacing
你同別人一樣
Just like others
每月可例行告假一次
You are entitled to request a sick leave
不一樣的是
Unlike others
你可能暗中懷了絕症
You may actually be ill beyond believe
像每個禮拜休假一天一樣
Just like Sunday you take a day off
每個月你也該撥出一天
You should very well pick a day of
去檢查或反省一下
Each month for you to check or reflect to see
你是否患了生理或心理上的惡疾
If you have any physical or psychical disease
Lawrence K. Wang has over 30+ years of professional experience in facility design, environmental sustainability, natural resources, STEAM education, global pollution control, construction, plant operation, and management. He has expertise in water supply, air pollution control, solid waste disposal, drinking water treatment, waste treatment, and hazardous waste management. He was the Director/Acting President of the Lenox Institute of Water Technology, Engineering Director of Krofta Engineering Corporation and Zorex Corporation, and a Professor of RPI/SIT/UIUC, in the USA. He was also a Senior Advisor of the United Nations Industrial and Development Organization (UNIDO) in Austria. Dr. Wang is the author of over 700 technical papers and 45+ books, and is credited with 24 US patents and 5 foreign patents. He earned his two HS diplomas from the High School of National Taiwan Normal University and the State University of New York. He also earned his BS degree from National Cheng-Kung University, Taiwan, ROC, his two MS degrees from the University of Missouri and the University of Rhode Island, USA, and his PhD degree from Rutgers University, USA. Currently he is the Chief Series Editor of the Handbook of Environmental Engineering series (Springer); Chief Series Editor of the Advances in Industrial and Hazardous Wastes Treatment series, (CRC Press, Taylor & Francis); co-author of the Water and Wastewater Engineering series (John Wiley & Sons); and Co-Series Editor of the Handbook of Environment and Waste Management series (World Scientific). Dr. Wang is active in professional activities of AWWA, WEF, NEWWA, NEWEA, AIChe, ACS, OCEESA, etc.
2. Dr. Hung-ping Tsao (曹恆平)

Hung-ping Tsao has been a mathematician, a university professor, and an assistant actuary, serving private firms and universities in the United States and Taiwan for 30+ years. He used to be an Associate Member of the Society of Actuaries and a Member of the American Mathematical Society. His research have been in the areas of college mathematics, actuarial mathematics, management mathematics, classic number theory and Sudoku puzzle solving. In particular, bikini and open top problems are presented to share some intuitive insights and some type of optimization problems can be solved more efficiently and categorically by using the idea of the boundary being the marginal change of a well-rounded region with respect to its inradius; theory of interest, life contingency functions and pension funding are presented in more simplified and generalized fashions; the new way of the simplex method using cross-multiplication substantially simplified the process of finding the solutions of optimization problems; the generalization of triangular arrays of numbers from the natural sequence based to arithmetically progressive sequences based opens up the dimension of explorations; the introduction of step-by-step attempts to solve Sudoku puzzles makes everybody’s life so much easier and other STEAM project development. Dr. Tsao is the author of 3 books and over 30 academic publications. Among all of the above accomplishments, he is most proud of solving manually in the total of ten hours the hardest Sudoku posted online by Arto Inkala in early July of 2012. He earned his high school diploma from the High School of National Taiwan Normal University, his BS and MS degrees from National Taiwan Normal University, Taipei, Taiwan, his second MS degree from the UWM in USA, and a PhD degree from the University of Illinois, USA.
Editors of the eBook Series of the "EVOlutionary Progress in Science, Technology, Engineering, Arts and Mathematics (STEAM)"

Dr. Lawrence K. Wang (王抗曝) - left

Dr. Hung-ping Tsao (曹恆平) - right
E-BOOK SERIES AND CHAPTER INTRODUCTION

Introduction to the eBOOK Series of the “EVOLUTIONARY PROGRESS IN SCIENCE, TECHNOLOGY, ENGINEERING, ARTS AND MATHEMATICS (STEAM)” and this Chapter “BILINGUAL POEMS”.

The acronym STEM stands for “science, technology, engineering and mathematics”. In accordance with the National Science Teachers Association (NSTA), “A common definition of STEM education is an interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering, and mathematics in contexts that make connections between school, community, work, and the global enterprise enabling the development of STEM literacy and with it the ability to compete in the new economy”. The problem of this country has been pointed out by the US Department of Education that “All young people should be prepared to think deeply and to think well so that they have the chance to become the innovators, educators, researchers, and leaders who can solve the most pressing challenges facing our nation and our world, both today and tomorrow. But, right now, not enough of our youth have access to quality STEM learning opportunities and too few students see these disciplines as springboards for their careers.” STEM learning and applications are very popular topics at present, and STEM related careers are in great demand. According to the US Department of Education reports that the number of STEM jobs in the United States will grow by 14% from 2010 to 2020, which is much faster than the national average of 5-8 % across all job sectors. Computer programming and IT jobs top the list of the hardest to fill jobs. Despite this, the most popular college majors are business, law, etc., not STEM related. For this reason, the US government has just extended a provision allowing foreign students that are earning degrees in STEM fields a seven month visa extension, now allowing them to stay for up to three years of “on the job training”. So, at present STEM is a legal term.
The acronym STEAM stands for “science, technology, engineering, arts and mathematics”. As one can see, STEAM (adds “arts”) is simply a variation of STEM. The word of “arts” means application, creation, ingenuity, and integration, for enhancing STEM inside, or exploring of STEM outside. It may also mean that the word of “arts” connects all of the humanities through an idea that a person is looking for a solution to a very specific problem which comes out of the original inquiry process. STEAM is an academic term in the field of education. The University of San Diego and Concordia University offer a college degree with a STEAM focus. Basically STEAM is a framework for teaching or R&D, which is customizable and functional, thence the “fun” in functional. As a typical example, if STEM represents a normal cell phone communication tower looking like a steel truss or concrete column, STEAM will be an artificial green tree with all devices hided, but still with all cell phone communication functions. This ebook series presents the recent evolutionary progress in STEAM with many innovative chapters contributed by academic and professional experts.

This ebook chapter, “BILINGUAL POEMS” is Dr. Hung-ping Tsao’s collection of work in poems. He devoted all his life studying Classic Number Theory, playing basketball and composing poems. In addition to his Math work, Tsao’s corner narratives and spontaneous poems, he also includes his translation of Kay Ryan’s “The Niagara River” and this chapter to end his collection as a good note.