技術性圖像
作為鏡像／映像的可能

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「鏡像・映像：80後的當代影像藝術」展覽，以1980年代作為區分，展覽分為兩個子題，「鏡像世界」透過鏡子反射虛假的暗示，延伸到攝影當中的「世界—自然景觀」；「映像人間」則試圖呈現攝影家所反射的世界，延伸至「自我—身體景觀」及「社會—文化景觀」兩大範疇。這樣的分野呼應策展人邱誌勇在策展論述中論及當代的視覺轉向，居伊・德波（Guy Debord）、阿君・阿帕杜萊（Arjun Appadurai）到威廉・米歇爾（W.J.T. Mitchell）等提出的概念，揭示當代世界已從擁有影像，轉變成陳列影像、影像的展示。

有趣的是，這個展覽將時間點定位在1980年代以後，恰好是捷克哲學家維蘭・傅拉瑟（Vilém Flusser，1920-1991）提出的「技術性圖像」（technical image）理論的時代。技術性圖像指的是透過機具裝置所製造的圖像，用來對應傳統圖像（traditional images），而傅拉瑟與技術性圖像相關的文論，原德文版本分別出版於1983年《攝影的哲學思考》（英譯本 Towards a Philosophy of Photography）、1985年《技術性圖像的宇宙》（英譯本 Into the Universe of Technical Images）、1987年《書寫具有未來嗎？》（英譯本 Does Writing Have a Future?）。在傅拉瑟的書寫中，他先聚焦於彼時技術圖像的顯著趨勢，認為當時的社會正處於臨界點，並假定預想不久的未來，社會會是主要由合成性電子圖像構成。傅拉瑟對於這樣的未來社會充滿正面想像，甚至稱之為正在浮現的「烏托邦」，在《技術性圖像的宇宙》的前言，他首先建構一理論模型，試圖表明傳統圖像與技術性圖像生成於兩種完全不同的環境中，即使技術性圖像能喚起觀者對於傳統圖像的記憶，兩者具有不同的表意方式。

本文將從後設的角度，一方面透過「鏡像・映像：80後的當代影像藝術」策展論述及展覽中幾件作品為思考的立基點，一方面以傅拉瑟於1980年代提出的論點作為參考依據，以交錯討論的方式，思考傅拉瑟所謂未來的技術性圖像，如何觸及此展覽中鏡像與映像的概念。

影像（image）

我們可以先參考傅拉瑟在《技術性圖像的宇宙》中建構的模型，該模型區分為五個梯級（rung）：第一梯級是動物與原始人類所在的具體經驗層級。第二梯級約200萬到4萬年前，是藉由可掌握對象組成的三維世界，典型產物是石刀與雕刻人像。第三梯級為人類進入處於自我和周圍環境之間的想像二維區域，洞穴壁畫等傳統圖像即代表觀察和想像。第四梯級發生約4000年前，線性文本的出現使得人類和圖像之間出現中間區域，是屬於解釋性的、歷史的層級。第五梯級則是傅拉瑟所稱的技術性圖像的層級，文本無法接收更近一步的圖像轉介，而是成為模糊、需要被集結的粒子，需要經過考量與計算[1]。傅拉瑟用這樣的架構來延展至第五梯級的技術性圖像，而「鏡像・映像：80後的當代影像藝術」策展論述從柏拉圖洞穴的影像談起，透過這樣的鋪陳，凸顯技術性圖像層級的特殊性。

從展覽標題與策展論述中，我們可以看到幾個圍繞於當代攝影發展的提問。首先，展覽的英文標題為「Specularity / Reflexivity: Contemporary Image Arts after 1980s」，標題使用「影像」（image）一詞為題、而非「攝影」（photography），也暗示了後攝影（post-photography）狀態中，影像與攝影概念的重疊。19世紀末當攝影最初發明時，約翰・賀薛爾（John Herscel）稱達蓋爾的銀版攝影為「銀版上的圖像」（pictures on silver），而當「photography」一詞發明之後，字源所影射的「光」和「書寫」意涵，在後攝影狀況中又受到數位科技的挑戰。從圖像（picture）、攝影／照片（photography/photograph）到影像（image），暗示著「圍繞攝影技術所產生的畫面」當中不同指涉，也反映攝影媒介無法用單一定義的方式固著。

20世紀攝影技術的發展，從類比的銀鹽底片到電子式的數位影像，攝影所經歷的轉變不僅是在技術，還包括對攝影本體的質疑。在中文語境裡，「image」是形象、影像、畫面、意象，「picture」指的是圖片、圖像、圖畫。米歇爾認為其中的分別是「朝向物性（objecthood）的迴轉」，並且以英語口頭語言的說法舉例：「你可以懸掛一張picture，卻不能懸掛一個image。」[2]在米歇爾的分析中，image和picture的概念所揭示的是乘載的物性，這樣的物性又成為中介——picture具有實體的物件（可燒毀或被破壞）、image不具實體物件，但卻存在於記憶、敘事、或是其他媒介的副本當中。對於形象的討論不僅在於內容，而是更廣泛牽涉該形象如何

1. Vilém Flusser, "To Abstract," *Into the Universe of Technical Images*. Minnesota: University of Minnesota. 2011. pp. 5-10。

2. 威廉・米歇爾（W.J.T Mitchell），石武耕譯，《形象科學》（*Image Science. Iconology, Visual Culture and Media Aesthetics*），臺北：馬可孛羅，2020，頁40。

被感知、運用和所引起的效應。而針對英文中的 image 與 picture、或是法文中 image 與 tableau，除了兩者平行存在的意義，李立鈞更指出需要思考的是，為什麼「影像」在當代成為一個需要探問的論題，尤其自 20 世紀末數位影像的技術發展，影像一方面喪失對於真實的公信力、一方面提供使用者直觀的技術操作介面。[3]

無論是攝影、影像或圖像，這些字詞的使用，一方面提醒米歇爾強調的當代圖像轉向（Pictorial Turn），另一方面也暗示 20 世紀 1980 年代之後，攝影文化的變遷。攝影史學者瑪麗・沃納・瑪麗安（Mary Warner Marien）在攝影文化歷史討論中列舉出，自 20 世紀下半開始，因全球化、技術與社會的變遷，加上受後現代思潮影響所開啟的各種攝影實踐，關於類比和數位影像的各種論述，一方面針對其本質的不同，另一方則認為攝影本來就不存在真實，自攝影史的最初始即有許多和變造（manipulation ／ altered）相關的案例[4]。其中較多引起後續討論的包括米歇爾（William J. Mitchell）提出的「後攝影時代」（Post-Photographic Era），認為在數位攝影當中用來建構圖像的蒙太奇手法其實更接近繪畫或拼貼，也質疑了攝影中忠於「真實」特質；藝術史學家喬納森・克萊里（Jonathan Crary）從歷史角度思考數位影像科技，主張其快速發展帶來視覺的本質改變，甚至從文藝復興圖像的透視法中斷裂脫離，視覺影像不再與觀者在「真實」世界中的位置有關係；維克多・柏根（Victor Burgin）針對數位攝影當中無原始底片的特質，分析攝影的複製觀念，並呼應以其論述中發展的「再現理論」（theory of representation）解構日趨複雜的影像意義；瑪莎・羅斯勒（Martha Rosler）則將重點放在照片的變造，強調數位攝影的成功即在於其文化強制力能建構具有欺騙性的圖片。

機具（apparatus）

技術性圖像是由機具裝置生產，傅拉瑟透過語源學的方式，說明 "apparatus" 的拉丁字根 apparare 在字根意義上，有「做準備」（to prepare）之意，然而拉丁文中的另一個動詞 praeparare 同樣也是「做準備」之意。為了劃分出前綴詞「ad」和「prae」的區別，傅拉瑟主張前者（apparare）可以以「pro-pare」取代。因此，apparat/ apparatus 指的是「一樣東西為了某件事做好準備」、「將自身準備好以從事某種事情的物體」；präparat/ preparatus 則是「耐心等待某樣東西的狀態」。換句話說，攝影機具（photographic apparatus）是為了拍照做好準備，甚至具有潛伏等待某事物的獵食性格。[5]

從這樣的角度來看，吳政璋在《臺灣美景》系列中照片的建構過程，則以巧妙的角度回應攝影機具的特質。《臺灣美景》系列在旗津、臺西等地進

行拍攝，吳政璋透過使用瞬間強光的方式，在拍攝的當下對臉部進行多次曝閃，光線的累積使得最後成品照片中的面孔呈現一片空白，藉此暗示人臉的「盲目」與「失明」。而在最後的成像作品中，我們可以看到背景環境在攝影家控制下所產生的視覺美感，以及攝影家刻意失控的過量光線，使得被攝主體的面孔看來像是「面無表情」的人形看板。吳政璋藉此表示在創作當中對於「紀實攝影」的嘗試與實驗，這一系列的照片，是為了處理臺灣在經濟發展之下環境所面臨的現實災害，攝影師將自己置入其中，對這些環境不直接的方式表達批判，照映在自己臉上的閃光燈反而像是另一種自省，透過臉部因過曝呈現的空白，與色彩飽和的背景呈現明顯對比。

從傅拉瑟「apparatus」的角度來看，在吳政璋的拍攝過程中，使用的機具裝置有兩種：一個是照相機，一個是閃光燈，在快門按下的同時也需要將閃光燈朝頭部進行閃射，以達到過度曝光的效果。這兩種機具在這樣的創作過程中擔任不同的任務，照相機較像是前述傅拉瑟所謂的präparat/ preparatus，是以耐心等待某件事情發生的狀態，而閃光燈則像是 apparat/ apparatus，先將自身準備好、為了某件事做好準備。觀者若理解攝影師拍攝過程，或許會感受到另一種矛盾的衝突，這樣的衝突來自於風景照中如畫的溫潤色澤，和攝影師使用閃光燈時，指向自己頭部、強烈光線與瞬間的暴力。我們可以想像在拍攝過程中，攝影家如何選擇拍攝場景，如何在透過適當的自然光線和攝影機具的操作，呈現畫面中的風景意象，然而同時，我們也可以想像拍攝過程中，在瞬間閃燈發射時，彷彿狩獵般的偷襲姿態。

照片當中，現實環境的「美景」、和超現實效果的面孔，營造出畫面中矛盾的情緒。照片背景像是美麗的風景照，長時間的曝光與刻意選擇的拍攝光線，使照片充滿溫潤的色澤，而景深的刻意操作，更顯得獨自站在「美景」中個體的突兀。相反地，在操作程序中強烈的閃光燈閃爍，彷彿在等待的過程中照顯幽靈。這組照片是各種攝影決定的混合結果，包括探求攝影的紀實性、融合自然風景照的美學、再滲入藝術家刻意操縱的閃光機具，以在拍攝／閃光燈每個瞬間破壞照片中原有的和諧。如傅拉瑟說，手上持有照相機的動作像是狩獵的舉動，然而在吳政璋的作品中，閃光燈才是他用來狩取獵物的工具。他的對象是自己，卻又是空白的自己，觀者彷彿旁觀者般，觀賞攝影師在狩獵過程中的各種操作與嘗試。也因此，這系列作品使自身也處於某種景觀，表現出攝影藝術家對於臺灣當代文化地景中，人類對環境的破壞與不協調現實的想法，也回應此展覽當中「鏡像世界」的世界自然景觀。

3. 李立鈞，「關鍵詞—影像」。《攝影之聲》關鍵字線上專題系列，客座主編謝佩君「家常任務：關於數位視覺政治性的關鍵詞」，參考網址：https://vopmagazine.com/kw1/，2022 年 1 月 19 日瀏覽。

4. Mary W. Marien, "The Culture Critique", Photography: A Cultural History. 4ᵗʰ Edition. UK: Laurence King. 2020. pp. 437-492.

5. Vilém Flusser, Für eine Philosophie der Fotografie, Berlin: European Photography, 2018；參考英譯本 Anthony Mathews 翻 Towards a Philosophy of Photography, London: Reaktion Books, 2000；繁體中文李文吉翻譯，臺北；遠流，1994，頁 41、簡體中文毛衛東、丁君君翻譯，中國民族攝影藝術出版社，2017，頁 21。

程式（program）

傅拉瑟在分辨技術性圖像和傳統圖像的差異時，主張世界被分解成「粒子」（particles），這些粒子不可見、也不可碰觸，只能借用觸及粒子工具——「按鍵」（keys）進行抓取。然而這些按鍵的操作仍然服務於人類的自由，例如在鍵盤上的每個按鍵，是以不同方式的組合，提供人類選擇。也因此，當我們看到圖像被按鍵合成、顯現在銀幕上的過程，那是先考量後計算的奇蹟。傅拉瑟進一步延伸「觸摸」（touch）這個動詞，是希望能發現某些東西而盲目的接觸，是試探性的作法。

我們可以以這個角度來看袁廣鳴《城市失格》系列的作品。在作品說明中，我們已知道這組作品是先從同一視角、以相同鏡頭與構圖、多次拍攝固定的場境，而後在電腦當中，藝術家再將不同「時間」的片段擷取下來，重新拼湊為虛擬的城市幻象。在展出的〈西門町白日〉和〈西門町夜晚〉的兩件作品，是以西門町為定點，將拍攝的上百張底片中，透過電腦的後製，一張一張移除照片中人與物的元素，先是擷取各種空白的局部影像，再以電腦的指令重新構成作品。在《城市失格》的創作過程中，觸及技術性圖像的按鍵為電腦指令中的「剪下」和「貼上」，也暗示空間在意義上的分割重組。若以馬克・歐傑（Marc Augé）在非地方（non-place）中提到的關係建構角度來看，鍵盤成為關係建構的機具，複製和貼上卻成為體現一次又一次的觸摸。

換句話說，在《城市失格》中使用的機具不是照相機、而是電腦，按下的按鍵並相機的快門或閃光燈的開關，而是滑鼠或鍵盤上的指令。指令是抽象的，是存在於電腦內部的編程，提供操作者決定指令的操作。如傅拉瑟所言，在技術圖像的宇宙中，我們可以將文化的變革視為人類存在方式向「指尖」的轉移過程，在機具的編程中，人類的手／工作、眼睛／思想、手指／敘事將依循被編排好的計算，而「按鍵」則給予人類新的認為——為世界和生命賦予意義，甚至可以說是從改變世界、探察世界和解釋世界的壓力中解放出來。[6] 從這樣的角度來看《城市失格》，熟悉的西門町街景因為藝術家的操作，呈現空曠、毫無人煙的奇幻甚至詭異（uncanny）。藝術家所操作的並非攝影的紀錄或再現，而是透過按鍵，重新賦予意義。這邊的「按鍵」像是蓋印章，將空白的部分、蓋上原先滿是人流與車流的局部，以「手工」的方式製造出現實中不可見的場景。然而在 2020 年疫情過後，這組做於 2002 年的作品，更是透過影像技術和劇場式的影像美學，以寓言的方式暗示人類、社會、空間在不種層次的「失格」，也呈現藝術家操作的「鏡像文化景觀」。

6. Vilém Flusser, "To Touch," *Into the Universe of Technical Images.* Minnesota: University of Minnesota, 2011, pp. 23-32.

而在馬立群的《山水形》系列中，則是刻意挑選拍攝場景，藉由沙灘上沙粒和海水的線條，呈現如中國山水畫中的造型美感。我們可以想像攝影師在拍攝這系列的照片時，首先需要以細微的角度觀察環境，在看到適合的形體（海邊散步時發現的海潮來去），選擇特定的角度與光線拍攝照片，再透過電腦的後製調整畫面細節、以圓形作為畫面的主要構圖、決定圓形畫面和方形邊框的比例，再以輸出染料方式完成整張照片。

《山水形》照片意境與方中有圓的裝裱形式，讓人聯想到南宋繪畫冊頁式裝裱所呈現的設計感。相較於北宋繪畫中彷彿一統天下的巨碑形式，南宋繪畫中所謂的「馬一角、夏半邊」，指稱畫家馬遠與夏圭的畫面構圖，將繪畫的主體對象放置於畫面的側邊或角落的小品形式，反應南宋時期社會氛圍的偏安狀態。而在《山水形》畫面當中，攝影家透過影像的後製，拉高畫面中色調的明暗對比，表現出宛如高山質地堅硬、稜角分明的岩石，也讓人聯想到山水畫當中斧劈皴的技法，透過中鋒勾勒輪廓、側鋒橫刮皴紋、淡墨渲染的方式，呈現小斧劈細緻筆畫的山勢。

這些影像製造過程顯得緩慢。和前述攝影機具的狩獵較不相同，這其中的攝影操作，更像是圖像的生產過程。我們可以大膽的把照片當中沙粒的排列對應到技術性圖像中的「粒子」。傅拉瑟說明，技術性圖像試圖將我們周圍和意識中的粒子整合到「表面」，以填補它們之間的縫隙。傅拉瑟所說的粒子，是像光子、電子元素、或信息碎片，正因為這些元素無法碰觸，不能用手來實現，需要透過機具裝置等，才能製作這些技術性的圖像。而在馬立群的作品中，照片中的粒子是沙粒，是維持在海灘表層、拍攝當下的排列，甚至可能在每次的拍攝都會因為各種因素而有變化，這些粒子的排列是無法重複，不同的時間點會拍到的照片也不相同——這些粒子是無法掌握的。換句話說，《山水形》雖然是作為技術性圖像的攝影，然而畫面的美學與操作形式，讓人直覺聯想到繪畫的傳統圖像。這也提醒我們兩者的差異。在技術性圖像中，製作者／攝影師的角色，較像是「凝想者」（envisioners），相對於傳統圖像中的「描繪」（depiction），凝想者主要透過視覺化（visualisation）進行操作，攝影機具或電腦裝置，則是提供自動化的按鍵，使凝想者可以將圖像具象化，並透過操作電腦的程式，呈現「鏡像式的自然景觀」——然而這個景觀並非描繪或紀錄，而是透過技術式的凝想。[7]

7. Vilém Flusser, "To Envision," *Into the Universe of Technical Images.* Minnesota: University of Minnesota, 2011, pp. 33-40.

賦形（information）

在傅拉瑟的攝影哲學中，他將「information」一詞，解釋為「一種未必可能的各種因素的組合」（an improbable combination of elements）。李文吉將 information 翻譯為「賦型」，解釋「information 兼具訊息（資訊）

8. 李文吉，〈基本概念詞彙〉，《攝影的哲學思考》，臺北：遠流，1994，頁99-100。

與賦予某物、某想法形體二種意義，若將拆之為 in-form（形式、形體），則更可明白賦型一意的字源」。[8] 在當代影像的創作中，藝術家使用不同的方式進行賦型，我們可以展覽中「映像人間」範疇中，洪譽豪的《無以為家》系列來進行思考。在這系列的影像中，主題是以臺北市萬華的騎樓空間作為拍攝對象，洪譽豪以 3D 掃描的方式，透過數位影像的技術，記錄拍攝騎樓內的常民百態生活情景。

在這樣的圖像製作過程中，鏡頭的掃描取代了人類視線的掃描，在攝影師的操作中，將現場以「一覽無遺」的方式記錄，更是凸顯鏡頭的光學無意識（optical unconsciousness）。我們可以進一步思考 3D 掃描技術在攝影作品中的意義。傅拉瑟說明，圖像的意義散佈在平面上，在觀看影像的時候，觀者（我們）需要將視線以巡遊圖像平面各處的「掃描」（scanning）方式，以獲得具有深度的意義。而這樣經由掃描過程所獲得的圖像意義，包含兩種意圖，一是影像的結構、二是觀看者的意圖。在《無以為家》中，燈箱裝置的畫面效果與 3D 掃描所呈現粒子，提出了數位影像中的視覺美感。如果仔細觀看的話，看見的並非圖像，而是「電子運作過程的徵象」。有趣的是，這件作品也提出「掃描」概念的疑問：當通過掃描攝影技術將現場資訊完全轉為數字化的同時，我們彷彿透過機具蒐集與凝結的現場，然而圖像中點雲的模糊卻又讓我們無法看得過於清楚，掃描過程中所出現的破洞反而透露歷史感與記憶痕跡。這也回應了傅拉瑟提出「技術圖像是一種凝想而成的表面」。圖像上所有的粒子存在於表面，而經過掃描造成的遮蔽，讓觀者更無法向下挖掘，反而被迫停於影像的表面。

這樣的影像生產方法，也巧妙地回應《無以為家》作品中所碰觸的議題。騎樓作為臺灣城市景觀中的意涵，本身即介於在街道與建築中的相交開放性空間，而萬華這個區域本身為臺北城市歷史的發跡之地，在萬華的騎樓因其在地的生活狀態與文化，在白天與夜晚可能出現不同的社會景觀。在洪譽豪所設定的作品題目中，中文名稱「無以為家」與英文名稱「Wonderland」相互對應，也提醒觀者重新思考這組攝影作品中，藝術家對於「家」、歸屬感等認知所進行的提問。換句話說，這組作品中用來賦型的影像技術，是透過形式的操作，呈現創作者想表述的社會文化景觀。這也回應在「映像人間」子題中，策展論述試圖提出經由光線反射而顯現的物像，是獨立於意識的客體現實。

結語

在影像充斥的當代生活中，各式影像背後乘載著不同的視覺軌跡。在「鏡像・映像：80 後的當代影像藝術」展覽當中，不同藝術家所使用的影像裝置機具，透露出機具是觀看的技術、是觀察者的眼睛、也是閱讀世界的途徑。本文藉由傅拉塞技術性圖像的論述來思考展覽當中，「影像—機具—程式—賦型」的連動關係。值得強調的是，傅拉瑟與攝影相關的文論大多寫於 1980 年代，當時攝影仍處於光學時代，電子網路與數位技術尚未興起，彼時的數位影像亦尚未蓬勃發展。然而傅拉瑟以技術性圖像一詞定錨攝影（照片），反映此類型圖像是透過機具裝置所製造，與傳統圖像並不相同，也透露其認知（預知）當下和未來的影像是以電子為主。現在的我們身處於傅拉瑟於 1980 年代所想像的「未來」、是其所謂合成性電子圖像構成的社會。而「鏡像・映像：80 後的當代影像藝術」展覽中，透過「Specularity」與「Reflexivity」兩種概念的互文，提醒在當代的影像藝術創作實踐中，我們可以如何思考創作者的意圖、影像技術操作的意義、影像呈現的表意、以及技術性圖像本身所暗示的各式景觀。

Technical Images
as Specularity / Reflexivity

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"Specularity/ Reflexivity: Contemporary Image Arts after 1980s" has two sub-topics of images after the year of 1980. The part of "Specularity" extends the discussion of the "World-Natural-scape" relationship in photography through suggestions given by virtual images reflected in mirrors. On the other hand, "Reflexivity" section intends to project the world represented by photographers to show the "Self-Body-scape" and the "Socio-Cultural-scape" scopes. The topical division echoes the contemporary visual turn in the curator Chiu Chih-Yung's curatorial statement, which connects the concepts from Guy Debord, Arjun Appadurai to W.J.T. Mitchell to reveal a world in favor of arranging and displaying images instead of owning them.

Intriguingly, the 1980s was the period when the Czech philosopher Vilém Flusser (1920-1991) proposed his theory of technical image. Technical images refer to the images produced by apparatus in contrast to traditional images. The original German editions of Flusser's essays on technical images were published individually, noted here in the translated English titles as follows, *Towards a Philosophy of Photography* in 1983, *Into the Universe of Technical Images* in 1985 and *Does Writing Have a Future?* in 1987. His writings pointed out the trending of technical images at the time and suggested that the world was on the threshold of a future society constituted by electronic composite images. Flusser was optimistic to this imagined future world and even called it an emerging "Utopia." In the foreword of *Into the Universe of Technical Images*, he established a theoretical model to manifest the two distinct settings that separately generate traditional images and technical images. Even if technical images could evoke viewers' memories about traditional images, the two categories have their own idiomatic forms.

From a metaphysical perspective, I would like to discuss the link between Flusser's idea of future technical images and the concept of "Specularity" and "Reflexivity" centered in this exhibition based on the curatorial statement, a few pieces of works in "Specularity / Reflexivity: Contemporary Image Arts after 1980s" and Flusser's theory developed in the 1980s.

Image

In his *Into the Universe of Technical Images*, Flusser constructed a theoretical model of a ladder of five rungs. The first rung is the level of concrete experience where animals and primitive people are. The second rung is the three-dimensional situation consisting of graspable objects two million to forty thousand years ago. Objects such as stone blades and carved figures are the features of this level. The third rung shows the level of humans entering an imaginary, two-dimensional zone between themselves and their environment. The traditional images such as cave paintings attribute to observation and imagination. The fourth rung took place about four thousand years ago. Linear texts introduced a mediation zone between human beings and their images. This is the historical, explanatory level. Finally, the fifth rung is what Flusser called the level of technical images. Texts do not receive any further pictorial mediation and become unclear, scattered particles that require collection, calculation and computation.[1] Corresponding to Flusser's five-rung structure, the curatorial statement of the "Specularity/ Reflexivity: Contemporary Image Arts after 1980s" begins with the image of Plato's Cave as a foil to the peculiarity of the level of technical images.

From the title of the exhibition and the curatorial statement, we can see a few propositions around the course of contemporary photography. First, concerning the wording of the exhibition's English title, "Specularity/ Reflexivity: Contemporary Image Arts after 1980s," instead of the word "photography," the curator chose the word "image." It suggests that in the state of post-photography, image and photography overlap with each other in terms of concept. When photography was invented in the 19th century, John Herscel described Louis Daguerre's Daguerreotype as the "pictures on silver." After the word photography was coined, the implication of light and scribing from the etymology has been challenged by digital technology in the post-photography context nowadays. From picture, photography/photograph to image, the interchanging terms imply the various connotations of "visual representations related to or produced by photographic technology" and indicates that the media of photography cannot be pigeonholed with a single definition.

In the 20th century, photography had been through the technological turn from analog silver films to digital images as well as the ontological criticism. In the Chinese context, "image" refers to standing, appearance, motion picture, a view, or an imagery, while "picture" means a graphic, pictorial presentation, or a drawing. W. J. T. Mitchell considered that the "turn to objecthood" distinguishes the aforementioned two terms. He gave an example in colloquial English, "You can hang a picture but not an image."[2] In Mitchell's analysis, the notions of image and picture reveals their beings as the carriers of objecthood, then the objecthood becomes a medium. Pictures are physical objects (which can be burned or destroyed). Images have no physical forms but exist in memories, narratives, or copies of other media. The discussion of an image not solely involves its content but broadly covers how the image is perceived, used, and the effects it causes. Regarding the words, image and picture in English, or image and tableau in French, in addition to the meaning

1. Vilém Flusser, "To Abstract," *Into the Universe of Technical Images*. Minnesota: University of Minnesota. 2011. pp. 5-10..

2. William J. T. Mitchell, *Image Science: Iconology, Visual Culture and Media Aesthetics*. Translated by Keng-Wu Shih, Taipei: Marco Polo Press, 2020, p. 40.

3. Li-Chun Lee, "Keyword — Image." *Home Mission: Keywords of the Politics in digital Visuality,* Hsieh, Pei-Chun., Editor, Voice of Photography, https://vopmagazine.com/kw1/. Accessed 19 January 2022.

4. Mary W. Marien, "The Culture Critique," Photography: A Cultural History. 4th Edition. UK: Laurence King. 2020. pp. 437–492.

5. Vilém Flusser, *Towards a Philosophy of Photography.* Translated by Anthony Mathews, London: Reaktion Books, 2000.

Traditional Chinese version. translated by Wen-Ji Lee, Taipei: Yuan-Liou Publishing Co., Ltd., 1994, p. 41.

Simplified Chinese version. translated by Wei-Dong Mau and Chun-Chun Ding, Beijing: China National Photographic Art Publishing House, 2017, p. 21.

of their parallel existence, Lee Li-Chun also pointed out that what needs to be considered is why "image" has become a topic that requires investigation in contemporary times, especially since the end of the 20th century. As the technology of digital images flourishes, on the one hand, images lose their credibility for reality; on the other hand, they provide users with an intuitive technical operation interface.[3]

Whether it is photography, image or picture, the use of these words reminds us Mitchell's view of the contemporary pictorial turn and hints the transformation of photographic culture after the 1980s. Photography historian Mary Warner Marien mentioned in a discussion on the history of photography culture that since the second half of the 20th century, globalization, the changes of technology and society, plus the impact brought by the postmodern thoughts on photographic praxis triggered the heated debates on analog and digital images. Some aimed at the difference in their nature and the others stated that reality did not exist in photography in the first place, since there have been a lot of cases of alteration and manipulation from the very beginning of the history of photography.[4] Among them, the Post-Photographic Era proposed by Mitchell sparked considerable subsequent discussions. Mitchell believes that the montage method to composite images in digital photography actually leans closer to painting or mosaic. His theory also questioned the fidelity of photography to the "real." Art historian Jonathan Crary cut into digital imaging technology from a historical angle. He argued that its rapid advancement has caused substantial changes in vision. Visual images even broke away from the perspective of the Renaissance images and no longer relate to their viewers' positions in the "reality." Victor Burgin analyzed the notion of reproduction in photography in light of the lack of original films in digital photography. It deconstructs the increasingly complicated essence of images in response to the "theory of representation" established within his discussion. Otherwise, Martha Rosler focused on the alteration of photos, emphasizing that the success of digital photography lies in its culturally coercive power to composite deceptive pictures.

Apparatus

Technical images are produced by apparatus. Flusser explained apparatus' Latin root, *apparare,* has the meaning of "to prepare" in terms of etymology, while another verb in Latin, *praeparare,* means "to prepare" as well. To distinguish between the prefixes, *ad* and *prae,* Flusser stated that the former (*apparare*) could be replaced by *pro-pare.* Thus, *apparat/apparatus* could mean "a thing ready for something," or "an object that prepares itself to do something"; as *präparat/preparatus* indicates "the state of waiting in patience for something." In other words, the photographic apparatus is prepared for taking photos. It even has a predatory character of lurking and waiting for something.[5] From this point of view, the composition process of Wu Cheng-Chang's *Vision of Taiwan* series responds to the characteristics of the camera in an ingenious way.

The *Vision of Taiwan* series was taken in Chijin, Taishi and so forth. Wu exposed the face multiple times with instant strong flash when shooting. The accumulation of light caused the facial part to be blank in the final photos, thereby implying the blindness of human faces and in vision. The visual aesthetics presented by the con-

trolled background environment as well as the deliberately excessive lighting make the subject's face a "non-expressive" human-shaped billboard. Wu Cheng-Chang shows his attempts and experiments in documentary photography in his creation. This series of photos was to frame the actual environmental disasters in Taiwan undergone the economic development. The photographer positioned himself in the photos to criticize the current situation indirectly. The flash reflected on his face is like an expression of introspection. The blankness due to overexposure contrasts the saturated background.

Speaking of Flusser's concept of apparatus, Wu's shooting process requires two types of equipment, a camera and a flash. When the shutter is pressed, he needs flash towards the head to achieve the effect of overexposure. The two types of equipment perform different tasks in the such creative process. The camera is closer to the so-called *präparat/preparatus* mentioned above, which indicates the state of patiently waiting for something to happen, while the flash is like the *apparat/apparatus* to prepare one's self for what is coming. If the viewers understand the shooting process, they might feel contradictory seeing the warm colors in the picturesque landscape and the violence appearing when the photographer pointed his head with a flash casting sudden strong light. We can imagine how the photographer chose the shooting scene and how he could present the imagery of the scenery in the picture through the proper natural light and operating the camera. It is imaginable at the same time that when the light flashed, the shooting was as if a sneak raid, a hunting.

The "vision" of the shooting environments and the surreal effect on the face build up conflicting emotions in the pictures. The backgrounds allow them to seem gorgeous like landscape photos. The long exposure and the arranged shooting light give the photos full, warm colors. The controlling of the depth of field has the individual oddly standing out from the "vision." The intense light flashed within the shooting procedure as though the illumination reveals the ghosts behind the process of waiting. This set of photographs results from various photographic decisions, including the search for the documentary nature of photography, the aesthetics of incorporating natural landscape photography and infiltrating the artist's manipulation of flash equipment to destroy the original harmony of the scene at every moment of shooting and flashing. As Fraser said, the action of holding a camera is like hunting, and in Wu's case, the flash is his tool to capture his target. His shooting object was himself, a blank self. The works allow its viewers to watch the photographer's operations and attempts in his hunting process from the sidelines. Therefore, the series puts itself in a certain landscape, expressing the photographer's ideas toward the environment destruction by humans and the uncoordinated reality in the contemporary cultural landscape of Taiwan, which corresponds to the vision of the natural world under the topic "Specularity" of the exhibition.

Program

To distinguish the difference between technical images and traditional images, Flusser advocated that the world has been broken down into "particles." These particles are invisible and untouchable, and can only be fetched by means of the

touching tool, "buttons" (keys). The operation of the keys, however, serves humans' will. For example, the key arrangement on a keyboard can vary in combinations to provide options to humans.

Thus, the process of image composition by keys and the image displays on screen are miracles of calculation and computation. Flusser further extended the verb touch to the conception of contacting blindly in the hope of discovery and a probing approach.

I would like to touch on Yuan Guang-Ming's *City Disqualified* series with the approach. The work description shows that the set of works was first shot from the same perspective, with the same lens and composition, and at the fixed scene multiple times, then the artist extracted the images of various moments and collage them into a city of illusion. The two works on display, *Ximen District in Daytime* and *Ximen District at Night*, took Ximending as the fixed point. Among the hundreds of films, the artist removed the elements of people and objects one by one in the post-production on computer. He first retrieved various blank partial images from the photos, then reconstructed the works with the computing instructions. In the creation of *City Disqualified*, what touched the technical images are the command keys "cut" and "paste," which implies the division and reorganization of space in a sense. From the point of view of the relational construction in Marc Augé's concept of non-place, the keyboard becomes an instrument of relational construction, while copying and pasting becomes the embodiment of touches.

In other words, the apparatus used for *City Disqualified* was not a camera but a computer. The buttons pressed were not a shutter or the switch of a flash, but the command keys on a mouse or a keyboard. Commands are abstract and built-in programs of computers for users to determine the instructions of operation. As Flusser stated, in the universe of technical images, we could view the change of culture as a process of human existence transferred onto "fingertips." With the programs, human hands/labor, eyes/insight, fingers/narratives would be following the orchestrated calculations. The "buttons" would be giving humans new beliefs in assigning meanings to the world and life, and even liberating them from the pressure of changing, exploring and interpreting the world.[6] Back to *City Disqualified*, the popular, familiar streets in Ximending presents an empty, uninhabited fantasy, or even an uncanny scene, through the artist's techniques. What Yuan Guang-Ming maneuvered was not a photographic record or representation, but a new definition by pressing the keys.

Pressing keys resembled stamping, overlaid the parts full of people and cars with the blankness and "crafted" the impossible scenes in reality. Nonetheless, in the context of the COVID-19 pandemic starting from 2020, this set of images created in 2002 allegorically implies the "disqualification" of human beings, society, and space at various levels with its imaging technology and theatrical aesthetics and represents the mirrored cultural landscape in the artist's vision.

Ma Li-Chun's *Landscape Shaped* series represents the aesthetics of form in Chinese landscape painting through the outlines of sands and sea water along the beach.

6. Vilém Flusser, "To Touch," Into the Universe of Technical Images. Minnesota: University of Minnesota, 2011, pp. 23-32.

When the photographer took this set of photos, the first step was to observe the environment carefully in details. When he saw the outlines formed by tides on his walk along the seashore, he captured them from a specific angle and with the specific light. He completed the works by computer post-production to adjust the details of the pictures, composite with the circular shape and determine the ratio of the circular picture and the square frame, then finally output the photos with dye-based ink.

The artistic conception of *Landscape Shaped* and its mounting form of the circles within square frames are reminiscent of the design of painting albums in the Southern Song Dynasty. Compared to the monumental style of the paintings in the Northern Song Dynasty, the slang in the Sothern Song Dynasty painting, "Ma takes corners and Hsia has a half side" refers to the composition style of the painters Ma Yuan and Hsia Gui that placed the subjects on the side or corner of the picture. The style reflected the social-political state of being content to hold a partial sovereignty in the Southern Song Dynasty. The photographer enhanced the contrast through post-production to emphasize the solid, sharp texture like mountain rocks. The expression is reminiscent of axe splitting in the dry brushwork techniques of Chinese landscape painting that is to outline with the center tip of brush, scrape with the tip side to make wrinkles and render light ink to delicately depict the mountainous terrain.

The process of making the set of images thus might appear to be slow. Differing from the aforementioned hunting with apparatus of photography, the operation for making *Landscape Shaped* is more like the production of images. We could boldly map the arrangement of sand grains in the photos to the "particles" in a technical image. Flusser explained that technical images attempt to integrate the particles around us and in our consciousness onto the "surface" to fill the gaps between them. The particles are referred to photons, electronic elements, or information fragments. These components cannot be touched or be realized by hand; therefore, they require the apparatuses to be produced into technical images. In Ma Li-Chun's work, the sand grains are the particles in the photos, maintained on the surface of the beach and arranged at the moment of shooting. They might change in each shooting due to various factors. The arrangement of these particles cannot be represented. Photos taken at different time are not identical, because these particles are not to be controlled. Although *Landscape Shaped* is a photography of technical images, the aesthetics and form instinctively evoke the traditional images of painting. It reminds us the difference between them. To technical images, image producers/photographers are closer to the role of envisioners. Envisioners take actions of visualization instead of depiction in the realm of traditional images. The apparatus of photography or computing equipment provide envisioners the automated buttons for reification and allow them to utilize computer programs to present "mirrored natural landscape," which is not a depiction or a record but a vision through technology.[7]

7. Vilém Flusser, "To Envision," *Into the Universe of Technical Images*. Minnesota: University of Minnesota, 2011, pp. 33-40.

Information

In Flusser's philosophy of photography, he defined information as "an improbable combination of elements." Lee Wen-Ji translated information as fu-hsing in Chi-

8. Vilém Flusser, *Towards a Philosophy of Photography*. Translated by Wen-Ji Lee, Taipei: Yuan-Liou Publishing Co., Ltd., 1994, pp. 99-100.

nese, explaining that "Information has dual meanings, message (information) and figuring objects or ideas. If we break down the first part of the word into in-form (form, shape), the meaning of figuring would be more understandable."[8] Artists implement various approaches to figuring in the contemporary photography. I would like to take Hung Yu-Hao's *Wanderland* in the *Reflexivity* section as an example. In the set of images, the arcade space in Wanhua, Taipei City is the subject of shooting. Hung Yu-Hao recorded the everyday life of ordinary people in the arcades via 3D scanning and digital imaging technology.

In such an image production process, the lens scanning replaced human scanning by eye. The photographer recorded the scenes in a panoramic way that underlines the optical unconsciousness of the lens. To take a further step, the significance of 3D scanning technology in photography can be examined as well. As Flusser said, the meanings of images scatter on a plane. Seeing an image, the viewers (we) needs to "scan" by eyes traversing the image plane to obtain the in-depth meaning. The meaning obtained through the scanning process indicates dual intentions. One is the structure of the image, and the other is the viewer's intention. The effect of the light box installation and the particles presented by the 3D scanning in *Wanderland* draw the visual aesthetics in digital images. If we look carefully, instead of images, we might see the "sign of the electronic process." Interestingly, the work raises its own question about the concept of scanning. When the site information is completely digitized through scanning technology, people seem to collect and freeze the site through equipment. Meanwhile, the blurring images of dots generated from the data prevent the viewers from seeing clearly. The voids appeared due to the scanning process instead reveal a sense of history and the traces of memories. It also corresponds to Flusser's claim that "the technical image is a condensed surface." All the particles in an image exist on its surface. The masking caused by scanning holds the viewers from digging, forcing them to stop on the surface of the image.

Such a method of image production subtly echoes the issues touched by *Wanderland*. In Taiwanese urban landscape, arcades are the open space that intersect between streets and buildings. As a birthplace of Taipei's urban history, the Wanhua area has distinguished social landscapes in arcades during the day and night, given the local living conditions and cultures. The Chinese work title *No Home to Go* and the English title *Wanderland* set by Hung Yu-Hao echo each other and remind the viewers to reconsider the questions raised by the artist about the perception of "home" and sense of belonging. Namely, the imaging technology to figure the work take effect by the form to represent the social and cultural landscapes which the artist would like to display. It can be related to the sub-topic Reflexivity, in which the curatorial statement attempts to propose that the images formed by reflection of light are object reality independent of consciousness.

Conclusion

All kinds of image have different visual trajectories in our contemporary life full of them. The imaging apparatuses hired by the artists in "Specularity/ Reflexivity: Contemporary Image Arts after 1980s" reveal that apparatus is a technology of viewing, an observer's eyes, and a way to read the world. This article is aimed for

compiling Flusser's discussions of technical images to reconsider the interconnection of "image—apparatus—program—information" in the exhibition. It is worth emphasizing that most of Flusser's theoretical essays related to photography were mostly written in the 1980s, when photography was still in the optical age and the electronic networks and digital technology had not yet emerged. It was the time when digital imaging had not yet flourished. However, Flusser anchored photography (photograph) with the term technical image, indicating that this type of image would be produced through machinery, which would not be identical with the traditional images, and revealed (predicted) that the images of that time and the future would be majorly electronic. We are now in a society of what Flusser imagined in the 1980s to be a "future" world constituted by the so-called composite electronic images. In the age of technical image, the inter-textual notions, "Specularity" and "Reflexivity," of the exhibition, is a reminder on how we can look at the creators' intentions, the meanings of technical operations of imaging, the representations of images, and the various landscapes suggested by the technical image itself.