

## 附錄 C

虛擬實境體驗

附錄 C 為存在感認知實驗之瀏覽過程詳述。以受測者戊為例，透過文字詳細描述受測者瀏覽四個空間的過程，包括如何去操作控制，看到或聽到了什麼，有何動作反應，以及部分口述內容等等，讓讀者能透過文字稍稍理解及感受受測者戊在虛擬實境裡的經歷體驗。下文中所出現的粗體字是作者自己的強調，並非受測者，希望幫助讀者掌握虛擬實境之空間體驗的一些特點；並針對部分內容補充附註說明，以增進理解。

### 受測者戊在學校空間(COD): 約 21 分鐘

受測者戊一開始一眼就認出 COD，隨後被最遠端的粉紅色吸引而朝向中庭的開放空間探索，由於這是她平常上課工作的地方，受測者戊對每樣東西感到一股熟悉感。很快地，她就想要嘗試飛行功能，但是由於此時還不太熟悉如何操作而沒有成功；另外，對於速度的控制也尚未純熟，因而一開始沒多久就常常失速而撞到牆壁，此時會暫時失去方向感，不知自己位於何處。

慢慢地，受測者戊操控比較順手了，她認出 COD 辦公室之一，然後再次回到中庭。此時身體還在熟悉操控的感覺以及如何保持平衡，在瀏覽的過程中，受測者戊細細觀察這個空間，注意到中庭裡頭供學生休息而擺放的桌椅，其中有倒下的椅子而感到奇怪(註：這是因為這個模型設計來當射擊遊戲，倒下的椅子乃是因為射擊過程相互尋找躲藏而形成的混亂所造成)。

之後，受測者戊確定自己身處於整棟建築物的何處，這對她而言似乎很重要；她看到一個房間並認出是圖書室，然後指出圖書室裡的電腦比例不對，整個電腦因為過大而顯得突兀。這時受測者戊又想嘗試飛行，結果整個失去控制，跑到了模型以外，且無法回到模型裡；因此實驗被迫中斷，必須重新啟動模型。

重新開始後，受測者戊很敏銳地發現自己似乎沒有站在地板上，而是飄浮在離地一吋左右的高度，這讓她很不自在，調整好之後才能繼續進行瀏覽，第二次一開始受測者戊還是強調遠處粉紅色的牆對她的吸引，總是不自主的就想先往那裡走去。同樣地，也還是出現無法隨心掌握前進速度而導致衝太快的情況，不過受測者戊很快克服這個困難，之後對於速度的操控就掌握的不錯。

隨後，受測者戊又來到中庭，並注意到上樓的階梯。她一一指出這些的名稱，並且辨識出材質，例如玻璃，她說因為感覺有點透明的緣故，不過這是否是因為她知道真實的建物使用的就是玻璃，所以才加以衍伸？受測者戊反應即使細節不多，但她仍然能感覺這個空間，而且似乎伸手就能碰觸柱子。

在過程中，受測者戊不斷注意與學習更好的操控或是平衡的方法，讓她更隨心所欲地瀏覽整個空間，這也幫助她探索許多她想要看的角落或角度。受測者戊瀏覽地很開心，她說 C6 比電玩遊戲來得有趣多了，並表示可以這樣四處看四處漫步的感覺很棒，讓空間感覺很真實。

突然間，受測者戊發現自己站在中庭供大家休憩桌子上，這並非她所預期的，不過她卻因為這

個發現而覺得有趣，隨即跳上跳下桌子好幾次。其實受測者戊只是站在原地，當她稍稍往前碰到桌子，系統就會自動改變高度，讓你變成站在桌子上，而這種瞬間切換高度的感覺讓人產生真的跳上桌子的錯覺，而且，據受測者戊形容，**這錯覺還非常的真實。不過儘管感覺真實，由於是突然瞬間的高度變換，無法確認哪一秒發生，這種非預期的感覺仍然有點奇怪。**

之後，受測者戊嘗試上樓，走著走著卻不小心直接像踩空一般掉落到一樓；對這突如其來的掉落，受測者戊有點驚嚇，因為掉落的感覺很逼真，一邊覺得驚嚇一邊又覺得有趣，讓她笑個不停；又因為突然的掉落而失去控制，不自主地衝向牆壁撞了上去，使得她失去平衡與方向。這段時間，**受測者戊一直驚呼與笑，說不出話，當提醒她說些現在的感覺時，她提出：要一邊瀏覽，一邊說出看到的與感覺到的每件事情，很不容易。**

努力恢復鎮定之後，再度上樓。受測者戊慢慢抓到上下樓的操控技巧，感覺樓梯一階一階的高度變化，很像真的上下樓梯的感覺。到了二樓，受測者戊說**感覺好像可以直接伸手觸摸到那個矮牆，但是接著她却說很怕撞上 C6 的牆壁，因為不確定它在哪裡，可是她知道應該就在前方某處，所以讓她有點害怕。**

接著，受測者戊猶豫要繼續往上還是回頭往下，最後決定下樓；她看到了演講廳，決定進去看看，受測者戊表示已經熟悉整棟建築是很不錯的事情，可以知道往哪走以及可以看些什麼。她覺得奇怪，進入演講廳前的走廊應該要擺放一些東西的，像是學生作品等，可是這裡卻空空如也。然後她往回走說要帶我看一根圓柱；當一邊按著控制器前進時，她看著圓柱子好似經過她的身邊往後退一般，她說看到圓柱子也經過了 C6 的牆角，感覺很奇怪，好像被切割開來而沒有連結在一起。(註：因為 C6 是六面牆壁包圍而成的，兩兩牆面形成 90 度角，當投影到牆角且畫面較單純又色淺時，會特別突顯出牆角的稜線來。)

這裡，受測者戊再次說明空間帶給她的真實感，**彷彿她張開手，所環抱的就是跟實際 COD 一樣大小的一個空間；抬頭往上方天井看，也能想像站在高處樓層的人們像她揮手的樣子。**

之後，受測者戊隨興看看中庭，再次提到可以跳上跳下的桌子；然後決定去看看圖書室，跟真正的圖書室比較一下。她自己提到她所做的大概就是進行一種比較，將記憶中的真實場景與目前所見的虛擬空間作比對；到了圖書室，再次提到電腦比例實在過大，書架之間的間隔也大於實際真正的距離。

受測者戊走出圖書室，談到平衡的問題，她必須去習慣這種前進的方式，不過又很奇特地覺得真的像在移動一樣。走著走著她發現一個奇怪的東西，不曉得為什麼會出現在這裡？她說很像是彈藥還是類似的東西，也許撿到它就可以得到點數。(註：這是射擊遊戲裡的類似寶物的東西；受測者並不知道這個模型是設計作為射擊遊戲的場景，不過因為她有電玩遊戲的經驗，所以很敏銳地猜對了。)

受測者戊繼續漫遊，並回答我的問題：是否覺得這個模型已經瀏覽夠了？她說或許第一階段差不多了，這可能是因為她已經知道有些什麼東西可以預期；例如，她指著一個角落說，這背後

應該會有個樓梯井，她就會想去確認看看。再問：那麼這個角落有符合預期嘛？她答：**在真實生活裡，她每次從這個門走出時，總會注意到地板上不知誰放了個用過的烤肉架，以致空氣裡總是飄著氣味；諸如這些事情，她總會特別注意到，不過，在這裡(指模型)並沒有這些東西。**

不過，受測者戊接著說，空間還是就在這裡，很真實。然後她發現自己好像又離地了，好像站在離地高三吋的地方而不是緊貼地面（註：事後推敲這種情況可能是不小心按到飛行按鈕，造成暫時離地）。受測者戊來到一開始就一直吸引她的那整片落地的粉紅玻璃牆，在真實建築裡，她很喜歡從這個角落往上看，可以透過狹窄的細縫看到一線天空，而此刻在模型裡看也有相似的感覺。

但是，由於這是一個往上看高處的角度，之前 C6 牆角稜線的問題又再次顯現，這使得原來應該是直直高聳的空間像被折了一個彎似的，減損了原有的空間感受。受測者戊再次四處走走看看，注意到電梯、看起來一堆一堆的牆塊，推測應該是辦公室。而突然間，在她操控著控制器前進時，意外發現飛行功能的控制方法，於是就開心地嘗試這新的瀏覽方式，而且可還是一種真實世界也無法嘗試的瀏覽方式。

受測者戊直接就飛到了她平時工作室所在的樓層，並指出她的工作室，她說這是她瀏覽 COD 時一直想做的事情，可以看看真實世界裡她的地方，感覺非常酷。此時受測者戊已經操控的很順手，也能用像步行的速度瀏覽，**其實這個空間裡什麼都沒有，但是受測者戊興味盎然地一一查看，還指出她的工作桌所在的地點，就在角落邊，彷彿所有細節都歷歷在目，憑想像就得到真實感。**她還查看窗戶外是不是有真實生活中的景觀，只可惜並沒有。

之後，受測者戊往下降落，並停住向下探看，因為真實世界裡無法看到這樣的角度。她說浮在半空中的感覺像踩在一片玻璃地板一樣，但是在半空中也讓她失去方向感。更重要的是，她指出此時她已經完全搞不清楚哪一面牆壁是出口了（註：C6 有一面牆壁是出口，比起其他實牆的投影，出口面的投影總是稍微淡些，平時很容易辨識；而受測者戊的意思是她已經無法分辨哪一面牆壁才是出口）。受測者戊又玩了一會然後說，很奇怪地，飛行的時候不再像之前總是會受到 C6 牆面稜線的影響，但是現在刻意去辨識都不太能察覺，很奇特。

決定結束飛行之旅後，受測者戊沿著樓梯下樓回到中庭，不過一時尚未適應向下的速度而感覺總室要撞向地面似的，這讓她無法平衡，也開始有點暈眩，需要完全停住站定才能重新開始前進。最後，一個直接降落掉到地面，結束 COD 的部分。

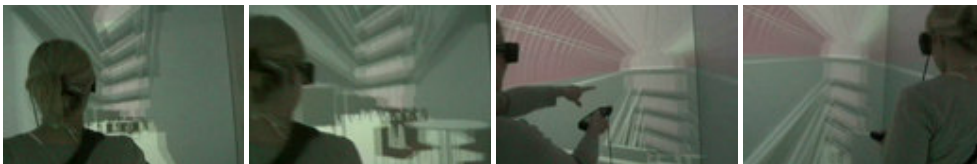


圖 C-1: 受測者戊 在 學校空間

### 受測者戊在辦公空間(AWL Office): 約 10 分鐘

受測者戊進入模型之後首先說，她並不認得這個空間。她看到了一些桌子，朝桌子走去。她看向天花板，很喜歡天花板上的管線樑柱等，以及這齊整的列柱空間的感覺。受測者戊覺得因為牆上圖片懸掛排放的感覺，使這裡看起來有點像地下室的空間。現在她很確定她並沒有到過這個空間，她往圓柱走去，邊走邊注意整個空間的細節如桌椅電腦等，覺得真實感很強烈，好似她可以直接坐在椅子上，而桌上的電腦比 COD 的好太多了，椅子也很棒等，整個質感與細節非常棒非常酷。

接著，她疑惑該往哪裡走？行進過程感覺不夠順暢，類似頓頓的感覺，受測者戊自己尋找解釋：是否因為整個貼圖太大的問題。受測者戊說這種頓挫的感覺太直接明顯，讓人很想停下來。接著她注意到光線，光線有點奇怪，太像電腦繪圖裡的感覺，光線好像不知道從何處冒出來的。她發現一道像門的東西，可是又好像無法通行，所以決定先折回來。她說很喜歡列柱排列的感覺，她總是喜歡走在中間，感受其中的對稱性。然後她試著尋找出去的路，看到後面有另一方隔間空間。在這裡她遇到些控制問題，無法如願停止，但隨即解決。她說想要去看一下隔間內的東西。

再次強調這個模型有許多的細節，連窗簾、窗戶的陰影等以及桌上的小燈。受測者戊不自覺走近虛擬空間裡的物件，但是又意識到可能會撞到 C6 牆面，她對這可能過近的距離感到有點害怕。不過，又很想看看隔間裡的情況，就像在真實世界裡頭總會探頭探腦想窺視隔間後的情況一番。受測者戊想要找找看有沒有出去的路，同時又再次強調她仍然不知道這個空間是什麼，結果不小心穿牆而過，這是非她自己所控制的。之後覺得自己很像在走路，必須這樣步行穿越而到達這裡。現在她很確定自己不會到過這個空間。她說因為這是陌生的空間所以她並不知道該往哪裡去，只能就眼前所見慢慢探索。也因為如此只能有一些客觀的感覺，例如看到一間會議室覺得很乾淨很整齊之類的印象。

受測者戊還是繼續想要找到可以出去的路。看到更多的辦公家具，之後看到最後有個門似乎可以出去，不過同時注意到角落有某個東西，但此時因為一直接著前進而穿越過了尾端的門來到模型外。受測者戊說最簡單的方法就是直接穿牆而過直到你找到路為止，然後再回來。**如果你熟悉這個地方，例如知道自己在什麼建築裡面，那麼你可以自己決定，而不是只能杵在中間一直試著找路。**

到了模型外頭，她看到牆壁上似乎有些影像，地板是黑漆漆一片，感覺自己很像飄浮在牆邊。受測者戊之後看到一個類似是門的開口。她決定往後退一點以便可以看到全貌，看起來牆上的影像似乎是某個城鎮之類的鳥瞰圖，然後她說還是不知道這是哪裡。

在這裡受測者戊說，在 3D 模型裡，你總是得將鏡頭拉退後一點才能知道你在哪裡，這樣做可以改變一些事情，這也是她剛剛為什麼那樣作的邏輯。但是她發現，她只知道模型像個大盒子罷了，還是不清楚這是哪裡。最後決定回到裡面，但是如何回去也是個問題，她發現徘徊半天還是在外頭。

她決定沿著窗戶走，應該可以走回剛來的地方，在這過程中，她說她仍然嘗試著找出這是哪裡的一些線索，想要從外面去知道這個空間或是這麼模型究竟是什麼？最後她了解，這模型完全是從內部建構起，看也是從內部的角度，而非外部。她繼續說明從內外看的差別，從外面看比較能掌握整體可以看清整體的感覺，但是這個模型的外面看起來像是未完成般不太真實。

最後，受測者戊決定沿著來時的軸向回去，這是一種找路的策略，因為對她而言，回到初始的地方能幫助重新定位自己的方向。之後受測者戊繞了一圈來到門口，她穿越門回到了一開始的入口處，結束 AWL 辦公室的瀏覽。

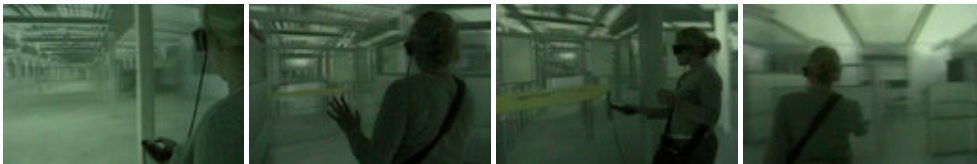


圖 C-2: 受測者戊 在辦公空間

### 受測者戊在教堂空間(Notre Dame): 約 12 分鐘

受測者戊站在 C6 裡等待第三個模型，一開始背景音樂先流洩而出，而後聖母院模型才隨之投影至 C6。此時受測者戊先注意到回音這件事情，她說現在的聲音聽起來讓她意識到身處在一個狹小的空間，而不像在大教堂裡應該有的感覺；原以為她指的是背景音樂，但她隨之解釋，是因為她說話的聲音，如果在大教堂裡，話說出口的聲音應該跟現在很不同，例如有回音之類的空曠感覺。

接著受測者戊說在現實生活裡，當她到了教堂就喜歡抬頭看圓頂，就像她現在做的，更何況她知道待會可能還能夠上去那些平常無法到的地方探索。這是她所喜歡的開放式的大空間，她注意到一些細節，大圓柱等，尤其喜歡回頭看列柱排列的感覺，也喜歡兩旁的走道所形成的軸線感覺，種種這些所形成的氛圍讓她非常喜歡。

受測者戊說她沒有到過真正的哥德式教堂，但是在虛擬的模型裡卻感受到哥德教堂的寂寥氣氛。她注意到模型外面有雲的貼圖，使內外空間的分野更加清楚突顯，身在內部空間的感覺也就因此更強烈了。此時她操控的速度太快，受測者戊形容感覺好像自己在跑似的，不過她隨即更仔細地形容這種感覺：一開始雖然覺得像在跑，但是又比自己跑步前進的感覺更加順暢的多，就像是坐在速度很快的車子裡，因為自己本身並沒有在動，所以比較像是被車子或什

麼東西搭載著往前移動一樣。

接著受測者戊順勢來到了教堂外，她看著眼前巨大高聳的教堂外觀，很自然的想要倒退看清整體，但是在 VR 裡卻沒有模擬倒退的操控模式，對此受測者戊想出很好的操控方式：將控制器指向背後，身體卻面向前對著模型，很像真實世界裡邊倒退著走邊欣賞教堂的情況；而在 C6 裡，實際上是教堂模型往後退越來越小直到整個教堂都在眼睛視線底下，如此一來，她可以仔細觀察教堂的細部，不過近看之後，她卻發現只是平面貼圖沒有真正建 3D 模（註：因為受測者戊有 CAD 基礎，因此可以分辨貼圖與建模的差別），因而顯得沒有深度，整個很平面的感覺；另外，門看起來也像紙片一樣薄，真實情況裡牆壁應該有大約一呎左右的厚度。

不過，當轉換角度看上去，整個氣勢還是很驚人很漂亮。從某些角度看光線射進教堂的感覺也很棒。受測者戊此時就想要試試飛行模式，可以飛近任何想看的細節，去驗證這些細節是否與想像中相同。看到了天花板上的尖拱以及柱子，並且可以穿透它們。這是平常無法觀察也無緣得知的一些角度與細部，更特別的是在這裡看到了窗外的景象。受測者戊操控得越來越熟練順手，她決定到窗戶外頭去看看哥德教堂的特殊結構－飛扶壁，受測者戊說感覺自己像一隻鳥在飛翔似的，因為她穿越了窗戶，正懸空地站著到處觀看，對於這個感覺，受測者戊形容，即使明知眼前這些東西不存在，但還是很難說服自己不受影響，因為它們就切切實實左右了身體的自然反應，就像感覺要撞到牆時，身體就會自動繃緊想保持平衡，這是很難去控制也很奇怪的感覺。

接著，受測者戊操控著控制器上上下下地，一方面熟悉控制的方法，一方面感受這種特別的觀看的角度。受測者戊也嘗試將手放在窗戶上伸出外頭的感覺，只是此時很容易失去平衡，接著她突然穿越了牆來到外頭，看到外頭的飛扶壁結構，受測者戊說可能要從原來出來的窗戶才能穿越進到裡面了，不過她此時也已經熟悉這樣的模式，習慣穿牆而過或是直接穿越玻璃窗戶，所以很自然地越過了牆壁進到裡頭，而此時她站到空中看到高聳而立的列柱與尖拱，發出驚嘆聲。接著她回頭看到我像是懸浮在半空中，說這種感覺很瘋狂(自己卻感覺不到自己也是這樣浮著)。一陣哄笑後，受測者戊竟然開始想嘗試速度可以有多快了，結果穿梭在列柱尖拱之中，而後向下俯衝似的自己也站不穩，像是要撞上地面一般，不過，她很快地保持了平衡。

此時，受測者戊提到她喜歡這音樂。接著她表示想從外面看看整體，就像她自己在建 3D 模型時，總是要切換到整體的概觀角度去看看，也就是把建築當成一個物件。因此她嘗試著到外面去，找路的同時，邊欣賞著整個教堂屋頂的結構等，她說無法好好形容這個感覺。最後她下到地面，從後端的門出來到外面後，受測者戊再次以她先前想到的觀覽方式，將控制器指向後面，整個模型就像慢慢後退而後呈現出整體外觀，受測者戊說就像在電腦裡操作模型的感覺，甚至最後縮小到整個模型就像一個放在桌上的樣品可以讓人前後左右，反覆觀看。但是最後不小心轉彎時速度沒有控制好，又發生在 COD 那樣跑出模型外，不過受測者戊認為這個模型的觀覽已經足夠，因此聖母院空間的階段就結束在此。





圖 C-3: 受測者戊 在教堂空間

### 受測者戊在想像空間(Firecave): 約 14 分鐘

受測者戊一看到場景立刻說是不是到了某種洞穴裡，接著聽到背景發出的音效感到有點害怕不敢移動。對受測者戊來說，這是個全新的未知的空間，沒有以往相似的經歷可以類比，因此探索這類空間的方式很像在玩電玩遊戲的行為，也用玩 game 的方式來操作控制器。她看到了一些骨頭，感覺很像某種動物的肋骨之類，覺得也許自己正在某種動物的身體裡。由於不熟悉整個空間，即使已經是最後一個模型，受測者戊一開始還是控制的不是很順利，需要時間適應。

接著受測者戊走到了一個向下的緩坡，沿著類似石階的地面行進，但是這種前進感覺跟想像很不一樣，好像要掉下去似的很可怕；然後受測者戊來到了更深入的空間讓她很驚嘆，因為 Firecave 不是一個能夠一眼望穿的空間，而是到處充滿了未知，需要一步一步慢慢探索；受測者戊說有些場景總是非預期地出現在眼前，而她自己也喜歡使用類似的建築手法來呈現空間，她形容這裡很像某種部落進行一些儀式的那種地方。

接著受測者戊看到一座橋沒有任何扶手欄杆讓她很猶豫要不要走過去，她先走到旁邊小心翼翼地向下探看，此時她說這些場景角度隨著立體眼鏡視角不同而跟著改變，感覺非常真實，好像真的站再懸崖邊四的恐怖。然後她決定過橋，橋由一塊一塊石板鋪成，中間留有不小的空隙可以看到下方的熔岩火漿，受測者戊頑皮地站在這個空隙上，模型的設計並沒有模擬這裡會失足掉落，因此形成了受測者戊懸空站在沒有任何支撐的地面上，她說感覺很詭異，因為理論上應該要掉落的，結果卻像被空氣支撐著似的。

過了橋之後，受測者戊好奇若是掉下去會是如何，她決定嘗試看看，再利用飛行功能飛上來；結果她卻一不小心踏空，真的像自由落體一般掉落下去，受測者戊一直叫喊著這是真的、這跟真的一樣，說不出其他的話來；好不容易到了底下，站穩後平復心情，受測者戊看著週遭的火山熔漿發出讚嘆，接著她說想試著飛回原來的地方。看看周圍的岩壁，受測者戊說感覺非常的真實非常棒，這是她第一次看到類似的景象。然後她說想再嘗試一次這種墜落的感覺，但是當她一邊慢慢向上升，一邊卻懷疑起自己能否再作一次，因為剛剛是非預期的掉落，現在想要刻意讓自己掉落的感覺反而有點奇怪，不知是否可行。

整個岩洞非常深而曲折，因此在受測者戊慢慢上升的過程，不時遇到有些陡峭岩壁或是斷裂的石橋突然出現，好幾次差點撞到，而這種突如其來的非預期的景象也讓受測者戊感受很強烈，加深了探索這個空間的感覺；終於回到了地面上，不過受測者戊懷疑這裡應該不是她當初



掉落的地方，她來到一個廣場似的空間，一根根燃燒著的火柱環繞在四周，像是某種部落聚會或是舉行宗教儀式的地方，受測者戊環繞一圈，覺得很神秘很有趣，她說這個空間是四個之中她最喜愛的，有許多驚奇之處，只是她得不斷地尋找方向跟出路。接著受測者戊注意到地面有一個很大的裂縫，她小心翼翼地避免掉下去，她提到：「**在這個空間裡，她常常不由自主地移動自己的身體跟腳步，而忘了可以用控制器來操作前進後退或左右移動。**」這或許是因為整個空間感受太直接而強烈，她整個人完全融入了情境之中。

確定了裂縫底下沒有什麼奇怪的東西之後，受測者戊繼續往前走，她說整個空間的高度感覺很真實，讓她覺得自己在一個很深的洞裡。她繼續四處遊走，想找到剛剛進來的方向。受測者戊一邊行走，一邊補充說明為什麼最喜歡這個空間的原因，因為這裡比其他模型多了許多的活動，也多了許多未知空間可以探索，就像現在她來到了一個底下充滿火紅岩漿的通道中，她慢慢地穿越這個曲折的通道，一不小心操控的速度太快，幾次的過彎差點撞上突出的岩壁，她的頭與身體左右閃避著，然後她來到了地底岩漿汨汨湧出一個地方，通過岩漿時，上下起伏的大動作，讓受測者戊不斷平衡自己的身體，並一直大喊，結束後，受測者戊覺得開始有點頭暈，剛剛的動作太大了，因而產生 motion sick，於是就在這結束了 Firecave 的實驗。

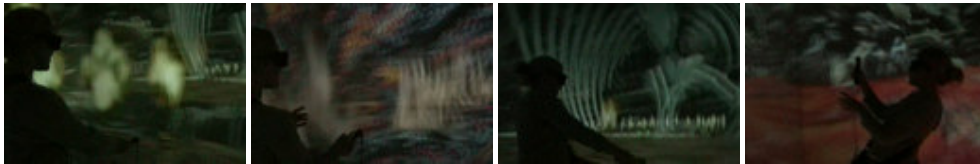


圖 C-4: 受測者戊 在想像空間

## 附錄 D

存在感認知實驗編碼

時間		口語資料	斷句	編碼							
				C1		C2	C3		C4		
				Re	Ae	Vr	Rr	Mm	Br		
		[學校空間 COD]									
01:05	受測者戊	Okay, this is the college of design, I'm pretty sure.	A001		■						
01:07	研究者	Oh, how did you know?									
01:11	受測者戊	[laughter] I see color, and there's a big open space back this way, so I'm gonna go check that out.	A002	■							
		Looking up, everything looks real familiar.	A003					■			
		Um, I wanna try and...it'd be interesting to fly up there, can I do that? Let's see if I can do that. And, it's this one, is it? I guess I'll turn around, and fly downstairs.	A004			■					
		Heh, okay, when you run into a wall, there seems to be...oh! I'm going very fast!	A005			■					
		[laughter] I wish I could stop, I'm going way too fast!	A006			■					
		Okay, stop... At least when you hit a wall it seems to slow down a bit.	A007			■					
		Okay, now... I don't know where I'm at.	A008			■					
		02:17	研究者	You control very well!							
02:20	受測者戊	It's much; it's moving a lot better.	A009			■					
		Um, oh, okay, this must be one of the offices, and then we moved back out into the atrium again.	A010					■			
		It's sort of odd keeping your balance doing this, you lose your balance doing this.	A011			■					
		Did I knock over these chairs (laughing)?	A012			■					
02:43	研究者	No. It's not your fault (laughing).									
02:47	受測者戊	That would be pretty interesting.	A013				■				
		Okay, now I know which end of the building I'm on.	A014	■							
		There's the library, it seems a little bit out of scale, a bit off scale from what it is.	A015	■					■		
02:58	研究者	Out of scale, what?									
03:00	受測者戊	Like, it looks like the computers are very large.	A016					■			
03:03	研究者	Ah, too large.									
03:06	受測者戊	A little bit too large.									
03:07	研究者	So that would reduce the reality?									
03:09	受測者戊	Yeah. Just the..making the model more believable.	A017				■				
		I still want to try and fly up here! Do you know how to make it fly?	A018			■					
03:19	研究者	Try this button to make it totally stop, and.... Is that this button? Or maybe this one. Oh, oh, no no no.									
03:43	受測者戊	Oh, where are we now? Oh (laughing), we're going down into the earth... or something, do you know where we're at?	A019							■	
03:53	研究者	No. (laughing) No, no, don't go! I think we need help. It's totally disappeared. It happens, always. Sorry, could you start again ?[to man] Because we got lost. Are you sure..which one is the fly button? The flying button?[to man]									
04:30	Man	You want to change it to fly mode? This one.									
		Next video clip									

04:39	受測者戊	Something seems different about our elevation doesn't it? Like it's slightly high? Hmm..I'm not able to...	A020			■		
04:53	研究者	It's not working?						
05:02	受測者戊	No. Ah, let's see if we can do this more carefully.	A021			■		
		I wonder how- the color really catches my eye, the pink and the...	A022		■			
		okay, it's really moving..quickly, I think? Or it's jumping. Oh no.	A023			■		
05:34	研究者	Again? We're losing it again. Can we go back?						
05:45	受測者戊	Okay, here. Is it going back? Now..it's all black.	A024				■	
06:06	受測者戊	Let's see if we can get into the Dean's office.	A025		■			■
		Is this an okay pace for you?	A026			■		
		Okay, it seems when you run into a wall it doesn't quite [move] as much, is that what's going on? We'll go this way.	A027			■		
06:35	研究者	So, you cannot go into the office?						
06:38	受測者戊	Is that right? It seemed like I ran into the wall and then it stopped.	A028			■		
		Here's the atrium...and staircase	A029		■			
		You can tell the glass is there, because it's sort of triangulated a little bit.	A030	■				
		It's not as detailed, you know, as reality, but you get the sense of a space, that's for sure.	A031				■	
		And I feel like I could touch that column.	A032				■	
07:12	研究者	Oh really?						
07:14	受測者戊	Oh, look at that! You can see the staircase.	A033	■				
		I like that you can walk yourself backward and look the other way. That's really hard to keep your balance that way though!	A034			■		
		I get too dizzy.	A035					■
07:29	研究者	Oh, you really have fun.						
07:32	受測者戊	I know, this is great! This is much better than a videogame.	A036				■	
		I really like how you can just look around, because it seems very..it seems very real.	A037				■	
07:48	研究者	It's real? So, uh oh!						
07:50	受測者戊	Umm, now we're standing on the table. Wow I didn't even do that.	A038			■		
		Oh cool! So you can jump up on the table. Let's do that again. (laughter)	A039			■		
		We'll go to the next one. Haha, wow! (laughter)	A040			■		
08:22	研究者	I'm glad you're happy!						
08:27	受測者戊	Okay, well let's go try out the stairs. Whoa.	A041		■			
08:32	研究者	Is that feeling strange? Or real?						
08:35	受測者戊	Yeah, it's very strange when you jump up, you don't know exactly when it's gonna happen.	A042				■	
08:42	研究者	But the feeling, the jumping feeling, is real to you?						
08:48	受測者戊	A little bit, the change in the elevation is very interesting.	A043				■	
		Okay, now we're gonna go up the stairs.	A044			■		

		Can you just like...fall off? (laughter) Wow, okay! I think I need help.	A045			■			
09:09	研究者	(laughing) Don't just laugh, say something!							
09:12	受測者戊	I am sorry, it's very difficult!	A046				■		
		Okay, well we fell off the wall there, and that was very odd.	A047					■	
		I'll try and go up the stairs.	A048		■				
		But the change in elevation really <u>does play with</u> your head, or like running into walls, you can't stop it from happening.	A049			■			
		I was bracing myself for it!	A050				■		
		Okay, now we have...going down is kind of fun! It hops down the stairs.	A051				■		
		Now I'm having trouble getting beyond this point...I don't know why.	A052						■
		Do you think I have to go up another level? Should I be able to?	A053			■			
10:05	研究者	Yes, but...							
10:09	受測者戊	I do feel like I could just touch this, right here!	A054				■		
10:13	研究者	You could feel it. And you tried to touch it.							
10:20	受測者戊	It doesn't..I don't know where the wall is, it kind of scares me. I'm scared I'll run into it.	A055						■
10:24	研究者	You mean the real wall?							
10:26	受測者戊	Yeah, the actual wall. Because I know that there's one here somewhere, and I guess I can see the actual floor, but I do feel like I could grab <u>a hold of</u> that.	A056						■
		Should we go back down, or what do you think?	A057			■			
10:49	研究者	It's up to you.							
10:51	受測者戊	Well, I would like to go up further. You know, to catch the view of the next level.	A058			■			
		Maybe we can try a different staircase. And then hop back down.	A059		■				
		Try going down this way again. Very cool.	A060				■		
		Walking by the entrance, you can see the auditorium through there.	A061	■					
		Hey, yeah, let's go check out the auditorium.	A062			■			
		This way, it's nice that you already know the building.	A063				■		
11:33	研究者	So you mean it's nice because you know this building.							
11:36	受測者戊	Yeah, because I know that there's an auditorium back here somewhere.	A064						■
11:38	研究者	So you can explore it.							
11:39	受測者戊	Yeah, and see what it looks like. This way.	A065						
11:43	研究者	Are you doing some mapping of this virtual one and the real one? Your experience?							
11:49	受測者戊	Am I making...what? I am sorry...	A066						
11:51	研究者	Mapping, do some mapping...							
11:55	受測者戊	Oh mapping...Yeah, just a bit. Because I know that it's supposed to be here.	A067						■
12:02	研究者	Something's supposed to be there.							
12:04	受測者戊	Yeah, but it's not.							

12:07	研究者	So you will try to find out that...					
12:12	受測者戊	Yeah. This space I know. And there should be, you know, I wonder why there's no trophy case or display cases on this wall, usually there are, right? Whoa.	A068				■
12:36	研究者	You're looking at...					
12:39	受測者戊	Here, yeah, I'll go back, I'll show you the column I was looking that.	A069		■		
		I was watching it go by, and as you see it go by where the real wall is, it's very strange. It looks like it's disconnected a little bit.	A070				■
		It looks good after you get close.	A071				
13:03	研究者	So you noticed the very detail of this building.					
13:08	受測者戊	Yeah, I have a little bit. I'm a little bit of a perfectionist, so.	A072				
		It looks like we can't go downstairs because there's no opening there.	A073		■		
13:22	研究者	So, when you are navigating, the feeling is real to you? You think you're really in this building? Inside of this building.					
13:30	受測者戊	Yeah. I'd like to see some people waving there or something.	A074				■
		Like, you know I actually feel like my hand is reaching out into a space that is as big as what the design college actually is.	A075				■
		I'm gonna jump up on a table over there. (laughter)	A076		■		
		Okay, we'll go check out the library. See how it compares.	A077		■		
		I think that's what I'm doing, I'm comparing reality with...you know? With the virtual space that I'm in.	A078				■
		And the computers are very large. The stacks are a lot further apart.	A079	■			
		The balance is still an issue. I thought I'd get used to it as we went along, but as I move side to side I actually feel like I'm moving.	A080			■	
		Like I'm running into this wall right now, into this column here. I feel like..	A081			■	
		okay I'm going this way.	A082			■	
		What is this? Hmm. I don't know what that is. Do we know what that is and why it's there? It's like the ammo or something you find in a game. You pick it up and get points for it.	A083		■		
It's weird, the way you have to navigate, just like the walls are really there. Let's go out. I'd like to try and...	A084			■			
15:36	研究者	You think it's enough for this building?					
15:40	受測者戊	Well, maybe for the first level, I guess it's because I already know what to expect back here in this corner, like if there's a stairwell there.	A085				■
15:53	研究者	You know that, so you will explore it.					
15:57	受測者戊	Yeah, a little bit.					
16:04	研究者	Try to...does that meet your expectation?					
16:16	受測者戊	Say that again?					
16:17	研究者	Does that corner meet your expectation?					

16:21	受測者戊	Umm, not quite, you know when I go out this door I always notice that there's a grill on the floor, and it's actually sucking air. Things like that I always notice. You don't get that.	A086					■
		But the space is actually here, right.	A087				■	
		It seems like my feet are a little bit off the ground, more than they should be. I feel like I'm 3 inches off the ground.	A088			■		
		I like this space, I like looking up there. I like looking up there in reality, it's kind of the same thing. You get that real narrow bit of sky.	A089					■
17:09	研究者	You really like this part of the real building?						
17:13	受測者戊	Yeah, looking up, and you see this, it's another big tall space, I guess that might be why.	A090					■
		It's a little bit distorted, it seems like when it hits the joint of the actual, the real virtual reality box it angles off quite a bit, which isn't real.	A091					■
		Let's see if we can go... The elevator shafts are interesting.	A092		■			
		What are these blocks? This office? I've never been back here, so I'll check that out. If I can get back there.	A093		■			
		Now I suddenly feel like we're very low. Oh, maybe it's working! Oh, we got it. It's working. Alright, we get to fly! We don't get to fly in real life.	A094			■		
		Now, my studio, this is what I wanted to do, I wanted to go see my space, you know, is here. Very cool!	A095				■	
18:38	研究者	You control so well.						
18:44	受測者戊	It's nice when it goes a lot slower.	A096			■		
		Oh, look at that! The walls are gone. Now that's neat. That'd be a nice big studio space, huh?	A097	■				
18:58	研究者	So this is the studio?						
19:00	受測者戊	Yeah, my studio space would be right about here. I have my desk in this corner, so.	A098					■
		And then we can go out and if there was a view.	A099		■			■
19:11	研究者	So even if there's nothing here, you can just imagine it.						
19:17	受測者戊	Yeah, I know that, I know that it's there. And if there was a view, right. There's no view.	A100					■
		I'll go back down. Cool. See if we can go back this way, okay. Yeah, I'm getting the hang of this. I like to fly.	A101			■		
		Oh, now look at that. If you stop and look down. That's freaky, because you don't get to do that!	A102		■			
		I do feel like the floor, like maybe it's a glass floor. Like I'm standing out in the middle of this space. Excellent!	A103				■	
		Let's see... Now there's a little bit of distortion maybe with the angle.	A104					■



		I can tell you, I know, I would not be able to tell you the way out of this virtual reality box! I have no idea which way is which now.	A105				■	
20:20	研究者	You're totally lost?						
20:22	受測者戊	Yeah, very disoriented with the real world right now. Excellent.	A106				■	
		Now you get to see how much bigger this glass really is.	A107	■				
		Let's go, let's fly over the...this is working very nicely.	A108		■			
20:51	研究者	Oh, I like your driving. (laughter)						
20:59	受測者戊	Now it's weird that I'm not really bothered at first by the join in the box, I mean, you could somehow straighten it out, and get it so that I'm turning... very strange.	A109					■
		Now is it gonna go down the stairs in the same way?	A110		■			
		Oh, now I feel like I was ready to hit the ground, because I was going to hit something.	A111				■	
		Okay, now I'm below that, I'll slow down. A little bit disorienting, a little bit motion sick.	A112					■
		Just a little bit. Sometimes I have to stop just to feel still again.	A113				■	
		And now we don't fall like we did before, I wonder what changed. Oh, that's it!	A114		■			
<b>時間</b>	(另一錄影片段)	<b>口語資料</b>						
		[辦公空間 AWL Office]						
00:05	受測者戊	I don't recognize this place first off.	B001		■			
		There's a little desk over there. It looks like they modeled one desk space; I'll go check it out.	B002	■				
		I like how all the pipework and beams and all that is all done. I like this little...the colonnade space.	B003	■				
		It looks like it's supposed to be filled in, maybe it kind of looks like a basement space, just the way the pictures are on the wall and such.	B004				■	
		Now this, I don't know what this is here. I'll go around the column here.	B005		■			
		Very nice, it looks just like the desks outside. Excellent. I feel like I could just sit right on the table, and the computer's a lot better. A lot nice modeling, and the chair is great. Awesome, very cool. Much better, like texture-quality and the detail of the chair is great.	B006	■			■	
		Where should we go? We'll go back there.	B007		■			
		It's a little bit choppy. Is that maybe because of the graphics?	B008					■
01:34	研究者	The chopiness would reduce the feeling of realism?						

01:39	受測者戊	Yeah, it's not as smooth, it's a little bit different, and you can definitely tell that it's [not real then]. You kind of feel like you want to just stop.	B009			■		
		The lighting in that space is really [odd]. It's just like the CAD models, it's kind of just like...coming out of nowhere.	B010				■	■
		Is this a door? It looks like it would be a door space, the way it sets back. It doesn't seem like I can go back there though. We'll go back. Okay.	B011	■	■			
		I love the processional aspects, the colonnade like that, it's great. I always like to walk down the middle, and appreciate the symmetry of it.	B012	■				
		Trying to find a way out I guess, is what I'm doing right now. There's another cubicle modeled back there.	B013		■			
		It's not stopping...there we go. I just want to take a peek in here.	B014			■		
03:22	研究者	What attracts you?						
03:25	受測者戊	Just that it's another space in here that's modeled and finished out.	B015	■				
		You know, like there's a lot more detail, with the curtains and, you know what I'm saying? The window shade, and I like the little lamp.	B016	■				
		It's weird that I'm walking myself toward this. It's kind of scary because I know there's supposed to be a wall there.*	B017					■
03:48	研究者	But you try to get closer?						
03:50	受測者戊	Yeah, you know. You turn in, like you want to look around the corner like that. I do feel like I want to peek around the corner like that, it's interesting.	B018		■			
		Let's see if we can go find a way out of here. I still don't know what space this is. Am I supposed to know what it is?	B019		■			
		Okay, we just jumped through a wall. I feel like I'm stepping, like I have to step this way to get through here.	B020			■		
		Now I don't think I remember being in this space before.	B021				■	
04:42	研究者	So, is it different, when you navigate this one and the design building?						
04:48	受測者戊	Yeah, because I don't know where to go. I'm just looking like...from what I see right now.	B022				■	
		This is new. This is a neat little office meeting space.	B023	■				
		Very nice, let's see if we can go out.	B024		■			
		There are more of these desks, they're great. I like the cubicle interiors[material?].	B025				■	
		It looks like there's a door like the last one but there's something in the corner. Whoa.	B026	■				
05:38	研究者	How do you feel?						
05:39	受測者戊	Interesting. I don't know where this is. You know, the easy way would probably just be to walk through walls until you find your way out. Then you can go back in,	B027			■		

		if you familiarize yourself with the space. Like, if you know what building you're in, then you can just decide, rather than being planted in the middle of it and trying to find your way out.	B028			■			
		Can I walk through this wall? It seems like some sort of image on the wall. Now we're sort of floating in the air along the wall. There's an opening over here it looks like.	B029		■	■			
		Maybe we could stand back a little bit and get a view of it. Looks like the images of an aerial shot of a town of some sort. Interesting. Okay, well I don't know where it's at.	B030			■	■		
		With, like, 3D CAD modeling, you always have to back out a minute and find out where you're at. That makes a difference, so maybe that's the logic in what I'm doing right now. If I could figure out what this place is. It's just a big box right now.	B031						■
		Alright, let's go back inside. Oh, I'm still outside of it. It's like I'm just hovering in space.	B032			■			
07:38	研究者	Hovering in space?							
07:40	受測者戊	Yeah, there's like...nothing underneath it. Now we have the great unknown outside.	B033	■					
		Let's see if we can go along this window line here. That must be the space that we started out in.	B034		■				
08:07	研究者	And you're trying to get back inside?							
08:09	受測者戊	Well no, more like trying to find out what it is, if I know what it is.	B035		■				
08:15	研究者	Oh, from the outside.							
08:17	受測者戊	Yeah, yeah. It definitely looks like it was modeled to be from the inside, like looking at it from the inside. Not so much from the outside. It looks like there's something sticking out over there-	B036				■		
08:32	研究者	Was it a different feeling, looking from the outside, than when you are inside?							
08:38	受測者戊	What's the difference, looking outside? I feel, maybe, like I'm in a little bit more control and I can see what I have to, you know, I can sort of see the whole thing, what I have to navigate. That's an interesting...overhang, or something.	B037			■			
08:59	研究者	And, do you think... which one is more real? Say, to give you a sense of presence, in being there.							
09:15	受測者戊	This one on the outside isn't nearly as real, it just looks unfinished. But the inside seemed a lot more detailed, and the textures were all modeled and such. And here you've got the beams and pipes all sticking out of the wall like that.	B038						■
		I'm going to go back inside; I bet we'll be back on axis again, right? So I'm kind of finding out where I'm at. And there we are, right back where we started. You want to...it seems like we've done most of this one. Let's go to the next one?	B039		■	■			
10:00	研究者	Okay.							

10:01	受測者戊	Is that okay?					
10:02	研究者	Okay.					
10:04		[教堂空間 Notre Dame]					
10:07	受測者戊	Right now, with the sound, I can tell that I'm in a real small space, you know. The sound over there is much smaller than it would be if I was in this cathedral. This is great.	C001		■	■	
10:18	研究者	The small space; you mean the real space?					
10:22	受測者戊	Yeah.					
10:24	研究者	The sound...what?					
10:27	受測者戊	Yeah, the sound of my voice in this space is much different than what it would be in the cathedral, you know?	C002				■
10:36	研究者	Okay, so that would be affected.					
10:38	受測者戊	Yeah. Okay, is this one like...okay, it's the second one. When I'm in cathedrals, I always like to go look up at the dome. So maybe that's why... but now I know I can maybe get up there, in places I don't usually get to go. The detail's very nice.	C003				■
11:11	研究者	It's a big space.					
11:12	受測者戊	Yeah. That's what I love. The columns, this is great.	C004	■			
		I love if you look back, the colonnades, I always love to look down the axis of the side aisle, and all of that.	C005				■
		I don't think I've ever been in a real gothic cathedral. Lots of loneliness...	C006			■	
		And this one has clouds outside, that's nice. And it moves relative to the walls, so you actually get a view of the outside. That's nice, it makes it seem a lot more real, because maybe you could get a view out there. You know, there might be something back there.	C007	■			
		It's so fast. It's like I'm running or something.	C008			■	
12:22	研究者	When you get faster, you feel you are running?					
12:25	受測者戊	Yeah, I don't know. But it's a lot smoother than if I was [actually] running. Plus I can just stand here, it's like I'm on a cart or something.	C009		■		
12:41	研究者	Because actually you didn't move.					
12:43	受測者戊	Yeah, you know, like I can just stand here and ride. It's more of a ride.	C010		■		
		Oh, I just fell down a little bit. Oh, yeah, let's stand back.	C011		■		
		It's nice; I can point backward and just walk away from the church, and keep looking back at it.	C012		■		
13:03	研究者	That's a good way.					
13:08	受測者戊	Excellent! Now I can tell that it's just an image on a flat surface. Like all those little statues aren't modeled. I don't know if that's just because I know CAD modeling, it's just... you can tell. The depth isn't there. The same with a lot of the surfaces are relatively flat, compared to what it would normally be in a actual cathedral, right?	C013			■	

		And the doorway kind of looks a little bit paper thin. Because I know that these walls are going to be a foot thick or so, regularly.	C014				■	
		Oh, but the changing view from here, oh that's beautiful. Let's go back to that view.	C015	■				
		I like how the angle... it's beautiful. The light coming in is really nice too.	C016				■	
		I wonder how to fly in the air. Shall we try flying, or not? Is this the one? There we go. We can check out the detail on there, see if it's actually a 2D surface.	C017			■		
		But I feel like I could just stand right next to it, as if I could just go up and... now we can go up and see how detailed everything else is, too.	C018			■		
		Okay, I wonder if that's really what it is, if it's really modeled like that, with the arch on the floor like that. Now this is great.	C019	■				
		The columns are really thin; it's still nice that you can penetrate this plane here, but you can tell that the columns are real thin like that.	C020		■		■	
		But this would be a view that you don't get to have when you go there and see it. I can see mostly the view outside the window. Oh, it's nice.	C021				■	
		I'm getting better at navigating.	C022			■		
15:40	研究者	Yeah, you did.						
15:43	受測者戊	Excellent. We'll go outside and fly through the buttressing. Oh, very cool. I feel like a bird. Okay, now you see, that's odd.	C023		■			
15:58	研究者	But would this reduce your [sense of] reality?						
16:04	受測者戊	What do you mean?						
16:06	研究者	I mean, actually you did something you won't really do in the real world. That would...make you feel that this space is more real, or less real? You can't tell that, right?						
16:25	受測者戊	Yeah. It's hard to convince yourself when you know that it's not there. But it's really crazy how much it affects the way that your body is staring at a space, because it really feels like I'm going to run into a wall. Like, my natural instincts, I brace myself here, which is very weird. Very strange...	C024				■	
		I'm not going through the wall like I would before. That's strange. I wonder how it's done then.	C025			■		
		Yeah, look at that. I feel like I could put my arm through the window. Looks great. It's messing with my [head]. It helps me to get used to it, to just go up and down.	C026			■		
		It's weird how you can see partially through parts of the walls.	C027					■
		I can't seem to get back inside again. As if it was one particular window that I was supposed to go through. How did I get out of here?	C028			■		
		There. Wow, it is nerve wracking like this. The space changes just like if you were there.	C029				■	

		You look crazy, floating out in the middle of nowhere!	C030			■	
18:13	研究者	Oh, you look at me and feel...crazy.					
18:17	受測者戊	Yeah, well, just because you're just floating out here!	C031			■	
		Let's see how fast we can go. See, that affects the falling [feeling]. You can definitely feel.	C032			■	
19:10	研究者	You should slow down. [laughter] Actually, I didn't feel it.					
19:15	受測者戊	[laughter] make you sick.					
19:17	研究者	No, I don't feel sick. Actually I didn't feel it.					
19:22	受測者戊	Really?					
19:23	研究者	Because I just watch into the screen.					
19:26	受測者戊	Oh yeah, because you don't have the goggles on. You don't need to handle so much then.					
19:37	研究者	So that's ok for me.					
19:43	受測者戊	Yeah, this is great for seeing parts of things that you wouldn't get to see. That's great view.	C033				■
		And I like the music.	C034	■			
		Let's go see, now that we can fly, let's go see what things look like on the outside. Just as if I was modeling it myself. This is an object.	C035			■	
20:23	研究者	What are you doing?					
10:25	受測者戊	I'm trying to get out. I guess. It's weird, flying around, up in all these, all the...structure, I can't think of the word.	C036			■	
		Great view of that...I suppose we could go back through the door. There we go. Okay. Once you get the hang of navigating. Look at the drawing..Oh, very nice.					
		You can turn it around just as if it was a model on a computer. Just like in modeling,	C037				■
21:36	研究者	do you feel you like a god					
21:39	受測者戊	Yeah, a little bit. Just like the modeling I guess.	C038				■
		I wonder what it would be like to see that for the first...whoa, okay...I need to slow down here.	C039			■	
		Whoa, now where are we. We're on the other side of the [sky] image!	C040			■	
21:58	研究者	I have no idea.					
22:04	受測者戊	It's not above us, is it? It's not letting us go back. I think I've navigated that pretty well. I'm comfortable with that, if you want to stop.	C041			■	
22:21	研究者	Okay.					
22:23		[想像空間 Firecave]					
22:43	受測者戊	Alright, are we in some sort of cave?	D001	■			
22:46	研究者	Yeah.					
22:48	受測者戊	Ooh, interesting. I'm scared to move. So now we're exploring a cave.	D002				■
		I think I have a tendency to push the controller like you're in a video game and you move the controller around when you're playing. It's weird.	D003			■	

23:24	研究者	So you compare this space with a video game space?				
23:28	受測者戊	Well yeah, just a little bit. Just with the space and how you move the controller around and everything.	D004		■	
		With the bones, it's like you're going through a ribcage of an animal. Maybe we're inside an animal or something.	D005	■		■
		And then this space seems to drop off... hold on. Okay, there are stairs, it looks like. Okay. [laughter]	D006	■		
23:57	研究者	How do you feel?				
23:59	受測者戊	It's weird! You know, I feel like dropping, it's very strange.	D007			■
24:08	研究者	But it's, uh, simulated action of-				
24:13	受測者戊	Oh wow, excellent space. Sorry, yeah. Wow, it's a real nice, tight space. You don't see <i>any</i> of this before you come down here. That's great.	D008			■
		The view is very sudden; I always like that effect when I'm presenting the architecture of spaces.	D009		■	
		I don't know what's over this edge, it's like a ritualistic type of space or something, you know, like a tribal space. Maybe, I don't know, it looks kind of...	D010		■	
		oh, and the bridge has no rails. I don't know if I'm very comfortable with that!	D011	■		
		You can...the goggles do that, don't they? The viewpoint changes which way you're looking. So I can kind of move over the edge.	D012			■
		Ooh, I see flames and fire down there... maybe we'll try and cross the bridge first. There's nothing attaching there, I'm standing on top of it! That's very weird.	D013	■		
		Wow. [laughter] I'm gonna fall off! I wonder if I could fall off. Have you tried falling? I wonder if I could fly back up again. Okay, I'll try it.	D014			■
[laughter] Oh man. It's real...it's like real. Okay, that was very strange. Let's do that again. That's so nice. This is great. This is very cool. Let's see if we can fly back up again.	D015				■	
26:44	研究者	How do you feel now? About this space?				
26:46	受測者戊	The rocks are great, those look real! Yeah, at least these do. This is kind of the first I've seen of that.	D016	■		
		I feel like maybe I could do it again, but I don't know. It's kind of weird, like... put yourself through that- to actually try and fall.	D017			■
		I don't remember which level we were at... before falling down.	D018			■
		Whoa, okay. It suddenly appeared, that was weird.	D019		■	
		The bridge looks a little bit different, or I've never been here before. The bridge broke over here, ooh! [laughter]	D020		■	
27:48	研究者	Oh this time I can feel it.				



27:49	受測者戊	You can feel it! It worked. This one's much better, it seems like, anyway. Like, moving through the space is much better.	D021			■		
		Whoa, now I feel like I'm on my knees. If I can go back to the, let's see. If I can go back to...there, that got me...back.	D022			■		
28:09	研究者	Go back to the ground?						
28:11	受測者戊	Yeah, back closer to the ground.	D023					
		What is this, I wonder? You can walk on it. Weird, it's like a big [], I don't know, like a sun dial or something	D024		■			
		. Let's see what this is. It's weird, it feels like it's coming through this space, but we're on top of it now*.	D025		■			
		And the bones, excellent. Yeah, this is my favorite space I think.	D026	■				
29:01	研究者	Really?						
29:02	受測者戊	Yeah.						
29:02	研究者	Why?						
29:03	受測者戊	I don't know, just because of the, I like the open space; I like that—	D027				■	
		oh, there's an opening up there. We definitely didn't come from there, did we? I don't know where we came from...that way? I'm just wondering where I'm at!	D028		■			
29:23	研究者	You're trying to find your way around?						
29:26	受測者戊	Yeah. Oh, and there's a big crack in the ground that I just noticed.	D029		■			
		It's hard not to want to move yourself, rather than moving the controller.	D030			■		
		I'll try not to get too close, it's kind of scary. I don't see anything down there.	D031				■	
		I think it's the depth, the distances are all very real.	D032				■	
		Oh, I didn't know if I was going to fall through there or not!* Okay, we came through this way. Let's see if we can head up there. Whoa, so we have to go over this edge. We didn't go through there, either.	D033		■			
		Okay. Wow. We could go down there, too. It is like a game, finding your way through this space.	D034			■		
		I think maybe that's what it is, it seems to be more...more space, more places to go, or something.	D035					■
		That messes with my head, dropping down like that! I almost want to go back to the fall.	D036			■		
31:01	研究者	Oh, you like that.						
31:05	受測者戊	Just because it like...whoa, whoa! Okay, I don't know where to go, they're popping up everywhere.	D037			■		
		[laughter] * Okay, yes, we don't have to go back to the fall because it's working right here. You're moving, when you bump up on the things, let's do that again.	D038			■		
		They're going a lot faster, I'm wondering what it's gonna do. [laughter] I have a trampoline at home, and that's...	D039			■		

		[laughter] okay, that's definitely making me a bit motion sick. Can't do that, can't do that. So, how do we get out of here? I don't want to ride on those things again, it really does work! It's, I feel like I'm doing that. It's making me sick!	D040						■
32:10	研究者	Actually, you just stand there.							
32:13	受測者戊	Okay. Like this?							
32:16	研究者	No, I mean, actually you just stand there, but you feel-							
32:19	受測者戊	Oh, yeah, yeah like I was moving like that. Okay, there we go. We'll get off of this fluctuating lava.	D041			■			
		Does the sound correspond to the space that you're in at all? Because that's interesting if it would do that, like wherever you move, there's these spooky noises.	D042	■					
		Now this is what's interesting, is the walkway that we're on here. Okay, slow it down.	D043			■			
		Yeah, I don't know how much more of this I can do, because it's starting to give me a little bit of a headache, I think. A little bit of motion sickness. Maybe it's because we're not in the, you know, the flying mode.	D044						■
		Wow, every now and then I catch a glimpse of the corners of the room and I don't know that's where it's actually at. You don't look for them, you know, you don't notice which way is like a square wall.	D045				■		
34:05	研究者	It's really extended.							
34:07	受測者戊	Yeah. I really like this space, this model. I wonder if there's an outside to it...it's a lot bigger.	D046				■		
34:25	研究者	So you like this one the best?							
34:27	受測者戊	Yeah, that fire's really cool, I wonder how they do that. We'll stay off of the moving lava...	D047		■				
		I was looking for the change in the color of the wall.	D048		■				
		Okay, we've got to stop flying because I'm going to get sick, I think! Yeah, in this one, I feel a lot more dizzy, sick, and disoriented when I fly. It's definitely different for some reason, I don't know why.	D049						■
		This space is very cool. Do we have time? I mean, [laughter]*	D050				■		
35:36	研究者	[laughter] You are safe, don't worry!							
35:41	受測者戊	Alright! [laughter]* I didn't mean to do that! Alright! [laughter] Did we fall again? I feel like...a power ranger or something.	D051			■			
		How are we for time? It's probably about time to go, yeah?	D052						■
36:15	研究者	Yeah.							
36:18	受測者戊	The roof is confusing...there it is.							
		Yeah, for some reason the fly mode in this model is a lot more...alright.	D053			■			
		I don't think we've gotten all of this one, but if we have to go, we can-							
		[結束]							

時間		口語資料	斷句	編碼					
				C1		C2	C3		C4
				Re	Ae	Vr	Rr	Mm	Br
		[學校空間 COD]							
05:35	受測者己	Let's see... I think the colors attract me. There's some there, there isn't very much in this one, actually. So I was drawn to the color. And...	A001		■				
06:13	研究者	Do you know what the building is?							
06:23	受測者己	Hmm, Oh actually, I think it's the college of design...oh, yeah. There's the elevators, and that's going down into the basement.	A002					■	
06:30	研究者	How did you recognize it?							
06:33	受測者己	Oh, the floors- the four floors up, and the browsing library.	A003	■					
06:52	研究者	So, you just recognized it's the design building.							
06:54	受測者己	Yeah...oh, okay- this is walking through the front entrance. [indiscernible] And there's the stairs...can we go up the stairs?	A004			■			
07:08	研究者	Yeah.							
		[indiscernible]							
07:26	受測者己	Oh... I'll just stay down here. There's the atrium, where they have all the things set up.	A005		■				
07:52	研究者	You just mentioned color and [artificial lighting] to give you a sense of this model?							
08:00	受測者己	Yeah, the shadow on the bottom of the floors,	A006	■					
		whoa, ok. Oops, slow down.	A007			■			
08:19	研究者	It's kind of hard to control it.							
08:23	受測者己	[indiscernible]Okay, we're outside. [laughter] I'm pressing the slow-down thing...okay, there we go.	A008			■			
08:34		Okay, now I've got to find the entrance again.							
		This looks pretty realistic out here.	A009				■		
		I guess I'm not sure what doorway that is, but I'll find out soon enough. Hmm-	A010			■			
09:08	研究者	Do you feel this model is real?							
09:10	受測者己	Yeah, it looks pretty real. The white, everything around it kind of doesn't make it seem real, but if you just look at the actual building, it seems real.	A011				■		
		Hmm, the controller's going through the wall!	A012			■			
09:31	研究者	You don't want to go through the wall?							
09:36	受測者己	No, because it feels weird! [laughter] Or can you? Maybe... Oh yeah, okay.	A013			■			
		It's, like right now it...feels real.	A014				■		
		I'm going to go up the stairs...kind of fast.	A015			■			
		The lighting's pretty good on this one, I can tell, and the pillars look round.	A016	■					
		Oh, you can see the corner here, on this one, of the space- this space.	A017						■
		This space looks pretty real.	A018				■		
11:09	研究者	What makes it feel real?							
11:12	受測者己	Umm, well especially the sunlight sort of looks like it's coming in-	A019		■				
11:16	研究者	The light?							
11:17	受測者己	-yeah, the top of these... [camera(the scene) falls to first floor]	A020	■					

		Oh, I just fell down! [laughter]	A021		■		
11:49	研究者	Why did you want to go through the wall and the table and chair?					
11:57	受測者己	[The tracker] was kind of too fast, and I just ran into it.	A022		■		
12:34	研究者	When this happens, does the space still feel real?					
12:39	受測者己	Yeah, I just feel like I can go anywhere. I just try to go....oh....	A023		■		
12:59	研究者	So it's, a little bit hard to control it.					
13:03	受測者己	Yeah, it's hard to take tight turns. If you look up, it looks really real.	A024		■		
13:15	研究者	If you look up? Because of the...					
13:17	受測者己	Because of...the size, I guess.	A025			■	
		Going up the stairs is a little bit, like, not very smooth, like I would walk up the stairs normally-smoother than it is.	A026				■
		I don't know what happened there, it just stopped or something. I don't know. Maybe I'm...hovering down. I'm confused...okay, there we go.	A027		■		
		That was weird. Okay. I think I was, like, in the wall or something.	A028		■		
14:27	研究者	Yes.					
14:44	受測者己	Looking down looks pretty realistic. Down there.	A028		■		
14:51	研究者	You mean looking down there?					
14:53	受測者己	Looking down into the atrium space.	A030	■			
		And, yeah I can still see... I still, I still feel like I'm in the building, but when I look over there, I can still see the corner of this room [C6].	A031				■
15:16	研究者	You are trying to look down, right?					
15:18	受測者己	Yeah.					
15:20	研究者	But you can tell the edge of it, right?					
15:23	受測者己	The age? What do you mean?					
15:25	研究者	The edge [of the room]					
15:26	受測者己	Oh, yeah.					
15:40	研究者	So, are there any other features that you've found?					
15:48	受測者己	This looks... Well, the, those stairwells look a little bit unproportioned, like, compare to how I'm used to seeing them, so those might be a little...maybe do a little work on them.	A032			■	
16:04	研究者	Are you doing some mapping of the real design building, and this virtual one? In your mind, are you?					
16:20	受測者己	Yeah, because I've been to all these places, so I kind of compare them to how I know what they look like, and I kind of go to places I usually go, like this is the third floor and this is the class that...I had a class on this floor last semester.	A033			■	
16:43	研究者	So, will this recall memory of your experience?					
16:49	受測者己	Yes, except for this area is actually offices and a narrow hallway, and it's not open like this.	A034			■	
16:58	研究者	So, you don't see anything here that you can just, imagine by yourself?					
17:07	受測者己	Yeah.					
17:10	研究者	Well, I think we'll have some imaginations to make it feel more real. I mean, if you've never been in the design building, what would you feel with this					

		simple model?							
17:35	受測者己	I think I would feel like I was in it. The walls lack texture, of course, but...for the most part I feel like I'm in it.	A035					■	
18:02	研究者	Once you are aware of this room [C6], could you mention that? Are you aware of this small room?							
18:22	受測者己	When I am aware of it? Yeah, like right now, because there is nothing here on this left wall, I feel like I am here[C6] because I can see the bottom. I just feel like falling... [laughter]	A036						■
18:43	研究者	How did that feel?					■		
18:45	受測者己	I felt it's interesting. I didn't want to do that...I don't know, like it hurts. I think this view looks probably the most realistic.	A037 A038						■
19:01	研究者	What? What is more realistic?							
19:03	受測者己	I think because there's a lot to look at, and because there's not so many blank walls.	A039	■					
19:13	研究者	Okay. You can stop anytime once you feel it's enough.							
19:19	受測者己	Okay, yeah, I think that's probably good. I was just in this office before I got here. [laughter]	A040					■	
		See, like right now I'm going through this, I can see the wall on the...	A041						■
		it feels like it's actually, it feels pretty real. Heh, interesting chairs, all over the ground... Okay, I think that's good.	A042					■	
20:46	研究者	Okay, you can just stop.							
		[辦公空間 AWL Office]							
20:48	受測者己	The middle plate kind of looks flat to me, but the walls have texture on them so that makes them more real. And, I don't know why it's not moving...	B001	■					
21:24	研究者	What are you looking at, or..?							
21:26	受測者己	Well, I'm trying to go forward, but it's not going forward. Okay.	B002					■	
		[technical problems]							
21:41	研究者	Does it work?							
21:43	受測者己	Yeah. It's very halting, though. It's not very smooth.	B003					■	
21:50	研究者	Does that affect your feeling about it?							
21:55	受測者己	Well it still feels real, it just doesn't feel like I'm... whoa. Whoa, that's kind of cool. This feels, like, really real. Even though I can see through this first table, but the chair feels really real.	B004 B005					■	
22:16	研究者	What makes you feel real?							
22:19	受測者己	It's about the same size as it normally would [be], and the colors of the chair. The TV screen, or the computer screen looks not real because it's not very detailed. But the materials all feel real and the space feels real. So, yeah, that's pretty cool.	B006 B007					■	■

		I'm kind of curious to see what's at the end of the hallway. I'm kind of curious to see what's in this cubicle because it's kind of mysterious, you can't really see into it.	B008		■				
		And the chair feels pretty real, but those desks over there, I can see where the wall of this room [C6] is, so it looks kind of like those things are behind a wall, and the papers on the desk don't really look like they're on there, but these trays or whatever coming out of the wall feel really real.	B009						■
		I can't really tell what this is, but it's a little bit too faint. Just if it was brighter, I could see it.	B010				■		
		The chair's about the same size, so it feels pretty real.	B011	■					
		So this space feels real, I feel like I'm really enclosed in it. I think that's because of the texture on the walls and the lighting and the shading. Pretty cool.	B012	■					
25:04	研究者	Can you do some comparison between this one and the former one?							
25:12	受測者己	Umm, there's just a lot more stuff going on in here, and kind of more things to look at, plus [indiscernible] this building, so it's really interesting.	B013	■					
		Things are more... in closer proximity to myself so it kind of makes them feel more real.	B014				■		
		And there's different shading and textures involved so that makes it more realistic.	B015	■					
		I feel like I'm in it because the ceiling's very low and I can see it without [tilting] up my head.	B016				■		
		Like, I don't really notice that we're in this room at all in this one.	B017						■
		I think what makes it look realistic is that there's such a wide range of tones, like there's a white pole and the walls are gray.	B018	■					
		I don't know if this is the end of the room, or what. That's kind of interesting.	B019		■				
		Well, all those buildings are repeating, so that doesn't look very real but, hmm. It's kind of a weird space (the outside space), I don't know.	B020				■		
		This looks a lot more realistic.	B021				■		
27:34	研究者	More than the design building?							
27:36	受測者己	Yes.							
27:45	研究者	But, the design building just feels real?							
27:50	受測者己	Yeah, but because I've been there before and I can recognize things, so I think previous knowledge helps.	B022					■	
		But this place is more detailed with more lighting, so it's more identifiable, easier to be identified.	B023	■					
		And the motion is halting, but...	B024				■		
28:39	研究者	You mean it's not so smooth?							

28:40	受測者己	No, it could be...[indiscernible]						
28:46	研究者	Would it reduce your feeling to this space?						
28:55	受測者己	Yeah, I think it would help if it was...						
28:59	研究者	It's a big problem to influence your sense?						
29:06	受測者己	Yeah, a little bit. I think...mostly just the texturing and shading on the walls helps a lot to make it look real.	B025	■				
29:26	研究者	So you mean when it's a static image...						
29:31	受測者己	...like if I just stand still? Yeah, it looks real, I feel like the wall's right there. I am kind of getting dizzy because it's so halting.	B026 B027	■				■
29:54	研究者	That makes you feel dizzy?						
29:56	受測者己	Yeah						
29:59	研究者	Did you ever recognize the edge of this room?						
30:05	受測者己	The age of it? Yeah, it feels kind of old...dirty kind of.						
30:13	研究者	I mean the edge of this C6 room.						
30:18	受測者己	Oh, only a little bit.						
30:23	研究者	Not because I mentioned it, but during the process, were you aware of that?						
30:34	受測者己	Of the corners? Sometimes, but not very often. Like right now, I can't tell. It feels like I am in the model.	B028			■		
		The controller's a little bit touchy, still.	B029		■			
		Yeah, it seems like especially when I'm close to things, it feels more realistic.	B030			■		
31:20	研究者	You mean, when you get closer?						
31:22	受測者己	[acknowledgement] Like, when I get close to those poles.	B031	■				
31:25	研究者	It will be more realistic?						
31:27	受測者己	[acknowledgement] And as far as, like, where my eye is drawn, I think the pipes on the ceiling kind of direct your eye to the end of the hallway, so you kind of follow the same lines,	B032	■				
		and there's pipes that go diagonally that kind of direct your eye there also,	B033	■				
		and the vertical posts kind of make you want to look up into the ceiling.	B034	■				
32:05	研究者	So, do you think those are helping you to form the sense of this space?						
32:13	受測者己	Hmm..., yes. Yeah, Those models are [indiscernible]	B035			■		
32:38	研究者	But you just mentioned the design building, that the size and the space made it feel real. And in this model, the detail and the things that are close to you make it feel real. They are different kinds of situations?						
33:04	受測者己	Yeah, I think because the design building lacked detail that it, the second best thing was the other stuff, so.	B036				■	
		Detail I think is the foremost important thing, especially like in here, these are pretty cool because-	B037			■		
33:27	研究者	-you can tell what they are, right?						



33:29	受測者己	-yeah. And these [chairs] are yellow, so they're a different color than the rest of the building, so it kind of draws your eye to that also. They're easily identifiable objects, so you can tell what they are.	B038	■				
		That table... like, with, I can see the corner of the room[C6] through the table. I don't know how you would solve that.	B039					■
		But that corner I can't really see as easily because there's this panel thing in the way that I'm really close to, so it feels like I'm really close to it.	B040					■
34:37	研究者	Again, if you feel enough, we can stop any time.						
34:41	受測者己	Okay, yeah I think I've pretty much explored it all.						
34:56	研究者	Okay, anything else?						
35:01	受測者己	I don't think so.						
35:05	研究者	Okay, then we'll stop.						
35:12		[教堂空間 Notre Dame]						
		[background music starts]						
35:37	受測者己	I want to see what's out there. [looking out window] [laughter] I can't see!	C001	■				
		So right now, I can tell, I can see the corner of the [C6] wall right there, it's a different color- this is more gray, and that's more brown, so that kind of makes it not as realistic.	C002					■
36:38	研究者	You just mentioned you have not been to this space before?						
36:45	受測者己	I have not.						
36:48	研究者	Do you feel that you are inside of it?						
36:50	受測者己	[acknowledgement] Yeah. I've been to somewhere similar, a couple of years ago. And it felt the same way. It feels similar with where I was a couple years ago.	C003				■	
37:13	研究者	Where have you been?						
37:16	受測者己	I went to a big cathedral in Quebec, Canada.	C004					
37:24	研究者	So you just [indiscernible]						
37:37	受測者己	The motion is better in this one. It's not as halting as it was before.	C005			■		
		I think, like, if I look up, that looks really realistic. Like, this[the columns] doesn't look very realistic. It looks kind of blurred.	C006		■			
		But if I look up, it looks very realistic. Especially because of the pillars, and the realistic shading.	C007				■	
		Is this the doorway we came in?	C008			■		
		I like the detail at the top of the columns, it's pretty cool.	C009	■				
		And you can tell where the light source is coming from.	C010	■				
39:36	研究者	Will this music help you to sense this space?						
39:39	受測者己	Yeah it does. When I think of music in a place like this, I think it would echo more, though. I don't know. It's just a small detail, but whenever I think of these places I think it would echo.	C011		■			
		The archways, I feel like I'm walking under an archway too, which is pretty cool. Let's see, okay.	C012			■		
		I guess I can't go through there.	C013				■	

		I like looking up, because it makes me feel, like, so small, and it's a really good sense of space.	C014				■		
		I like looking up because there's a lot of detail on the ceiling.	C015	■					
		I guess the things that most attract me are the detail and the colors.	C016		■				
		If there's something really bright in here, I would be attracted to it almost.	C017		■				
41:58	研究者	What's the difference between this kind of realistic detail and the last one?							
42:08	受測者己	Yeah, there was more smaller detail, like the chairs and desks, and or so, and things are on a much grander scale in this one.	C018	■					
		But, like the bricks and the materials look very realistic, and the shading, and where the light's going.	C019	■					
42:34	研究者	So this kind of detail is about the material, and the other is about objects.							
42:42	受測者己	Yeah, but that's partly because there are no objects in here. If there were chairs or benches or something, that might be good.	C020				■		
		Hmm, I don't get it. It's kind of screwing me up now. Okay, there we go.	C021			■			
		Do you know if you can go outside of this one? Or is it...	C022			■			
43:41	研究者	You can try.							
43:44	受測者己	Just go through a wall? [laughter]							
43:47	研究者	I don't think so. I think we can find a door or something...			■				
44:22	受測者己	I think this is the door we came in.	C023		■				
		Hmm. I can see outside, but I can't get out. Okay, I don't know. [indiscernible] Too bad there's no way to get upstairs.	C024			■			
46:03	研究者	Did you ever try the fly function?							
47:03	受測者己	Hmm, I don't know. It doesn't work. Oh, oh, okay. This is cool. [laughter] A little crazy.[the flying]	C025			■			
47:50	研究者	How did you feel about it?							
47:53	受測者己	Hmm...All of it's pretty cool, it's like exploring part of it.	C026			■			
		I feel like I'm pretty low to the ground. I don't know, it won't let me turn.	C027			■			
48:24	研究者	[hard to hear] Do you feel real in this space?							
48:28	受測者己	I feel it's pretty realistic.	C028				■		
		That wall again, is... I don't know.	C029			■			
		But, yeah. I guess I keep wanting to look out the windows for some reason.	C030		■				
		I think I'm getting a little queasy! [laughter] How do you get back to the normal settings?	C031			■			
49:47	研究者	This one, and then we are on the ground. [indiscernible]							
50:12	受測者己	Uh, I think I've pretty much explored everything.	C032				■		
		Well, I guess I'll go this way.	C033		■				
		I can tell where the ceiling is when I look at that.	C034		■				

		Now I'm really confused. Okay, there we go.	C035				■	
		But that doesn't look as 3D when I get close to it. From far away it looks good though. This is...interesting. Okay.	C036				■	
51:43		[想像空間 Firecave]						
54:16	受測者己	Okay, that's a little bit easier to understand. Yeah.	D001		■			
		The ground doesn't really feel that realistic.	D002		■			
54:35	研究者	It doesn't?						
54:37	受測者己	It does not. It just feels flat, like, you'd think it would be kind of bumpy and stuff, but...	D003				■	
54:53	研究者	So, you mean it should be a little bit bumpy, not so flat...but it's flat; so it's unreal?						
55:02	受測者己	A little more 3D, yeah.						
55:06	研究者	But when you see it, will you think it's real?						
55:14	受測者己	Like, these parts, they look a little real. Yeah, because it...yeah. If you look at things far, like those rocks, they look pretty real. But then if you get close, the details kind of blur together.	D004	■				
55:37	研究者	So, compared to the cathedral? It's a difference?						
55:46	受測者己	Yeah. It's not as good. Like, the ceiling looks pretty good. All the little thing.	D005	■				
56:14	研究者	You just mentioned the other one...recalled your memory of the cathedral? How about this one?						
56:25	受測者己	Well, I've never been in a place like this, so this is a new experience. These things are kind of weird.	D006				■	
		I guess, like, I guess when the walls come into the floor, it's just like a straight line, it doesn't...yeah.	D007					■
57:01	研究者	So, do you mean there's a gap between what you see and what you feel?						
57:25	受測者己	Yeah, like, it kind of looks like it shouldn't be, like if you look down, but if you look straight across...	D008					■
57:32	研究者	That will reduce the reality.						
57:34	受測者己	Yeah. The music also outstanding...helps a lot on this one, I think. It seems kind of sinister I guess. Sinister. [indiscernible]	D009	■				
		It's okay, I guess. This might be a little bumpy.	D010			■		
58:16	研究者	This will make you feel more real?						
58:20	受測者己	Umm, a little bit. It could be a little bit smoother I think, it's too fast.	D011			■		
		This part looks really real, like, the flames, not so much, because they don't have too much detail to them, but, like, the surrounding walls look really real. Down there looks really real.	D012				■	
59:01	研究者	If you move, is it real for you?						
59:07	受測者己	Yeah, except I feel like I'm half-way in the ground, though. But now it's on the ground.	D013			■		
		Yeah, those walls look really real though. The walls look real, like where the light is placed and everything. Yeah, that looks real. Yeah, it looks	D014	■				

		3D.						
59:52	研究者	Can you, make a [comparison] with your past experience?						
01:00:02	受測者己	Can I identify with it, or what? Yeah, I can.	D015			■		
01:00:08	研究者	I mean, this is actually a virtual space, not a real space, so there's a difference between the cathedral and this one ..						
01:00:18	受測者己	Well, I can sort of imagine. It seems like this is like the ribcage of something, and I seem really small.	D016				■	
01:00:34	研究者	So do you still feel like you're inside a space?						
01:00:37	受測者己	Yeah. I kind of feel like I'm in something, like a whale or something.	D017			■		
01:00:58	研究者	How do you feel about the sound?						
01:01:03	受測者己	I think it adds to the emotional part of it. Kind of makes everything seem a little bit spookier.	D018				■	
01:01:22	研究者	There are still lots of other spaces.						
01:01:27	受測者己	Do you know where they are?	D019	■				
		Yeah, those rocks, like, the ground still doesn't feel very real for me. The rocks over there do. They get blurry.	D020					■
		Whoa, oh that's not cool.	D021			■		
01:02:32	研究者	You won't want to do it again.						
01:02:34	受測者己	No. How to go up?	D022			■		
01:02:39	研究者	Just like flying.....						
01:02:41	受測者己	Oh, this one? These are pretty blurry right now, but if I look over there, they get realistic. But yeah, when you get close to them, they just look flat. I can see where the ceiling is in this room.	D023	■				
01:03:47	研究者	Where are you trying to go now?						
01:03:49	受測者己	Back to the... let's see, where am I.? Back to where I fell off. Yeah, because it all kind of looks the same.	D024			■		
		I don't know about the white cracks, those don't really...like, the, umm, the colorful parts look real but the white doesn't. These walls still look pretty blurry.	D025	■				
		I don't know where to find the way back. This is a different one, isn't it? I think so.	D026			■		
01:05:13	研究者	Does this one provide more experiences to you? And how do you feel about it?						
01:05:26	受測者己	I think, umm, that's quite a drop off...[the falling] I don't know, I'm kind of not feeling very good. But I think that's just because I've been in here for a while, it's probably motion sickness.	D027					■
		The floor is still really blurry.	D028			■		
01:06:14	研究者	So actually, the features in this model are almost the same?						

01:06: 20	受測者己	Umm, yeah, there's more color contrast... I can feel the, like this is a little bit better because the floor's different.	D029	■				
		I think I'm going to have to stop, though... I didn't realize how close to the wall I got, either. I think I should stop.	D030					■
01:07: 36		[結束]						