

# 張永達 個展

The world today that constructed from technology symbolizes the extreme development of human intelligence and culture. The enormous volumes of data behind this are formed from zeros and ones, and although the data is invisible, they are violently dominating the world; human actions and our modes of thinking. We continue expanding the scope of our awareness, consciousness and knowledge with the development and extension of technological assistive tools; in the meantime, the underlying, invisible data, message and energy that accompany technology are steadily accumulating, bringing with them warnings of impending crises and a sense of anxiety. For me, this sense of crisis originated from 2011, when I resided in a Japanese village as the Tohoku earthquake and the Fukushima disaster struck the country. From Chernobyl to the Fukushima disaster, they are all results of technology backfiring on mankind, showing the arrogance of man in his manipulation of technology, yet at the same time being possessed by the fear of the uncontrollable radiation. At this point, the ideal technological society of human beings, that is, the perfect utopia between man, machine and nature that is interlinked and operating in equilibrium, is instantaneously upturned and disintegrated.

The name of the exhibition, *Super Penetrating*, was given in an attempt to return to the origin of all things; to detect and explore the invisible, the unseen substance and energy that hold super penetrative powers, which are able to influence things from as diminutive as DNA and cells in the human body, to the operation of cities, global activities, or even the galaxy and universe at large. From the formation of the universe till this point in time, the environment where we are in is being endlessly pummelled by cosmic rays that are of unknown origin and from tens of millions of light years away, while we are simultaneously surrounded by background radiation. As these things cannot be seen, there is no sense of their existence. Thus they can only be expressed as numbers detected by sensors and instruments. The artworks in this solo exhibition use technological micro-sensors to continuously detect and quantify cosmic rays, natural background radiation and manmade radiation over long periods of time. These invisible entities are detected and recorded as real-time data, transformed through different formats and their signal amplified, to create visible, sensible visual and audio installations. In the process of continuously detecting, monitoring, translation and reproduction of data, does that provide us with data of the ideal and safe range? Or is it simply the emergence of the anxiety and warning signs of crises in a technological world that has an uncertain future?

「藝術家想像中的形象並非一張圖，而是對『不可見者』的探索。」

梅洛·龐蒂

今日科技所建構的世界，象徵人類智慧與文明的極致發展，而其背後由0與1構成的巨量數據，卻也無形且暴力地支配著世界及人類的活動與思維模式；在科技輔具的發展與延伸之下，我們雖得以不斷地往外擴張感知、意識與知識的範圍，另一方面，在伴隨科技而來，潛藏不可見的數據、訊息與能量不斷累積中，卻也帶出迫近的危機警示和焦慮感。這樣的危機意識源自於2011年，我在日本駐村時遭遇311地震與福島核災事件。從車諾比到福島核災事件，演繹著人為與科技所帶來的反噬，突顯人類操弄科技的傲慢，卻又對輻射無法掌控的恐懼。此時，人類理想中的科技社會，亦即人、機器與自然之間得以彼此繃緊與平衡運作狀態的完美烏托邦，瞬間被逆襲瓦解。

「Super Penetrating」的命題，試圖想喚回歸到萬物起點，對「不可見」、具有超級穿透力之物質能量的偵測與探索，其影響微小至身體DNA細胞，大至都市運作、全球活動狀態甚至至是宇宙星系。從宇宙生成之初至今日，我們所處的環境，其實無時無刻接受來自未知源頭與千萬光年之外的宇宙射線（Cosmic Rays）的衝擊，與背景輻射值（Background Radiation）的環繞，因不可見而無感於其存在，只能藉由感測器所測得之數據呈現。本次個展的作品透過科技微感裝置，對宇宙射線、自然背景輻射值及人造輻射等進行長時間持續量測，將不可見的物質，以偵測紀錄即時數據的方式，藉由不同型態轉化與訊號放大，形成「可見的」、「可感的」視覺與聽覺裝置。而在不斷偵測監控、數據轉譯再現的過程中，給予我們的是理想安全的數據範圍？還是對科技世界前景不明的焦慮、危機徵兆的浮現？

整體而言，只有在數位文化的背景下才能更好地理解張永達的作品。數位文化並不改變這個時代日常生活的現象，相反地，它替換了過往在現象背後，製造現象與創造魔力的結構性力量。日常生活中我們往往受限於視覺，從視覺層面上所看到的現象來判斷事件的因果關係與價值，然而，在數位網絡時代，技術大幅地介入現象的生成，甚至篡奪了「自然」原本的地位而成為「第二自然」，人造的數位環境成了我們多數人習焉不察的生活世界。

藝術家以看似抽象的圖像與影像，將數據化的世界展示在我們的面前。數據化世界是機器的世界，而不是經過歷史與文明沈澱下來的人類意義世界。機器彼此之間的溝通，是不斷且大量地重複運算，在這個世界中，人類過往以為豪的文化與文明都起不了任何作用。人類不再是數位比機械世界的主宰，而是被讓嵌在數位整合後的世界秩序裡。這些張永達的作品讓我們覺得疏離、覺得抽象、覺得無法融入這些不可理解的圖像與機制，才是隱藏在日常現象背後，真正的世界樣貌。

聲音，是張永達表達數位世界樣態的重要媒介。除非刻意戴上耳機，否則「聲音」就跟「世界」一樣，總是會成為現象或事件的背景，甚至更進一步成為理解這些現象或事件的重要脈絡，換句話說，聲音創造了沉浸的效果。藝術家用這樣一種聲音的特質，拉開了數據與世界兩者間的距離，我們所有的感知與體驗都發生在這兩者所打開的可能性空間中。

在張永達的作品中，不論是細微到我們很難察覺的現象，或是影響範圍大到我們幾乎無法全盤掌握的事件，都是他探索的重點。這些成為我們日常生活背景卻又被我們所忽略的現象，恰恰是人類的經驗世界與機器的數位化世界，兩個世界相互碰撞的地點。而現在，藝術家以展覽作為介面，將觀眾安放在這個看似平靜，實則波瀾洶湧的空間中……。

## TEXT / Wang Po-Wei (Art Critic)

In general, only under the context of the digital culture can a viewer understand Chang Yung-Tas's works to their full depth. Digital culture does not alter the daily phenomena of this era. Rather, it replaces the structural force that used to generate phenomena and the driving forces behind the phenomena. In our daily life, we are often limited by our visions, using what we perceive visually to evaluate the causal relationship and the values of the incidents. In the digital network era, however, technology has intervened in a substantial manner with the generation of phenomena, even usurping the original status of Nature and has become the Second Nature. The artificial digital environment has converted the world in which most of us live without being conscious of its existence.

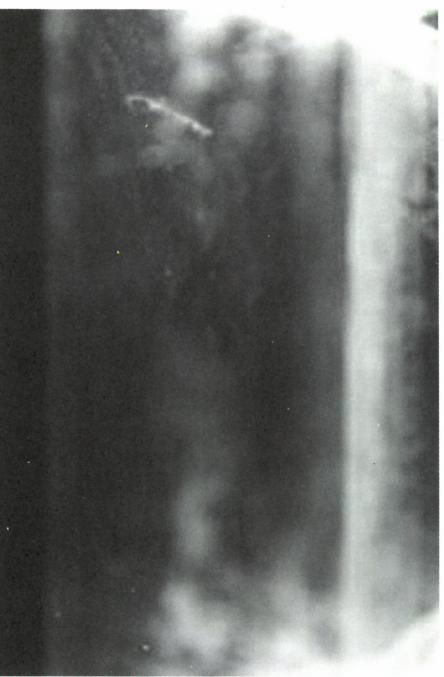
The artist uses seemingly abstract pictures and images to present the digitized world in front of the viewer. A digitized world is dominated by machines, not a world full of the meanings from accumulated human history and cultures. Communications between machines are conducted through continuous and large amount of repeated iterations. In that world, the cultures and civilizations that humans used to be proud of can have no effect. Human beings are no longer the rulers of the digitized mechanical world; instead, they are mosaicked into the world order derived from digital integrations. These works by Chang make the viewer feel isolated, abstract, and cannot merge with the incomprehensible images and mechanisms, but they are the actual features of the world hidden behind daily phenomena.

Sound is a critical medium for Chang to delineate the features of a digital world. Unless one intentionally puts on headphones, sounds, like the world, become the background of a phenomenon or an incident. Nevertheless, sounds can provide a critical context for understanding phenomena or incidents. In other words, sounds created an immersive effect. The artist utilized this characteristic of sounds to stretch the distance between data and the world, and all the senses and experiences we have occur in this space of possibilities opened up by the two.

In Chang's works, both subtle phenomena that can hardly be discerned and incidents with a scope beyond our full comprehension are his focuses of exploration. Those phenomena become the background of our daily life but are overlooked by us are precisely where the world of human experiences and the digitized world of machines collide. Now, the artist uses his solo exhibition as an interface to place the viewer in the space that is seemingly tranquil but is, in fact, turbulent...

o2  
SeenUnseen-Entropy n°2

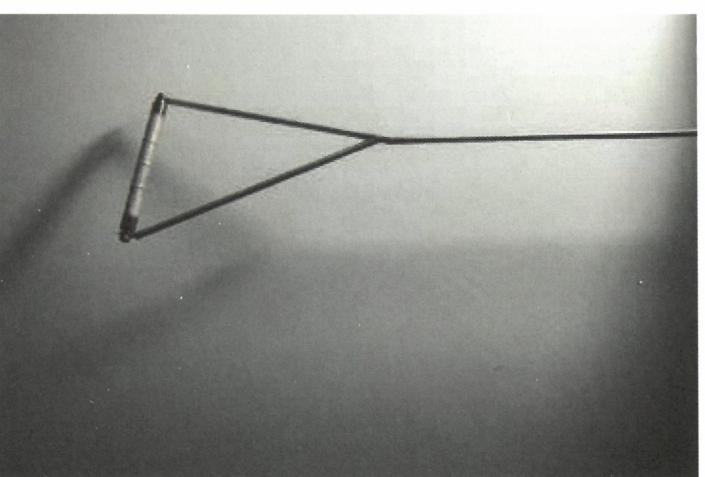
電腦、LED、arduino、投影機、蓋格偵測管、客製化微電腦控制晶片、網路攝影機、低頻喇叭、加熱元件、玻璃、木板、海綿、鋁、乾冰、異丙醇(IPA)、computer, LED, arduino, projector, geiger tube, customized microchip controller, camera, bass shaker, heating component, glass, wood panels, sponge, aluminum, dry ice, IPA  
48(W)×48(D)×140(H) cm / 2018

SeenUnseen-Entropy n°3  
60.3(W)×7(D)×86.6(H) cm×2 (2Pcs) / 2018

耳機、壓克力、木板、LED面板、蓋格偵測管、客製化微電腦控制晶片、電腦、arduino、geiger tube, customized microchip controller, headphones, acrylic, wood panels

o4  
SeenUnseen-Entropy n°4SeenUnseen-Entropy n°4  
80(W)×400(D)×50(H) cm×2 (2Pcs) / 2018

鐵岩、LED、伺服馬達、擴大機、低頻喇叭、壓克力、木板、鋁、水、黑色粉  
granite, LED, servo motor, larger slide, arduino, computer, geiger tube,  
customized microchip-controller, black paint, acrylic, wood  
panels, aluminum, water, black toner



張永達  
個展

CHANG, Yung-Ta Solo Exhibition  
**Super Penetrating**

