

InsideOUT: DIRECTOR'S NOTES

Terri A. Wright

Parsons Design & Technology MFA



Author Note

Project Made Possible in Part By: Parsons Material Aid Fund

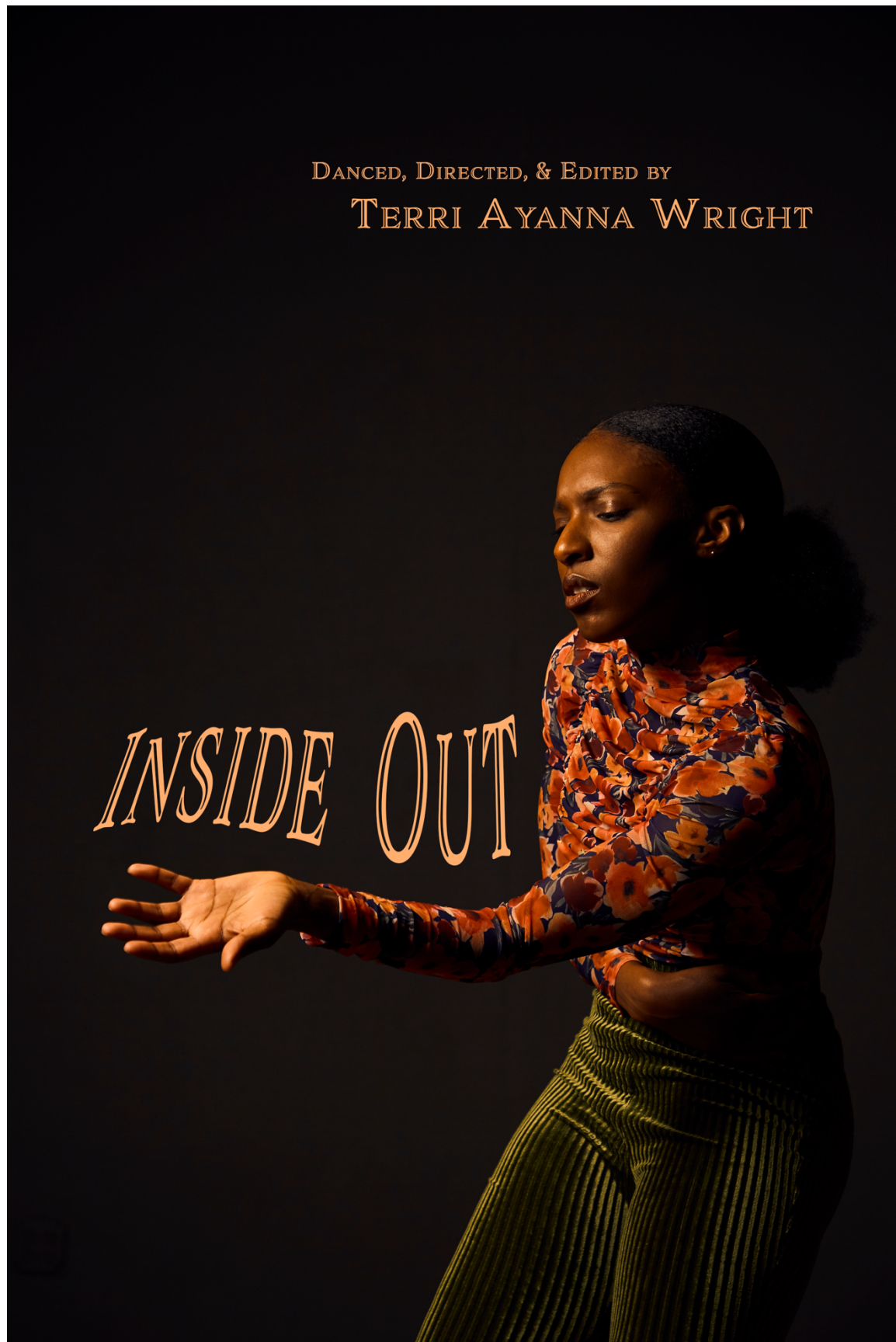


Table of Contents

Why Am I Doing This?.....	4
InsideOUT: DIRECTOR'S NOTES	5
Fairytale Based in Ancient Philosophical Truth?	5
A Personal Quest to Mathematize Dance.....	7
The IChing & Binary Code.....	8
Motion Capture as a Visualization Tool	15
Production and Compositing Notes.....	16
SCENE BREAKDOWN	18
SHOTLIST	23
REFERENCES	24
APPENDIX	27
Moodboards.....	27
Character Photo Gallery	29

Why Am I Doing This?

I desire to see more people that look like me, black & female-identifying, within speculative fiction-based narratives of cinema. Representation matters. The idea that a black person can exist in a magical land, not as a troll or a slave or a villain, is the antagonist to imperialistic thought. That black person is inherently no longer inferior. Being able to pull off a magical, fantastical, speculative narrative with black leads is an element of privilege I wish to tap into. Seeing is believing. Seeing is raising empathy. Seeing is enhancing understanding.

I want to see more people that look like me in whimsical stories of the supernatural, other dimensions, future parallel universes, based in not just Western (primarily Greek) mythology, but also Afro-asiatic. What would *Harry Potter* or *Lord of the Rings* or *The Matrix* look like from an Afrocentric lens? There is a reason why *Black Panther* broke so many of the box office records. I believe the world is ready to see more minority groups represented in mainstream cinema. And not just in casting, but also in the implications of the narrative itself. Even in my practice as a professional dancer, my compass for moving is completely dependent upon how much the dance's choreographic intensions are true to my own heritage. Alvin Ailey's masterpiece, *Revelations*, will forever be my favorite ballet to perform. Why? Because I get to share his blood memories growing up in the rural South, memories so akin to my own family. Even though *Revelations* is a ballet about the southern black experience, Mr. Ailey found a way to package the work such that it is relatable, and thus impactful to ALL people of ALL ages, races, and spaces. I vow to do the same in my artistic practice. Thus, *InsideOUT* is a film based around my own teachings and storytelling language: the spirit and dance. Below are my notes as director....

InsideOUT: DIRECTOR'S NOTES

InsideOUT is a speculative fiction short dance film. It tells the story of a distressed woman finding solace after encountering her anthropomorphized subconscious. As the dancer, choreographer, director, & editor, Terri aims to combine live action with visual effects to share a self-portrait in motion - the film reflecting her southern black heritage and spirituality rooted in Afroasiatic traditions. This work is also the culmination of a production pipeline that imposes 3D camera tracking on motion-captured rigs as a tool for visualizing the spatial relationship between the dancers and the camera. Here in my director's notes, you will find the philosophical background of the story I am telling, my exploration into how to formulate dance-making, and the major components of my production process (i.e. storyboard, script, shot list, and compositing workflow).

Fairytales Based in Ancient Philosophical Truth?

What if fairy god mothers were real? What if they came to us in hard times, and helped us find solutions to whatever hardship we are going through? Psychiatrist, Carl Jung, would tell us that “in dreams and fairy tales the grandmother or ancestress often represents the unconscious, because the latter in a man contains the feminine component of the psyche” (Jung XXVII). Perhaps the ‘fairy god mother’ is an embodiment of our inner souls, looking to catch the attention of our conscious selves, to heal itself, from the inside out. So when the Fairy God Mother reveals herself to Cinderella,



or when Pocahontas retreats into the forest to speak to Grandmother Willow, these heroines are actually going deeper inside of themselves to find solutions and gain the clarity they need to tackle whatever obstacle they may be facing. The same can be said in real life, at least in my life. I am trying to illustrate this reality in my film, as I dance both the role of the ancestor or fairy god mother, and the woman who consults her.

Ancestral reverence is not a new concept, in that it is a common theme in both Eastern and African spiritual traditions. As I consult the IChing¹ as an oracle in my daily religious practice today, I am reminded that it is a ritual of constant inward reflection to find answers. The idea that God exists outside of oneself is of Western origin². It strips away any accountability or expectation for humans to become God-like while on earth. Narratives in mainstream entertainment that lift up this kind of thinking, rather than demonizing it, are few and far in between.

The ancient Chinese were not the only subgroup to find an appreciation for the 'observed moment.' The Sikidy of the Middle East, and the Ifa of West Africa, both geomantic in their origins, are also examples of ancient divination systems that call for a casting of lots in a series of 4 (whether it be drawing lines in sand or throwing cowrie shells) to make inferences about the predisposed world (Binsbergen). Within the Ifa system, there are as many as 256 variations of

¹ The IChing, or The Book of Changes, presents metaphors around elements of nature and the family unit, revealing lessons on morality and the human condition. It was (and still is) meant to be used as an oracle, developed over thousands of years (on record as early as 3300 BC) within ancient Chinese cultural practices, however the familiar form known today largely credited to the broad distribution of Confucius philosophical teachings near 500 BC. The Book "represents one long admonition to careful scrutiny of one's own character, attitude, and motives" (Jung, XXXIV).

² Through Richard Wilhelm's own personal study of its philosophy, he was able to present the IChing's 'magic' to the Western world, publishing the Mandarin to German translation in 1951. In the foreword, Swiss Psychiatrist, Carl Gustav Jung (Zurich, 1949), provides a digestible approach for the West (societies dominated by a eurocentric point of view) to be able to grasp this Eastern doctrine. He calls it a casting off of certain "prejudices of the Western mind" (XV) as we [westerners] tend to "unnecessarily compartmentalize..." (XXII).

these tetragrams recognized as potential outcomes. Furthermore, the 8 trigrams of the IChing “have names that do not occur in any other connection to the Chinese language and because of this have been thought to be of foreign origin...” (Jung, LVII). I would argue that this form of speaking with the universe, with our inner selves, is as old as the human race itself, not so much inclined to one sub-group over another. Perhaps these parallel developments point to the idea that notions of geomancy were created before ethnic subdivisions within the human species formed. The original man coming from Africa, this way of speaking is inherently Afrocentric.

In this fairy tale of a film, I play both the role of the ancestor and the woman, using cloning techniques and movie magic to have the two characters exist in the same place. The other point I am trying to illustrate is that the ancestral characters is an aspect of the woman herself.

Not separate. By the end of the film, the characters become one, revealing that the entire dance was a ritual of internal reflection, rather than an external resolve. The woman finds the answer to



her turbulent moment, by reaching deep inside of herself. In my opinion, this is the main difference between Eastern and Western religions: one believes God is a separate entity from ourselves, while the other believes God lives within all of us. In retrospect, they are the same thing, but I digress.

A Personal Quest to Mathematize Dance

As preparation for creating this film, I went on a quest to bring more structure to my creative practice. I wanted the success of my projects to not come from luck, but from the

formality of following a step-by-step process. I would ask myself, ‘how do I do this with an organic art form like dance?’”

The IChing & Binary Code

Following in the footsteps of composer John Cage³, I wanted the IChing to inform my work not only artistically, but also methodically. I thought maybe I could bring form to my dance making practice by finding some overlooked formula that connects the IChing's hexagram⁴ to binary sequencing of the modern computer. After delving into a few numerology conspiracies, and John Cage's approach, I realized this magical formula doesn't actually exist. Any application (including John Cage's) of the IChing's methodology is a complete disregard for the philosophy that took thousands of years to cultivate.

³ In 1951, the renowned composer John Cage debuted *Music of Changes*, a body of work inspired by the IChing. He assigned values of sound, duration, and dynamics to the different 64 hexagrams, and then made decisions within these attributes based on the answer he received from the IChing. This way of thinking, leaving his musical genius totally up to chance, would become the basis for his computational method for the rest of his life in order to free himself from his own preferences. He believed in the words of author Ananda K. Coomaraswamy, that it was the “responsibility of the artist is to imitate nature in [their] manner of operation,” and he felt embracing randomness did just that, as he no longer had to make a choice, but rather just propose a question (Cage). I would imagine that Cage gravitated towards the following sentiments from the IChing in his practice: “every process [in nature] is partially or totally interfered with by chance, so much so that under natural circumstances, a course of events absolutely conforming to specific laws is almost an exception” (Jung XXII).

⁴ The ancient Chinese were not the only peoples to develop binary-based oracle system. The Sikidy of the Middle East, and the Ifa of West Africa, both geomantic in their origins, are also examples of ancient divination systems that call for a casting of lots in a series of 4 (whether it be drawing lines in sand or throwing cowrie shells) to make inferences about the predisposed world (Binsbergen). The 4 castings are recorded in a pattern of dots and/or broken or unbroken lines that form a tetragram (see Figure 4). Within the Ifa system, there are as many as 256 variations of these tetragrams recognized as potential outcomes. Similarly, the IChing lot-casting is based in 6 (a series of 6 castings to complete one outcome), with 64 possible outcomes. In other words the Sikidy system is 2^4 , the Ifa system is 2^8 , and the IChing oracle system is 2^6 . The basic bit sequence of today's computers has 8 bits, or 2^8 . But when information is transferred via the internet, it must be encoded to a 6-bit sequence, or 2^6 (Shivam).

Let's take a step back. How exactly does the IChing correspond with binary counting? When a question is proposed, when the oracle is consulted, lots are casted 6 times. Within each of the 6 times, 3 coins are casted. Each coin has the value of either a 2 or a 3. So the sum of each cast can range from 6 to 9 (see Figure 1). So by

the end, you have a series of 6 numbers, ranging in value from 6 to 9. The values are recorded vertically, the numbers stacking on top of each other. Each number (6 through 9) corresponds to a broken or unbroken line (changing or unchanging line). 6 and 9 are changing lines, 7 and 8 are

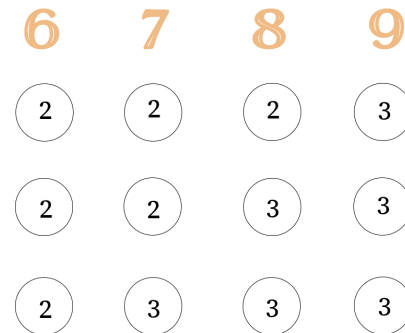


FIGURE 1

unchanging. 6 is the yin changing line, 9 is the yang changing line. 7 is the unchanging yin line, 8 is the unchanging yang line (See Figure 2). Yin and Yang represent the opposing energies of the universe. They complete and complement each other. Each hexagram (like the example in Figure 2) has its own set of teachings, presented

AN EXAMPLE HEXAGRAM

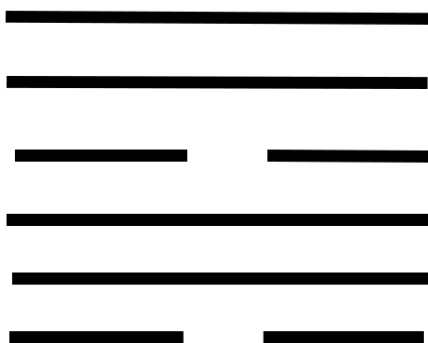
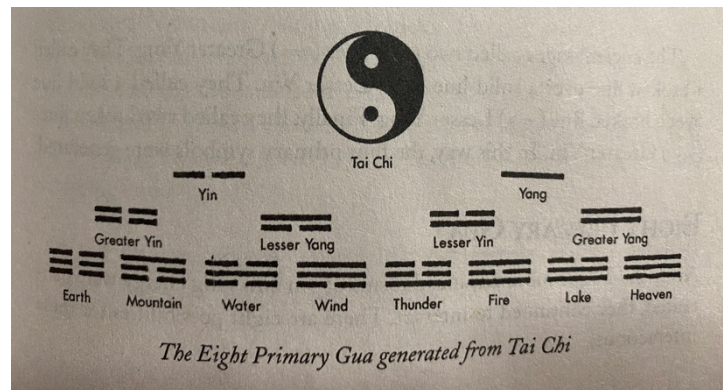


FIGURE 2

metaphorically in a combination of powerful imagery and poetry within the IChing's pages. In summary, you ask a question, you cast your lots, and then you study the section pertaining to the hexagram given. So how can this macrocosmic way of organizing the universe be applied to organizing on a smaller scale? Say, a dance? A film? How and or what can this kind of structuring be compared to today?

As mentioned, there are 6 lines to a hexagram (or two *gua* stacked on top of each other; note picture below), and 2 different options for each line to be (broken or unbroken, yin or yang).



It's similar to how each bit within binary

code has 2 possible values: 0 or 1. The more bits in a sequence, the more possible arrangements can accrue of 0's and 1's. A 6-bit sequence has 64 possible iterations, notated as 2^6 . Similarly, the IChing oracle system acknowledges 64 possible answers. 64 hexagrams. 64 arrangements of yin and yang lines (See Figure 4). Are there any systems or software of today that already utilize 6-bit sequencing? I want to find

connections between them and this ancient

way, to not only further my own

understanding, but also possibly find a

new method of application. What if

today's methodologies could be much

more informed by the past? I am to

develop technical artistic practice

informed by the IChing's binary counting

system.

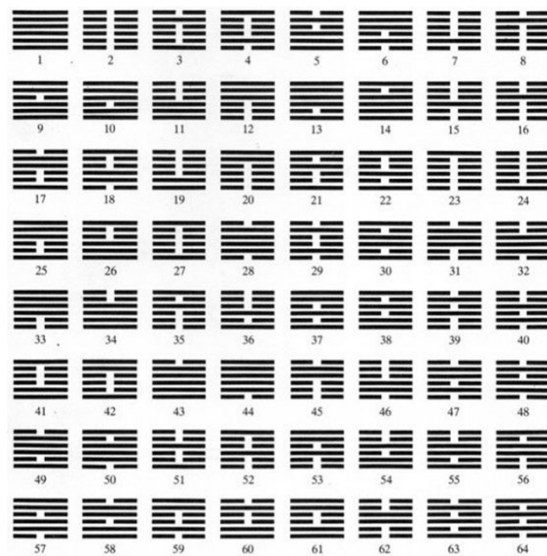


FIGURE 4

The Base64 encoding process is used to compress messages so they can be properly transferred over the internet. The computer interprets words as a sequence of characters informed by unicode - a standard that “provides a unique number for every character, no matter

what platform, device, application or language. It has been adopted by all modern software providers and now allows data to be transported through many different platforms, devices and applications without corruption” (unicode.org). Thus, Base64 encoding allows for the translation of 8-bit sequencing (aka base of 256) to 6-bit (aka base of 64), while still using ASCII (American Standard Code for Information Interchange) to map each byte to a symbol. In Figure 5, note the

THE ICHING'S LOOKUP TABLE COMPARED TO THE BASE64 INDEX TABLE

TRIGRAMS	Ch'ien	Chên	K'an	Kên	K'un	Sun	Li	Tui
UPPER ►	☰	☱	☲	☳	☴	☵	☶	☷
LOWER ▼	☰	☱	☲	☳	☴	☵	☶	☷
Ch'ien ☰	1	34	5	26	11	9	14	43
Chên ☱	25	51	3	27	24	42	21	17
K'an ☲	6	40	29	4	7	59	64	47
Kên ☳	33	62	39	52	15	53	56	31
K'un ☴	12	16	8	23	2	20	35	45
Sun ☵	44	32	48	18	46	57	50	28
Li ☶	13	55	63	22	36	37	30	49
Tui ☷	10	54	60	41	19	61	38	58

BASE64 INDEX TABLE			
0 A	16 Q	32 g	48 w
1 B	17 R	33 h	49 x
2 C	18 S	34 i	50 y
3 D	19 T	35 j	51 z
4 E	20 U	36 k	52 0
5 F	21 V	37 l	53 1
6 G	22 W	38 m	54 2
7 H	23 X	39 n	55 3
8 I	24 Y	40 o	56 4
9 J	25 Z	41 p	57 5
10 K	26 a	42 q	58 6
11 L	27 b	43 r	59 7
12 M	28 c	44 s	60 8
13 N	29 d	45 t	61 9
14 O	30 e	46 u	62 +
15 P	31 f	47 v	63 /

FIGURE 5

similarity between the IChing's look-up table (located in the back of Richard Wilhelm's translation) and the Base64 index table. Each letter/digit/symbol is assigned a number between 0 and 63, in the same way that each hexagram (upper + lower trigram) is assigned a number between 1 and 64. Following the footsteps of the work led by Ron Eglash in *African Fractals*⁵,

⁵ Ron finds a clear through line from the development of Bamana Sand Divination, an Afro-asiatic based oracle, to the developments of Leibniz, to the binary base of the modern-day computer. "Shape and number are not only the universal rules of measurement and logic; they are also cultural tools that can be used for expressing particular social ideas and linking different areas of life." (Eglash, 4)

my goal is to continue finding connections between the ancient and the new, to dismantle imperialistic thought embedded in today's technology.

I was surprised to find how the process of modern-day cameras translating an image into a format readable by a computer involves binary sequencing within the camera itself⁶. To digitize an image, literally means to convert measurements of light in voltage (as captured by the camera's lens and recorded by the

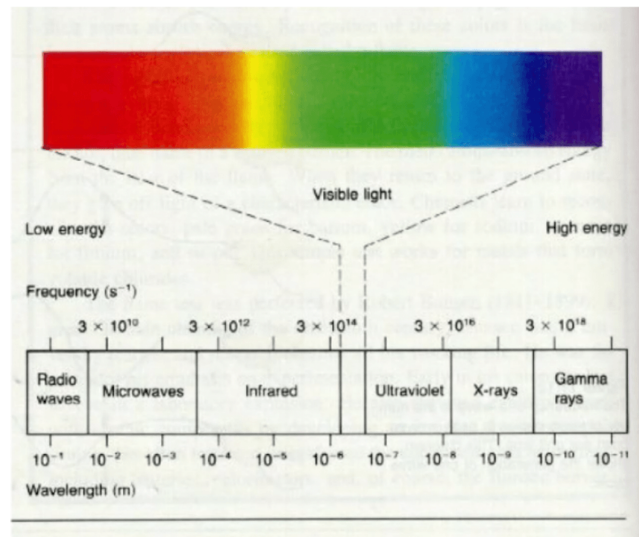


FIGURE 6

sensor) into 0's and 1's. Knowing that the colors we see are just different variations of wavelengths of electromagnetic radiation (see Figure 6), we can confer that each wavelength variation (measured in volts) is being assigned a bit sequence. And each bit sequence is assigned to one pixel⁷. The longer the sequence, the more variations of 0's and 1's allotted, the more subtleties in light and color can be accounted for per pixel. A camera with 10-bits per channel capability is understood to capture video at an extremely high resolution. Let's break this down

⁶ "For digital video, some form of an analog-to-digital converter (ADC) is part of the camera and outputs the digital signal. In its simplest form, an ADC reads the variations in voltage of a continuous analog signal and translates that into binary output. It does this by sampling the analog signal at regular time intervals, which is the sampling rate. The sampling rate or sampling frequency defines the number of samples per second taken from a continuous signal. It is normally measured in hertz (Hz), which is frequency or cycles-per-second (Blain Brown, pg 148)

⁷ "Digital video defines each pixels brightness and color as a computer word comprised of bits (zeros and ones). In the simplest example, a pure black-and-white image (with no gray at all) would only need a zero (black) or a one (white) to represent every pixel in the image. In a color image, every pixel is formed through a combination of the three primary colors: red, green, and blue. Each primary color is often referred to as a color channel. The bit depth for each primary color is termed the bits per channel." (Blain Brown, pg 173)

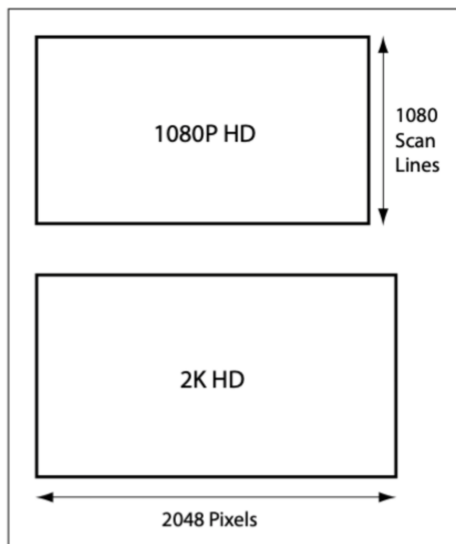


FIGURE 7

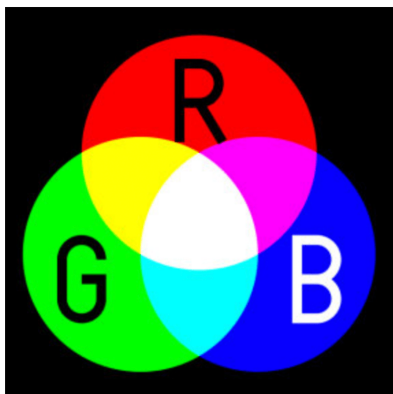


FIGURE 8

further: each pixel of an image captured with 10-bit sequencing would have 1,024 different possible variations of brightness, because the binary notation 2^{10} is equivalent to 1,024. For an image with 2K resolution, that's 1080 rows of 2,048 pixels in each row (see Figure 7). For an image with 4K resolution and 16:9 aspect ratio, that's 2034 rows of 4,096 pixels in each row. That's over 8 million pixels in one image! Potentially over 8 million different bit sequences per frame! AND, for a colored 4K image at 16:9 aspect ratio, where all 3 additive primary colors⁸ (red, green, and blue illustrated in Figure 8) are represented within each pixel, the binary notation would then jump to $2^{10 \times 3}$, or over one billion different color possibilities! PER PIXEL! This is where the compression process becomes so important to managing the size of high-

resolution files. Without compression (and varying sampling rates between luminance and color), the file size of a 4K, 10bit, 16:9 camera recording at 24 frames per second, at a sampling rate of 13.5 MHz, would have to be humungous, requiring lots of bandwidth and processing power.

Insert Lossy and Lossless Compression⁹, ChromaSampling, and Codecs. Lossless compression

⁹ "A lossless compression system is one that is capable of reducing the size of digital data in a way that allows the original data to be completely restored, byte for byte. This is done by removing redundant information. For example, if an area of the image is all pure white, where normally the digital code would be a long list of zeros, the compression might write a code that means "there is a row of 5000 zeros," which will use only a few bits of data instead of thousands. Much higher compression ratios (lower data rates) can be achieved with lossy compression.

systems, like the MPEG 4 Part 10 (i.e. H.264) codec (compression/decompression software), are great to shoot in because it uses code to compress information from the sensor, without losing ANY of that information...but a nightmare to edit because the high amount of detail tends to overwhelm today's editing software, resulting in computer overheating, and delays in runtime. Lossy compression systems however, like the Apple ProRes codec, tend to run much smoother in post-production only because not all the information from the image is contained. Chroma Subsampling for example, is a form of lossy compression that takes advantage of the fact that the human eye is not as sensitive to color resolution as it is to luminance. As a result, color is sampled at a lower frequency than luminance.¹⁰ This is why I believe the best production pipeline is to shoot in H.264, edit on Apple ProRes proxies, and then relink the original H.264 footage before exporting.

With all of this having been realized, I am curious to learn if the H.264 compression of video files is at all similar to the Base64 encoding process of character strings. Do 4K, 10-bit color channel sequences get translated to 6-bit, in order to make the file smaller? Does the process even compare at all? Can the IChing's 6-line structure - with each line representing a number from 6 to 9, as the sum of 3 variants of 2 and/or 3 - be applied to the H.264 codec, making it easier to edit in post-production? I plan to further this exploration with my future projects and research.

With lossy compression, information is discarded to create a simpler signal. These methods take into account the limits of human perception: they try to lose only information that won't be missed by the eye." (Blain Brown)

¹⁰ "[Chroma Subsampling] is based on the idea that a real RGB signal (such as you might get from gathering independent signals from the red, green, and blue sensors in a three-chip camera), contains redundant information: in essence, each of the channels contains a duplicate black-and-white image." A camera that incorporates chroma subsampling may have twice as many samples of luminance as for the chrominance. This would be expressed as 4:2:2, [the ratio of a set of frequencies], where the first digit is the luminance channel and the next two digits are the chroma channels (Y, R-Y, B-Y). The 4 represents 13.5 MHz, the sampling frequency of the Y channel, and the twos each 6.75 MHz for both the R-Y, B-Y channels." (Blain Brown)

Motion Capture as a Visualization Tool

What would it look like to make dance inside of a 3D animation software? How do they do it in the box office movies: combining computer generated characters with live action inside of a moving shot? Renowned choreographer and filmmaker, Merce Cunningham, did something similar, developing a process where he used a computer software, *LifeForms*, as a choreographic tool¹¹. I agree with Cunningham, in that composing dances on the computer “suggests possibilities of time and space I’ve never thought of before” (Anne Pierce quoting Cunningham 14-15). This will also allow me to resolve the question: How can I simultaneously perform the work and direct the camera?

I used motion capture to help me visualize the choreography of each character in space, as well as their relationship with the camera. Using camera tracking in Blender, I played with potential angles and movements of the camera, against where the choreography took the characters in space (see Figure 9). As someone who struggles with the two-dimensionality of storyboarding - specifically, not being able to sufficiently translate the images in my head to a drawing on paper - this step was EXTREMELY necessary. I developed my own personal 3D storyboard

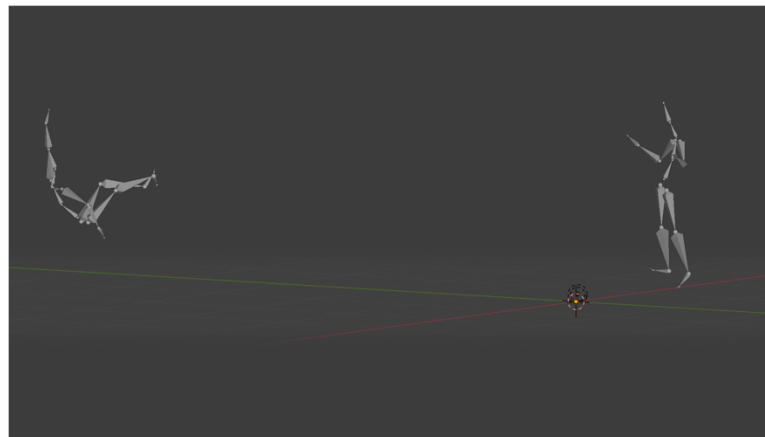


FIGURE 9

¹¹ Developed in the 1980s on a SGI Personal Iris Computer donated to Cunningham by Silicon Graphics Inc. Libraries of movement paths and sequences came with the software and acted as “visual idea generator” (Schiphorst 31) for Cunningham. He was the “first choreographer to explore the use of video as an artistic medium, for viewing movement separate from video’s use as a documentary tool (Schiphorst 48). He “embraces technological possibilities as an extension of his exploration of movement as a process, rather than as a fixed goal” (Schiphorst 45).

of sorts, that more readily translated how I relate to form as a dancer. I feel this was the most helpful step in my process, especially since I dance both characters. Otherwise, the dance would not exist until I finished compositing. Implementing this step allowed me to adequately plan out the green screen shots as well. In each shot where both characters are in frame, I had to plan to film it at least twice: one time as the ancestor and another as the woman. I had to make sure the character's eye contact and body angles matched each other at any given point in time.

Production and Compositing Notes

One error I made in planning out my greenscreen shots, I chose to have the characters moving the least amount within a given moment be in front of the screen, which was usually the background character. The subject that is most downstage should be in front of the greenscreen! Had I done this, it would have saved me so much time during post-production. Below is my compositing workflow step by step:

1. Shoot film with Red Camera in 4K (3840x2160), 4:2:2, 10-bit depth, log, Apple ProRes
2. Make proxies of all footage using Adobe Media Encoder (note: file names MUST stay the same)
3. Set up folder in Adobe Premiere (based on timestamps in music) and place footage accordingly based on where they fall in the dance
4. Beginning with wide shots of the woman, start to fill in the sequence using 3-mark editing technique (In-Out-In)
5. Overlay wideshots with counterpart as the ancestor
6. Apply a rough mask to see the two characters in the same frame
7. Refine the mask using rotobrush tool in After Effects (note: had I used green screen properly, this step would not have been necessary), and key out any green
8. Apply Rotobrush tool the entire cut, even in the moments when characters are not overlapping, in order to avoid color bumping within the same cut

9. Incorporate handheld camera moments, as they appear in order of the dance. Stabilize the footage (videographer recommends no more than 3%)
10. Apply camera movement to composited still shots using keyframes, scaling, and positioning
11. Create title card and credits in After Effects
12. Apply visual effects (i.e. moving light orb, glowing palms, ancestor's aged face) in After Effects
 - a. Note: aged face pipeline – create png sequence, bring one notable png into FaceApp, apply Old Woman filter and export, use Ebsynth to reinform the png sequence with the aged face as the new reference, overlay png sequence with original footage. Use keyframes and opacity to match up facings.
 - b. Note: moving light orb pipeline – using keyframes, position and scaling, to move png image of light orb with transparent background from the ancestors hand to the woman's hand.
 - c. Note: glowing palms – create filled in mask around hand in After Effects , make it glow by playing with blurriness and luminance in Davinci Resolve (this step comes later)
13. Relink Footage to Original in Premiere and After Effects
14. Export using the same settings (Apple ProRes, 4:2:2)
15. Open in Davinci Resolve to Color Correct
 - a. Apply LUT similar to *Grand Budapest* (free from Color Grading Central)
 - b. Mask bumping issue in overlayed shots
 - c. Fine tune visual effects
16. Export and Repeat steps 1-15 as needed
17. Final export, H.264, UHD 4K, optimized for Vimeo

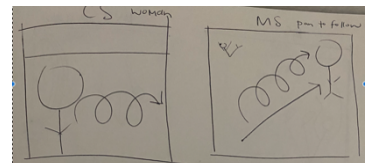
SCENE BREAKDOWN**1. INT. MESSY APARTMENT HALLWAY/ROOM - DAY**

WOMAN

woman beats herself up against a wall inside of her apartment, in turbulent distress. She is home alone. Time period is uncertain. Could be the 70-80s based on lighting choices, style of furniture, and clothing. Room is full of dusty knickknacks and random pieces of furniture. Some pieces are covered by white sheets. Some are not. Room is dimly lit by sunlight coming from a window. The sun's light is also revealing the dust particles in the air.

1-8: slow heavy turns against wall

2-8: rep



CUT TO:

2. INT. ABANDONED ROOM IN WAREHOUSE - DAY

WOMAN

still in turbulent distress, woman turns corner to enter larger room from a narrow hallway. Room is full of dusty knickknacks and random pieces of furniture. Some pieces are covered by white sheets. Some are not. Room is dimly lit by sunlight coming from a window. The sun's light is also revealing the dust particles in the air. One of the random objects in this space includes a life-size spinning doll, like a broken-down ballerina in a jewelry box. It's spinning slowly and aimlessly in the background, like someone forgot to turn it off, however many ages ago.

3-8: speed them up in space on diagonal

4-8: rep & stop abruptly
(13 sec)

*5-8: arms accents, in out double-in

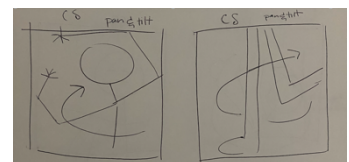
6-8: leg running in place slow

7-8: speeds up becomes frantic
(23 sec)

*8-8: cont'd, ends abruptly w/ arch

9-8: cont'd, arms/body curls in ->

10-8: cont'd, slow turns



WOMAN

woman continues to battle with internal demons, when suddenly a beam of light (not from the window) landing on her catches her attention. She tries to go back to her internal battle, but the light keeps pulling her out of it. She is drawn towards the light, moving closer to the source. She realizes it is coming from the life-size spinning doll. There is a sign nearby that instructs to touch the doll's forehead. The woman complies. The doll comes to life.

(31 sec)

*11-8: left arm is opened, rep & R

12-8: retreat

13-8: both opened

(40 sec)

*14-8 notice the ancestor doll

15-8 walking towards doll

(47 sec)

*16-8 walking towards doll

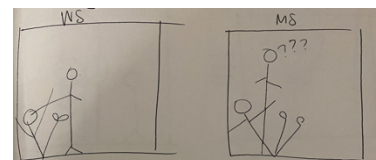
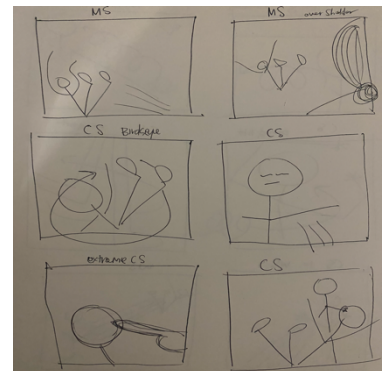
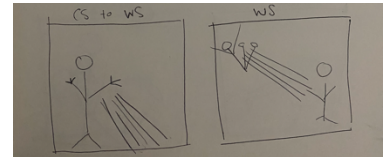
17-8 walking towards doll

(54 sec)

*18-8 woman touches forehead

19-8 ancestor unfolds, tingles

20-8 woman looks on, perplexed



ANCESTOR

ancestor doll comes to life slowly, with slow Butoh movements. The woman is curious, as their movements tend to reflect each other. They acknowledge each other's presence. A mutual respect is established

(1:03)

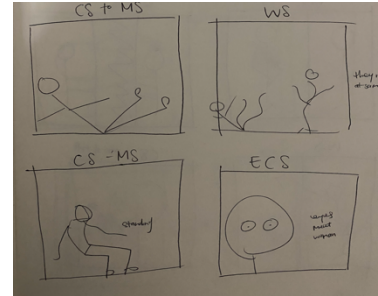
*21-8 ancestors feet slowly down

22-8 cont'd

23-8 cont'd

(1:13)

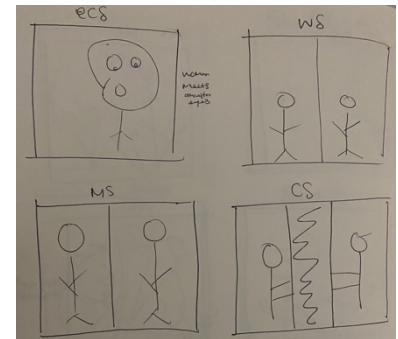
- *24-8 eyes meet, forward/back chest
- 25-8 take step forward/back
- 26-8 cont'd
(1:22)
- *27-8 another step
- 28-8 cont'd
- 29-8 bow
- 30-8 bow



WOMAN & ANCESTOR

They further explore how similar they are. There is an inquisitive energy in the air. Also somewhat skeptical. What are you? Who are you? Where did you come from? A whimsical curiosity
(1:35)

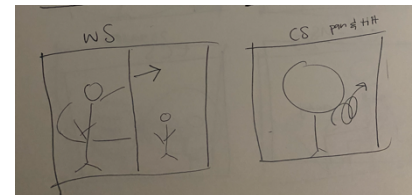
- *31-8 up/down/up/break/turn
- 32-8 ron de jambe passe over pivot
- 33-8 head roll, foot up leg, turn
- 34-8 shoulder s curve, sneaky fosse
(1:48)
- *35-8 rendez vous, cut to front
- 36-8 attitude, stretch out
(1:55)
- *37-8 mirror hands and arms
- 38-8 mirror hands and arms



WOMAN

woman throws herself/is drawn back into her turbulent distress. She shrinks back into her own depression/self-loathing. Throws herself into a tizzy. The ancestor doll observes her, concerned.
(2:00)

- *39-8 out of control turns
- 40-8 out of control turns
- 41-8 to the floor
- 42-8 standing and still turning



ANCESTOR

ancestor doll swoops in and stops the woman from continuing in her into a tizzy. She calms her down, encourages her to breathe.
(2:13)

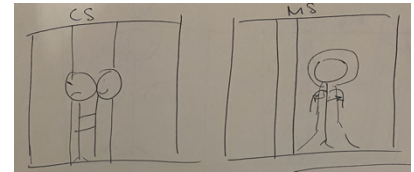
- *43-8 ancestor grabs woman
- 44-8 cont'd
- 45-8 woman cont'd to twitch/adjust
- 46-8 ancestor tightens grip

(2:27)

*47-8 shoulders down, head stop
48-8 dramatic simmer
49-9 arms unfolded, stand tall

(2:36)

*50-8 three breath implications



ANCESTOR

ancestor doll expresses to the woman a number of things: 1. everything will be ok; 2. you are not alone; 3. you have to lift your head up high, always, for you are the lineage of royalty; 4. your black is beautiful, it is complex, it is powerful in that complexity; 5. any answer you seek is inside of yourself. I live inside of you.

*51-8 palms flip front/back/front/back

52-8 elbow out expand

53-8 cut and push thru

54-8 break, mess around, cut under

(rep 2:52)

*55-8 foot flex turns land sec

56-8 pleading in sec resolve n para

57-8 third eye, développé, resolve sec

58-8 address present, ret to past

(3:05)

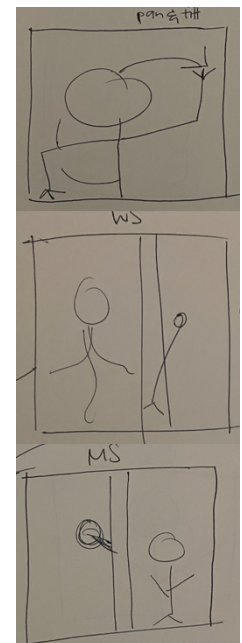
*59-8 -> past to chest, return to pres

60-8 ret w/ pride, resilience, ease

(3:11)

*61-8 melt leading w/ pelvis

62-8 rep



WOMAN & ANCESTOR

they rejoice together in this newfound revelation. They celebrate their connection. And the two become one.

(3:18)

*63-8 ancestor gathers woman

64-8 rep:up/down/up/break/turn/ron

65-8 steps into fan

66-8 pivot, head up

(3:31)

*67-8 foot up leg run to corner

68-8 leap, chugs back, up/side/side

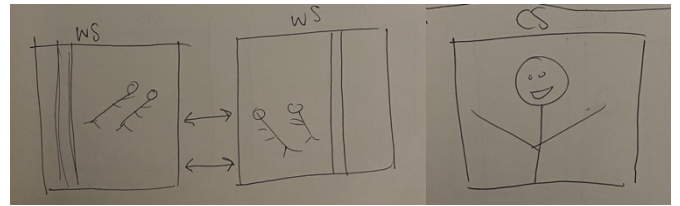
(3:37)

*69-8 flick, & develop

70-8 step to it, twitch, run & jump

(3:44)

- *71-8 fast turns again
- 72-8 cont'd
- 73-8 become one
- 74-8 woman turns alone
- *75-8 she resolves alone



WOMAN

woman comes back to reality, makes sense of where she is in space. She is no longer depressed. Her inner conflict becomes resolved.

(4:00)

- *76-8 looks around
- 77-8 ancestor doll is inanimate
- 78-8 cont'd

(4:09)

- *79-8 rep:ancestor solo:palms
- 80-8 rep:elbow out expand
- 81-8 rep:break,mess around,cutunder

(4:19)

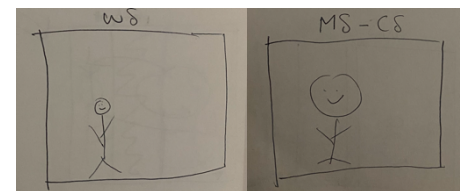
- *82-8 rep:pleading sec resolve para
- 83-8 rep:3rdeye,develop,resolv sec

(4:26)

- *84-8 rep:past to chest,ret to pres

(4:29)

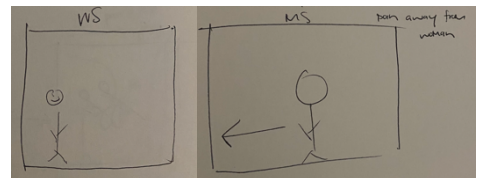
- *85-8 turning slowly to the door



CUT TO:

3. INT. MESSY APARTMENT/HALLWAY/ROOM - DAY

- 86-8 cont'd out hallway
- 87-8 cont'd to front door
- 88-8 leave apt, lights out



SHOTLIST

Inside OUT Shotlist						
Shot #	Interior/Exterior + Location	Shot Size	Camera Level/Angle	Camera Move	Description of Shot + Choreography	Minutes
1	Interior + Eyebeam Studios	CS	normal	handheld moving, follow the woman	woman in turmoil, shot starts super tight and then begins to open as she turns in space, goes back to tight when she stops turning, tilt and pan around body	1
2		MS	normal	handheld moving, follow the woman	woman in turmoil, shot starts super tight and then begins to open as she turns in space, goes back to tight when she stops turning, tilt and pan around body	1
3		CS	side/front view to over the shoulder	handheld	woman is looking out with curiosity to see what caught her attention (i.e. the ancestor) , shallow DoF	1
4		WS	left of woman's shoulder	still	empty shot, looking towards ancestor from woman	1
5		WS	left of woman's shoulder	still	ancestor rotating on turntable from woman	1
6		extreme CS	low angle	handheld	woman is perplexed looking down and ancestor, starts to gesture a point to forehead	1
7		CS to WS	normal	pan around woman and open up into space	woman ending solo	2
8		CS to MS	midstage left normal, shallow DoF	handheld , 270 revolution and tilt	ancestor solo	2
9***		WS	downstage right - low/normal	still	full dance as woman character	10
10***		WS	downstage right - low/normal	still	full dance as ancestor character	10
11***		WS	downstage center - low/normal	still	full dance as woman character	10
12***		WS	downstage center - low/normal	still	full dance as ancestor character	10
13***		MS	midstage left - low/normal	still	from getting off turntable to grab as woman	5
14***		MS	midstage left - low/normal	still	from getting off turntable to grab as ancestor	5
15***		MS	upstage right - low	still	full dance as woman character	10
16***		MS	upstage right - low	still	full dance as ancestor character	10
17***		MS	upstage left - normal / low	still	after ancestor solo, before happy turns as woman (no screen)	1
18***		MS	upstage left - normal / low	still	after ancestor solo, before happy turns as ancestor w/ screen	1
19		MS	high angle, midstage	still	ancestor rotating around turntable to stand up moment w/ greenscreen	1
20		MS	high angle, midstage	still	no greenscreen, woman walks into the shot, reacts to ancestor standing up	1
21		MS	midstage left - normal	still	woman mirrors ancestor in front of greenscreen	1
22		MS	midstage left - normal	still	ancestor mirrors woman without greenscreen	1
23		MS	midstage - normal , shallow DoF	still	woman in frantic solo	2
24		MS	midstage - normal , shallow DoF	still	ancestor watching solo with greenscreen behind , not in focus	2
25		MS	midstage left	still	happy turns coming together woman no greenscreen	1
26		MS	midstage left	still	happy turns coming together as ancestor with green screen	1
27		MS	midstage right	still	ancestor solo as ancestor without green	2
28		MS	midstage right	still	ancestor solo as woman with the green	2
29		CS	downstage , normal	still	ancestor helping woman with green screen	1
30		CS	downstage , normal	still	woman being helped without screen	1
31		CS	high angle	handheld	woman's finger touching ancestor's forehead (use Remi)	1
32		CS	over the shoulder , high angle	handheld	woman walking to ancestor (Remi as woman)	1
33		CS	normal	handheld	woman is frantic, ancestor enters frame to grab woman (Remi as ancestor)	1
33		CS	low angle	handheld	ancestor and woman turning together pan and tilt up the body before getting to the torso (Remi as ancestor)	1
34		CS	over the shoulder , normal	handheld	ancestor presses shoulders down on woman (Remi as ancestor)	1
35		CS	normal, in front of woman	handheld	ancestor releases arms of woman (Remi as ancestor)	1
36		CS	over shoulder	handheld	ancestor lifts woman's head up (Remi as ancestor)	1
37		CS	over shoulder	handheld	ancestor rolls back woman's shoulders (Remi as ancestor)	1

REFERENCES

- Anne Pierce quoting Merce Cunningham in "Cunningham at the Computer". *Dance USA/Journal*, Summer 1991, pp 14-15
- Acocella, Joan. "Chance Encounter." *The New Yorker*, The New Yorker, 9 Jan. 2012, www.newyorker.com/magazine/2012/01/16/chance-encounter.
- Beckett, Samuel. *Nohow On*. Grove, 1996.
- Binsbergen , Wim van. "African Divination across Time and Space: the Typology, Intercontinental Connections, Prehistory, and Intercultural Epistemology of Sub-Saharan Mantics." *Cite Seer X*, Mar. 2008, pp. 1–12.,
doi:<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.515.7201&rep=rep1&type=pdf>.
- BROWN, BLAIN. *CINEMATOGRAPHY: Theory and Practice*. ROUTLEDGE, 2021.
- Butler, Octavia E. *Parable of the Sower*. Seven Stories Press, 2016.
- Cage, John. "John Cage: An Autobiographical Statement." *John Cage : An Autobiographical Statement*, 1989, johncage.org/autobiographical_statement.html.
- Clarke, Arthur C. "'Any Sufficiently Advanced Technology Is Indistinguishable from Magic.'" CCCB LAB, CCCB Lab, 8 Nov. 2018, lab.cccb.org/en/arthur-c-clarke-any-sufficiently-advanced-technology-is-indistinguishable-from-magic/.
- Cunningham, Merce. "Merce Cunningham." *The Dancer and the Dance: Conversations with Jacqueline Lesschaeve*, Marion Boyars Publishers, 1985, p. 27.
- Eglash, Ron. *African Fractals: Modern Computing and Indigenous Design*. Rutgers University Press, 2005.
- Eglash, Ron. "The Fractals at the Heart of African Designs." TED Ideas Worth Spreading . TEDGlobal, 22 Nov. 2020,

www.ted.com/talks/ron_eglash_the_fractals_at_the_heart_of_african_designs/transcript?language=en.

Gurskis, Dan. *The Short Screenplay: Your Short Film from Concept to Production*. Course Technology, Cengage Learning, 2007.

“Inspirational Working Methods: John Cage and the I Ching.” YouTube, 11 Dec. 2017, youtu.be/uyjOnqzjqpc.

Jensen, Marc G. “John Cage, Chance Operations, and the Chaos Game: Cage and the ‘I Ching’.” *The Musical Times*, vol. 150, no. 1907, 2009, pp. 97–102. JSTOR, www.jstor.org/stable/25597623.

Jung, C G. “IChing Foreword .” *The I Ching; or, Book of Changes*. the Richard Wilhelm Translation, Princeton University Press, 1972.

Konstantinovsky, Michelle, and Mark Fairchild. “Primary Colors Are Red, Yellow and Blue, Right? Well, Not Exactly.” *HowStuffWorks Science*, HowStuffWorks, 9 Apr. 2021, science.howstuffworks.com/primary-colors.htm.

Marine, Joe. “8 Tips for Writing a Director's Note for a Grant or Lab.” *No Film School*, No Film School, 29 Feb. 2016, nofilmschool.com/2016/02/8-tips-writing-directors-note-grant-lab-nathalie-mentorless.

“Merce Cunningham.” Merce Cunningham Trust, 2019, www.mercecunningham.org/about/merce-cunningham/.

Özen, Figen & Tükel, Dilek & Dimirovski, Georgi. (2017). Synchronized dancing of an industrial manipulator and humans with arbitrary music. *Acta Polytechnica Hungarica*. 14. 151-169. 10.12700/APH.14.2.2017.2.8.

Saunders, George. *Lincoln in the Bardo: a Novel*. Random House, 2018.

Schiphorst, Thecla. "Merce Cunningham: a Case Study Use of Life Forms Computer Choreographic System in the Making of Trackers." B.G.S. Simon Fraser University, National Library of Canada, 1993.

Shivam. "Copying and Pasting Text Turns to Gibberish." <https://community.adobe.com>, Adobe Support Community , 26 Nov. 2018, community.adobe.com/t5/acrobat/copying-and-pasting-text-turns-to-gibberish/td-p/10194796?page=1.

Simon, Herbert A. *The Sciences of the Artificial*. The MIT Press, 1969.

Wilhelm, Richard, and Cary F. Baynes. *The I Ching ; or, Book of Changes*. the Richard Wilhelm Translation. Princeton University Press, 1972.

"What Is Unicode." Unicode, Unicode, Inc. , 24 July 2017, 2:15pm, unicode.org/standard/WhatIsUnicode.html.

Wright, Terri, and Sarah Friedland. "Sarah Friedland Interview." 19 Nov. 2020.

Wright, Terri, and Thom Kat. "Thom Kat Interview." 27 Sept. 2020.

Wright, Terri, and Valencia James. "Valencia James Interview." 10 Nov. 2020.

APPENDIX

Moodboards



Woman Moodboard



Ancestor Moodboard



Set Moodboard



Lighting Moodboard

Character Photo Gallery
(captured by Whitney Browne)



