The Squid and the Fool:

Playing and Living Within the Oceanic Carnivalesque and its History

I.B. Laughbaum

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pages read as a prayer that we may achieve a world where no one is incarcerated anywhere, Human or not, before the world is taken from us.

INTRODUCTION

The sea and its vicissitudes are frequently the subjects of disaster narratives around the climate crisis. “New York will be underwater by 2050,” is a now-common phrase used to illustrate the projected rise of sea level in the upcoming decades, some years ago usually appended with, “if we don’t change anything,” these days often appended with “*even if* we change *every*thing.” The world is ending, and one of the key ways in which that ending is being marked is the presence of saltwater upon the soil.

The sea taking over the land feels so frightening because, we have been told, we cannot live in it. The ocean is a space so anathema to terrestrial life that even its basic verbs are different: if New York were to truly go underwater, those of us who live here would cease living *on* the land and start living *in* the sea, or more likely start dying in it. That’s at least how it feels, since especially in the environmental humanities, land is more than just a subject. Land is a methodology, land is a research partner, and most importantly, land is its own (and perhaps the ultimate) pedagogue. As terrestrial creatures, land is synecdoche for the entire planet Earth, despite the fact that what we call “land,” famously, only occupies thirty percent of our planet’s surface, and much less of its total non-atmospheric volume when compared to the vastness of the depths.

Over the past decade, the intellectual legacy of the ocean has been reexamined within the environmental humanities. As literary theorist Dan Brayton puts it, “Like a kind of terrestrial unconscious, the ocean has been consistently repressed in order to erect ecocritical scholarship on seemingly firm ground.”[1] The ocean was largely ignored and feared by Western scholars from the Medieval period through to the Enlightenment (despite centuries of dependence upon the

[1] Dan Brayton, *Shakespeare’s Ocean*, (University of Virginia Press, 2012), 42.

maritime for trade and nutrition) until, in the wake of Charles Darwin's *Origin of Species*, it became a major site of research and theorization of the "primordial soup," the origin of life. "The Victorian imagination, in step with then nascent scientific archaeology, came to associate the deep with the early history of Earth."[2] The European nineteenth-century postulation that the primordial was the natural opposite to the modern cast the deep sea into a role of pure speculation: though the secrets to the origin of life may lay within its murky depths, whatever knowledge could be gained from the ancient deep would be so alien that it would have no bearing upon the realities of modern, terrestrial life.

This tendency to think without the ocean as an integral part of our planet's life systems has started to fade, due to two realizations: the climate crisis which "grows" the ocean has been just as disastrous to aquatic life as it has been to terrestrial, and that perhaps "firm ground" is not only unnecessary for robust scholarship, but that seeking such terrestrial stability can occlude very dire knowledge in our navigation of the current ecological moment. In his dissertation on the history of undersea cinema, Jonathan Christopher Crylen argues that,

> To turn toward the ocean, especially in a time of ecological crisis, means thinking about life as most of it exists elsewhere on the planet and in radically different conditions than those that govern our existence. To see and hear, if only in mediated fashion, a radical otherness that normally remains out of sight and out of mind might help us better understand our place within the web of life and the collective influence we exercise on it.[3]

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[2] Stefan Helmreich, *Alien Ocean: Anthropological Voyages in Microbial Seas*, 1st ed. (University of California Press, 2009), 73.
[3] Jonathan Christopher Crylen, "The Cinematic Aquarium: a History of Undersea Film," PhD diss., (University of Iowa, 2015), 9.

A dogged dedication to keeping things as they have been for the last century and a half by international corporations, governments, and other institutions is precisely what has landed us within the climate crisis, and so communing with radical otherness may be our best shot towards making it out alive. Though there are more contexts that are radically other aside from the aquatic, "The milieu of the ocean offers an epistemological check on human knowledge formation, presenting entirely different conditions for perception, sensation, and life than terrestrial environments."[4]

For my undergraduate Senior Thesis at the University of California Santa Barbara, I became fascinated with another such "radically other" world: the carnivalesque as it originated in the cultural practices of Medieval Western Europe. Known to us now as the cultural force behind circuses, theme parks, and arguably most entertainment, the carnivalesque originated within Carnival, the forty days between Christmas and Ash Wednesday in which Medieval Europeans celebrated "the world upside down." During celebrations of Carnival, beggars would be crowned as kings, Pigs would parade through town as men, and all that was considered lowly became praised and celebrated on high. Though considered by the aristocracy of Medieval Europe as a simple diversion from toil for the peasantry, starting in the mid-twentieth century, many scholars have understood Carnival as, "a populist utopian vision of the world seen from below and a festive critique, through the inversion of hierarchy, of the 'high' culture."[5]

This Master's Thesis takes the position that the oceanic and the carnivalesque are not only both valuable models for restructuring scholarship, governance, and Human-to-Nonhuman relations but that they are inextricably linked within an epistemological framework that amalgamates these two worlds into the same psychospiritual position: that of the Low,

[4] Melody Jue, *Wild Blue Media: Thinking Through Sea Water*, (Duke University Press, 2020), 10.
[5] Peter Stallybrass and Allon White, *The Politics and Poetics of Transgression*, (Cornell University Press, 1986), 7.

Primordial, and Natural as opposed to the High, Modern, and Civilized. We have received this intellectual lineage from Western colonialism as it descended from Medieval European culture. To demonstrate this position, I have split the work into two Chapters. In the first chapter, I foreground that the intellectual ocean we have received was amalgamated with the historic practice of Carnival in Medieval Western Europe due to their constructions as worlds that were "topsy-turvy," upside-down, or just simply opposite to the terrestrial and the everyday, respectively. By highlighting the ways each of these worlds were understood as low and primordial, I trace the origins of thinking that would lead to the later characterization of what I refer to as the Oceanic Carnivalesque in the nineteenth and twentieth centuries. In the second chapter, I take the playful subversion of established order as one of the key features of this Oceanic Carnivalesque and build upon it, suggesting the possibility of a radical interspecies politic enacted through the practice of terrestrial-to-aquatic play. The space of this proposed play is the institution where Humans currently interact with aquatic species most (aside from the dinner plate): the aquarium. This chapter concludes that if we are stuck with the intellectual discourse of a radically other ocean, the best course of action to live equitably with our aquatic neighbors (who come closer to our door every day with rising sea levels) is to learn how to play with them in such a way that could destabilize the very structures that have forced us into the climate crisis. By combining these two works, I hope to navigate a new methodology for thinking through and with the ocean that fully embraces the topsy-turvy world that we may soon be fully submerged within.

Ships of Fools: The Oceanic Carnivalesque in Medieval and Early Modern Western Europe

"Hence I have pondered how a ship / Of fools I'd suitably equip– / A galley, brig, bark, skiff, or float, / A carack, scow, dredge, racing-boat, / A sled, cart, barrow, carryall–, / One vessel would be far too small / To carry all the fools I know. / Some persons have no way to go / And like the bees they come a-skimming, / While many to the ship are swimming"-Sebastian Brant, *The Ship of Fools*.

Since fifteenth-century theologian Sebastian Brant wrote the verse quoted above, along with hundreds more verses within his famous book of religious poetry *The Ship of Fools*, this eponymous vessel has been one of the most enduring icons of foolishness within the Western canon. It has been the subject of paintings by artists stretching back to Hieronymous Bosch and stretching forward to surrealists like Thomas Bühler and even Kehinde Wiley, who painted President Obama's official portrait. "Ship of Fools" or some variation thereof has become the title of many novels and songs, and it is even one of the nicknames of the old sailor's dice game Ship, Captain, and Crew. Though Brant's portrayal became the most iconic depiction of a fool-packed seafaring vessel, it was not an image of his own invention. In fact, "The idea of placing careless livers, rakes, drinkers, and the like together upon a ship was widespread from Holland to Austria before Brant's time."[6] Most pertinently,

> The recent discovery by Adolf Spamer of a sermon on the subject of a fools' ship…seems to prove beyond a doubt that even the conceit of a fools' ship was no innovation of Brant. Internal evidence indicates that this sermon dates from the sixties or seventies of the fifteenth century; besides, the anonymous preacher boasts that with a ship

[6] Edwin Hermann Zeydel, introduction to *The Ship of Fools*, by Sebastian Brant (Columbia University Press, 2012), 12.

> of fools he is offering something *new*, although admitting that allegorical interpretations of St. Ursula's ship have occurred before. In his sermon this preacher describes twenty-one fools of the 'Narrenshiff' and, as the twenty-second character, Christ, who, followed by St. Ursula's ship, crosses the sea dry and exhorts the fools to leave their vessel and board Christ's St. Ursula's ship, which is described as a ship of penitence.[7]

This iconography also manifested where fools were most at home, the Medieval and Early Modern "Carnival" or festival. "In Nuremberg there was one float…drawn through the streets on a sledge to the main square. It often took the form of a ship, reminiscent of the German ship-wagon processions which are occasionally mentioned in ancient and medieval times."[8] The relation between ships and fools was not limited to Germanic regions either, and was "in harmony with a favorite medieval thought, also found in a Spanish morality–that a fool's aimless life is comparable to a fool's sea voyage, undertaken without rudder and compass."[9]

Though Brant's full book depicts fools in a variety of terrestrial circumstances, more than half of its poems center around the misadventures of the eponymous vessel. The ship is a curious selection of literary device due to the fact that,

> Before the start of the nineteenth century, few people who did not work at sea traveled on long voyages. Only emigrants and colonial officials had reason to go, and few of them made more than one or two trips in their lives. Not only was going to sea dangerous, but it involved an uncomfortably close encounter with an international maritime culture of life at sea that polite society preferred to ignore. From the perspective of shore, those people who worked at sea, especially common seamen, represented the dregs of society.[10]

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[7] Zeydel, introduction to *The Ship of Fools*, 13-14.
[8] Peter Burke, *Popular Culture in Early Modern Europe* (New York: Harper & Row, Publishers, 1978), 184.
[9] Zeydel, introduction to *The Ship of Fools*, 15.
[10] Helen M. Rozwadowski, *Fathoming the Ocean: The Discovery and Exploration of the Deep Sea* (Harvard University Press, 2005), 9.

As he spent most of his life as a professor at the Rhine-hugging University of Basel, Switzerland, it's probable that Brant never once boarded an oceangoing vessel, and possible that he never saw a ship larger than a riverboat. The same seems even more likely for the peasants of landlocked Nuremberg, who nevertheless paraded a float in the shape of a ship through their town every year during the season when foolishness was most cherished.

The Ship of Fools expanded from Brant's work and local festivals to an artistic and literary icon, appearing in Medieval and Early Modern manuscripts and paintings across the continent. It came to be the most commonly used symbol of, "the frequent association established between the sea and madness…a floating body used to seclude lunatics, who were thus committed to the element that was in keeping with their unpredictable temperament."[11] What was it about ships and fools that convinced so many in Western Europe at this point in time that they belonged together?

I contend that this is because the oceanic and the carnivalesque held the same psychospiritual *topos* for the peoples of Medieval and Early Modern Western Europe. That *topos* was, and I will argue in later chapters still *is*, the inverted, "topsy-turvy," or anti-natural world against and through which the normal or everyday world was made sense. The ocean was a world set apart from the Earth as early as the story of Genesis in European Christian cosmology, "a feared vestige of primordial chaos, host to demonic monsters,"[12] untouched by God during Creation. Carnival, the time of year between Christmas and the start of Lent on Ash Wednesday, cultivated with its chaotic festivals, "a second world and a second life outside officialdom,"[13] in which Europeans, "celebrated temporary liberation from the prevailing truth and from the

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[11] Alain Corbin. *The Lure of the Sea: Discovery of the Seaside in the Western World 1750-1840*, trans. Jocelyn Phelps (University of California Press, 1994), 8.
[12] Helmreich, *Alien Ocean*, 15.
[13] Mikhail Bakhtin, *Rabelais and His World*, trans. Helene Iswolsky, (Bloomington: Indiana University Press, 1984), 6.

established order; [Carnival] marked the suspension of all hierarchical rank, privileges, norms, and prohibitions."[14] So, if both the oceanic and the carnivalesque were the opposite of the world that was "right-side up," would it not stand to reason that the peoples of Western Europe understood these two worlds as two parts of the same upside-down one?

To push the relationship further, despite being "opposite" to the everyday world, the oceanic and the carnivalesque were entangled in the ongoing survival of terrestrial Lenten lifestyles. The deadly aquatic was understood as the opposite of the life-giving terrestrial, yet in England by 1636, ''at least half the King's subjects derived their living directly or indirectly from the sea."[15] Due to the restrictions upon eating terrestrial meat during Lent and a series of Wednesdays, Fridays, and Saturdays throughout the rest of the year, "A pious Christian had to take his or her animal protein from fish 140-160 days each year."[16] Fishing even took such political importance that, "In the early days of the Hundred Years War, the king of France was advised to target the autumn herring fishery of Yarmouth because of the huge numbers of English vessels that could be destroyed at one time."[17] Despite this religious and economic reliance on consuming mass quantities of fish, Western Europeans all but refused to swim in the ocean until the eighteenth century. "The irresistible awakening of a collective desire for the shore arises in the period from 1750 to 1840…Here, more than anywhere else, the individual found the means of encountering the elements and enjoying the brightness or transparency of the water."[18] This fear was not found in bodies of freshwater, where Europeans bathed, laundered, and fished regularly. Similarly, the raucous, unruly, and foolish carnivalesque overturned the authority of

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[14] Bakhtin, *Rabelais and His World*, 10.
[15] Brayton, *Shakespeare's Ocean*, 2.
[16] Richard C. Hoffman, *Fishers' Craft and Lettered Art: Tracts on Fishing from the End of the Middle Ages*, (University of Toronto Press, 1997), 18.
[17] Maryanne Kowaleski, "The Seasonality of Fishing in Medieval Britain," in *Ecologies and Economics in Medieval and Early Modern Europe: Studies in Environmental History for Richard C. Hoffman*, ed. Scott G. Bruce, 113-145, (Boston: Brill, 2010), 118
[18] Corbin, *Lure of the Sea*, 53.

clergy and royalty for the sometimes months-long durations of festivals and fairs, but, "To the Middle Ages Carnival and Lent were both necessary, inevitable episodes in the eternal cycle of the Church year,"[19] especially given that Carnival time was often the only point in the year where merchants and artisans from small villages could meet together for trade that was essential to survival.

As I will illustrate fully later, the oceanic and the carnivalesque were both cast in the "low" role in the cultural drama of the tension between high and low. Allon White and Peter Stallybrass, preeminent scholars of the carnivalesque, describe the Western European relation between high and low as such:

> A recurrent pattern emerges: the 'top' attempts to reject and eliminate the 'bottom' for reasons of prestige and status, only to discover, not only that it is in some way frequently dependent upon that low-Other…but also that the top includes that low symbolically, as a primary eroticized constituent of its own fantasy life. The result is a mobile, conflictual fusion of power, fear and desire in the construction of subjectivity: a psychological dependence upon precisely those Others which are being rigorously opposed and excluded at the social level. It is for this reason that what is socially peripheral is so frequently symbolically central.[20]

The symbolic centrality of the oceanic and the carnivalesque and their epistemic amalgamation into one topsy-turvy world will be the focus of the rest of this chapter.

To make this point in full, the chapter will be divided into the following sections: First, I offer a primer on the carnivalesque, highlighting its many constructions as "the world upside-down." Working through the rich history of critical theory on the carnivalesque in the

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[19] Barbara C. Bowen, "Lenten Eels and Carnival Sausages," *L'Esprit Créateur*, Spring 1981, Vol. 21, No. 1, a Rabelais Symposium (Spring 1981), 22.
[20] Stallybrass and White, *Politics and Poetics of Transgression*, 5.

wake of the 1968 English translation of Mikhail Bakhtin's book *Rabelais and His World* as well as primary and secondary sources on Western European fair, festival, and market practices, this section will sketch the fools, clowns, "monsters" and grotesqueries that inhabited the storied world of the Medieval and Early Modern Carnival.

Next, I will demonstrate that the ocean *was* in fact viewed in Western Europe as a world inverse to the terrestrial. This will be accomplished by reading into the oceanic outlook of the story of Genesis, which for obvious reasons primed the Abrahamic peoples of Western Europe to comprehend the ocean as a space outside of God's Creation. With the epistemological ancestry of Genesis in mind, I will examine two cultural artifacts of the proto-alien Western European ocean that demonstrate this belief in a topsy-turvy ocean, the oracular reception of whale strandings, and myths of the doubly-inverted Indian Ocean.

Synthesizing these two parts together, I will demonstrate the psychospiritual overlap between the oceanic and the carnivalesque, focusing on the construction of both as "low" Others to the terrestrial and to the everyday, respectively. Here I will also illustrate the construction of both Carnival and the ocean as primordial spaces, set apart from modern life on land. This section will cement that these two topsy-turvy worlds were subconsciously amalgamated within the Western European imaginary in a manner that lingers with us to this day. To finish out the chapter, I will trace the simultaneous death of the "mysterious" ocean and Carnival practices in the late nineteenth century using the history of St. Bartholomew's Fair, England's longest-running Carnival festival, as a microcosm for the paradigm shift in both oceanic and carnivalesque thinking throughout the eighteenth and nineteenth centuries.

Put as neutrally as possible, Carnival was the forty-day period between Christmas Day and Lent as organized by the Catholic calendar of the First Vatican Council. Though Lent

remains an observed period in the modern calendar, the only artifacts of the Carnival celebrated by Medieval Europeans that remain today are the Brazilian Carnivale (which lasts one week) and Mardi Gras, or Fat Tuesday. It is easiest to explain Carnival practices and attitudes as the opposite of Lenten ones. Most familiar to those who keep Lent today, there was no restriction on the consumption of mammal and bird meat during Carnival, as there was and is during Lent. Most pertinent, however, is that Medieval Western Europeans were also forbidden from consuming meat on any Friday of the year, save for the Fridays that fell during Carnival. In line with these attributes, a one-meal-per-day fast was held throughout Lent, whereas people were encouraged to feast throughout the time of Carnival. Engaging in sexual activity during Lent was considered a grave sin, and so Carnival was a time in which risque behavior was not just acceptable but celebrated.

Most vital to the spirit of Carnival was trade. Alternatively referred to as markets, fairs, and festivals, Carnival celebrations were always organized around large-scale mercantile activities. As mentioned in the introduction, peasants and artisans from smaller villages would travel to the nearest town during Carnival time to sell their wares and purchase goods not accessible to them throughout the rest of the year. These Carnival fairs were so vital to the economic life of Medieval Western European towns that "it was from the rows of [merchant] booths ranged to form streets, with a broad main thoroughfare leading to the abbey or castle gateway, that the town took its shape."[21] Some towns even existed solely due to the prominence of their Carnival markets. "So important were fairs in the Middle Ages that at least three that were granted to the greater churches–those at St. Albans, Peterborough, and Bury St. Edmunds–were the means by which the Church, and the Church alone, produced the town."[22]

[21] William Addison, *English Fairs and Markets*, (London: B.T. Batsford LTD, 1953), vi.
[22] Addison, *English Fairs*, 20-21.

Though in some regions there were markets at other times of the year, many areas only allowed for such trading during Carnival, and there was nowhere in Medieval Western Europe without a Carnival market. To give a sense of just how many of these festivals there were, in England alone, between the thirteenth and fourteenth centuries,

> no fewer than 4,860 [fair charters] were granted–3,300 in the thirteenth century, 1,560 in the fourteenth. After that they declined so abruptly that only 100 were granted in the fifteenth century. By this time, of course, the country must have been practically covered by the earlier grants, and as the number increased their dating had to be arranged to safeguard those already established. [23]

These fairs typically lasted for fourteen days until they were forcibly reduced to three, which will become pertinent at the end of this chapter. As they were vital to the economic life of Medieval Western Europe as a whole, the successes of Carnival markets were protected by law in many kingdoms. "Not only was it unlawful for any two fairs to be set up within seven miles of each other, but it was usual to compel all shopkeepers to cease from independent business in the neighbourhood of any such privileged market."[24]

As the name Carnival would imply, these festivals carried within them the roots of what the nineteenth and twentieth centuries would call carnivals or, more popularly, circuses. At some Carnival celebrations, there were simple, hand-cranked rides resembling very small Ferris wheels, though what every Medieval fair had in common with Victorian circuses were their monster and animal shows. At a Carnival festival, one could see beasts from mystified "far-off lands" such as "monkeys and apes dancing on tight ropes,"[25] as well as Human "monsters," who were usually disabled people and those kidnapped from Africa and Asia that were exploited for

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[23] Addison, *English Fairs*, 29.
[24] Henry Morley, *Memoirs of Bartholomew Fair*, (London: Chapman and Hall, 1859), 22-23.
[25] Addison, *English Fairs*, 95.

their appearance. This was the historical model that would become typical of the later circus "freak" show. At many of these festivals,

> A succession of dwarfs was paraded before the public…Giants, usually Scottish or Irish, appear to have been equally popular, as were bearded women, wild black women and the spectacularly fat such as William Whitehead the twenty-two stone boy. Good sized fairs generally included menageries and waxworks and few were without booths exhibiting such delights as mermaids, seven-legged mares and cannibals' heads. Educated animals were a perennial attraction and throughout the century a succession of intelligent horses and pigs…amazed audiences.[26]

Entertainment at these fairs was not just limited to these shows. The majority of Carnival activities centered around semi-improvised theatrical performances. Often referred to as "travesties" due to their parodical nature, "Eroticism, obscenity and satire, criticism of the various social groups, even Western society in general, constitute the contents of the carnival plays."[27] These plays usually took a Biblical or folkloric tale and subverted it for grotesque and comic effect. For example, "The oldest grotesque parody, 'Cyprian's supper' (composed in about the fifth or sixth century) transformed all sacred history from Adam to Christ into a fantastic clownish banquet using in grotesque fashion its most important events and symbols."[28] Many such plays satirized then-current Church rituals, dressing mules in bishop's clothing and letting them run across the stage.

With the material realities of Carnival explained, it is vital for the next section of my argument to examine how people have thought and practiced the carnivalesque. When writing

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[26] J M Golby and A W Purdue, T*he Civilisation of the Crowd: Popular Culture in England 1750-1900*, (London: Batsford Academic and Educational, 1984), 38.
[27] Edelgard DuBruck, "Homo ludens–homo cogitans: Images of Fifteenth-Century Man in German Carnival Plays," *Fifteenth Century Studies* (Jan 1, 1981; 4, ProQuest), 61.
[28] Bakhtin, *Rabelais and His World*, 84.

any overview of the theory on the subject, it is difficult to start anywhere other than Mikhail Bakhtin's landmark 1965 book *Rabelais and His World*. Though other works on Medieval European festival culture surrounding Carnival were published earlier, such as William Addison's *English Fairs and Markets* in 1953, Bakhtin was the first to put forward the carnivalesque as not only a full cultural mode but a philosophical and political position.

Bakhtin defines the carnivalesque as, "the peculiar logic of the 'inside out'...of the 'turnabout,' of a continual shifting from top to bottom, from front to rear, of numerous parodies and travesties, humiliations, profanations, comic crownings and uncrownings."[29] Most pertinent to Bakhtin and the carnivalesque scholars in his wake is the specific shifting from top to bottom, more often phrased as high and low. White and Stallybrass, the most notable theorists of Carnival after Bakhtin, claim that, "The high/low opposition…is a fundamental basis to mechanisms of ordering and sense-making in European cultures."[30] What was categorized as "high" and what was instead "low" structured much of Medieval Western European life, and few things escaped this binary. Royalty and clergy were constructed as high when compared to the low peasant and artisan classes, leading to the Carnival tradition of crowning a beggar or village idiot as king during any given festival. To dance, gamble, or play in other frivolous ways were lowly activities in contrast to spending the same amount of time in solemn prayer, which brought one's soul higher, towards heaven. Humans were placed in the high position in counterpart to lowly animals, so a common theme amongst many Carnival cultural artifacts is the reversal in position of men and beasts: horses riding men and humans wallowing in pig sties were common to see in illustrations of the carnivalesque from the period. Feasting and fasting were placed along this axis, and in a meta sense, so were Carnival and Lent themselves.

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[29] Bakhtin, *Rabelais and His World*, 11.
[30] Stallybrass and White, *Politics and Poetics of Transgression*, 3.

Bakhtin argues that this topsy-turvy logic was inherent to all Carnival activities listed above, the feasting, the sexuality, the commerce, the monster shows, and the plays. All of these elements turned the world upside down in the first place due to their uplifting of the body, which was considered the lowly and grotesque counterpart to the high, pure soul during the rest of the year. He refers to this bodily focus as "grotesque realism," and argues that,

> In grotesque realism…the bodily element is deeply positive. It is presented not in a private, egotistic form, severed from the other spheres of life, but as something universal, representing all the people. As such it is opposed to severance from the material and bodily roots of the world; it makes no pretense to renunciation of the earthy, or independence of the earth and the body…This is why all that is bodily becomes grandiose, exaggerated, immeasurable.[31]

This view of the body contends that even within itself there is the dichotomy between high and low, as, "the upper part is the face or the head and the lower part is the genital organs, the belly, and the buttocks."[32] So it is that Carnival is a time for promiscuity, gluttony, and the scatological, as well as the humor to be found in all three. To take the carnival plays as a specific example, "their exuberant indulgence in sex, food, and collective merrymaking can be interpreted as an escape from (and reaction against) the severe asceticism favored by the church. Indeed, they are at the opposite extreme of medieval predication."[33]

Though it may seem frivolous to build a politic around lust, feasting, and the behaviors of clowns, many have viewed "carnival not simply as a ritual feature of European culture but as a mode of understanding, a positivity, a cultural analytic."[34] Carnival provided an opportunity for

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[31] Bakhtin, *Rabelais and His World*, 19.
[32] Bakhtin, *Rabelais and His World*, 21.
[33] DuBruck, "German Carnival Plays," 63.
[34] Stallybrass and White, *Politics and Poetics of Transgression*, 6.

peasants to play at upending the aesthetic and cultural hierarchy that otherwise held them in the "low" position within their social order, even if only for forty days. Within ludic Carnival practices, "a real overturning of social order was replaced by its model, cast within a medium of play, fun, gaiety, and laughter. In turn, this opened the way for commentaries on that order."[35] White and Stallybrass postulate that this play invited such rich commentaries because:

> Play, in the fair, is symbolic action which is rarely mere play: it articulates cultural and political meanings, and any simple elision of 'real' politics with the 'serious' consigns the subordinate classes to contesting state and class power within a problematic which has positioned them as ignorant, vulgar, uninitiated - as low…the grotesque tends to operate as a critique of a dominant ideology which has already set the terms, designating what is high and low.[36]

Put simply, the crowning of a beggar as king for the day could put the idea in many heads that there is no difference between a beggar and a king. Essential to its position as a cultural analytic, "Carnival was opposed not only to Lent but also to the everyday, not only to the forty days which began on Ash Wednesday but to the rest of the year."[37] It was not just that Carnival was Lent upside-down, but a reversal of the full system in which Western Europeans lived during the Medieval period. Within the practices of Carnival festivals,

> the inner core of sacred meanings may be juxtaposed with messages of play. Then meta-messages of make-believe dissolve the everyday strictures of this context, which are imposed on the self. Categories of persons, ordinarily separated by moral edicts and by social rules, are brought together within a medium which vividly encourages each to

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[35] Don Handelman, "Reflexivity in Festival and Other Cultural Events," in *Essays on the Sociology of Perception*, ed. Mary Douglas (New York: Routledge, 2003), 166.
[36] Stallybrass and White, *Politics and Poetics of Transgression*, 43.
[37] Burke, *Popular Culture in Early Modern Europe*, 188.

> reflect upon the validity of his own position in relation to all others. In such holy festivals, through messages of play, there are dissolved both external boundaries and internal lines - distinctions between the sacred and the mundane, and between social roles.[38]

There were even such cases where Carnival festivals escalated to full political action. "Such wild activity could often boil over into riot and indeed a degree of license for riot and damage to life, limb and property was tacitly written into certain annual [Carnival] festivities."[39] Put simply, wrapped up within seemingly innocent Carnival iconography such as Horses riding men and the mass indulgence of culinary and sexual appetites was also the message that there was no functional difference between the village idiot and the king, or even that the king was merely a village idiot to whom everyone swore fealty. Carnival created,

> an autonomous world in which symbolic actions are performed which have all the compulsion of reality - one might call it an alternative reality. It is similar to youth as a state in opposition to the established structures of society, and for the same reasons the boundaries between it and the non-play, non-carnival world were carefully policed.[40]

To ensure that riots did not boil over at every fair, the boundaries that were dissolved during Carnival had to be rigorously upheld at all other times of the year.

If Carnival encouraged the lower classes to think in such ways, then why did European royalty write laws that protected Carnival markets' right to succeed? Beyond Carnival's use as a driver of trade, many scholars of the carnivalesque put forward a concept that I refer to as the "pressure valve theory." Historian Peter Burke articulates this theory by asking:

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[38] Handelman, "Reflexivity in Festival," 166.
[39] Golby and Purdue, *Popular Culture in England 1750-1900*, 23.
[40] Bob Scribner, "Carnival and the World Turned Upside-Down," *Social History*, (Oct., 1978: Vol. 3, No.3), 318.

> Why did the upper classes permit this? It looks as if they were aware that the society they lived in, with all its inequalities of wealth, status and power, could not survive without a safety-valve, a means for the subordinates to purge their resentments and to compensate for their frustrations.[41]

Six years after Burke wrote the above, J M Golby and A W Purdue made the same argument in their book *The Civilisation of the Crowd: Popular Culture in England 1750-1900*, writing, "Authority tolerated and often supported such festivities, partly because they were traditional…and partly because of a half-conscious recognition of the necessity of a safety valve to release tensions built up during the working year."[42]

To ensure that Carnival acted as a pressure valve for rebellion rather than a pressure cooker thereof, the ends of both Carnival plays and Carnival fairs themselves frequently revolved around the act of returning the topsy-turvy to its "correct," upright place. A play commonly performed during the last day of a festival saw two actors dressed to represent Carnival and Lent, wherein, " it was natural to represent Lent as emaciated…as a kill-joy…'Carnival' was represented as young, cheerful, fat, sexy, a mighty eater and drinker, a Gargantuan or Falstaffian figure."[43] Lent took on the role of the prosecutor in a courtroom, accusing Carnival of activities such as feasting too heartily, drinking too heavily, dancing too vigorously, etc. A mock jury on stage found these crimes indefensible, for which Carnival would be put to death. After a comic execution, the play ended with Carnival being buried as the world moved along to the Lenten season. In this example,

> The trial, execution and burial of 'Carnival' might be interpreted as a demonstration to the public that the time of ecstasy and licence was over and that they must make a 'sober

[41] Burke, *Popular Culture in Early Modern Europe*, 201.
[42] Golby and Purdue, *Popular Culture in England 1750-1900*, 23.
[43] Burke, *Popular Culture in Early Modern Europe*, 188.

> return' to everyday reality. Comedies built round situations of reversal, like the judge in the stocks, and played during Carnival, frequently end in a similar way with a reminder to the audience that it is time to set the world the right way up again.[44]

However, even with these rituals designed to keep the role reversal of Carnival season-specific, "there was a growing fear that the boundary could no longer be so effectively policed…Within the context of the play world, popular retribution…was merely carnival fun. Enacted in the real world, even in carnival forms, it became rebellion."[45] While European trade became increasingly unbound from Carnival markets throughout the Early Modern, Renaissance, and Victorian periods, the "pressure valve" of Carnival came to look more and more like an incitement towards revolt. As we shall see at the end of this chapter, this suspicion coupled with the unmooring of mercantile success from Carnival within Colonial and Industrial economies led to great administrative efforts to lay this folk practice into its grave.

The carnivalesque operated as the "world upside down" that Medieval Western Europeans lived through and within annually, and I argue that the ocean was the same kind of world that those of the period *purposefully avoided* living through and within. When analyzing any cultural or psychic artifact of Medieval Western Europe, examining the said artifact's description within the Bible is often the best way to start. For the ocean, this comes easily, since the cosmological relation between the land and the sea is articulated in the first chapter of Genesis.

Of the first verses of Genesis in the King James Bible, it is the second that is often skipped over in popular retellings. After God creates the heaven and the earth, the book of Genesis clarifies that, "the earth was without form, and void; and darkness *was* upon the face of

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[44] Burke, *Popular Culture in Early Modern Europe*, 202.
[45] Scribner, "Carnival and the World Turned Upside-Down," 319.

the deep. And the Spirit of God moved upon the face of the waters."[46] Fundamental to the Abrahamic worldview, then, is the idea that the ocean is that which is without form, a dark void that lacks any internal difference. Alain Corbin describes the primordial Biblical ocean as such: "This quivering expanse, which symbolized, and actually was, the unknowable, was frightful in itself. There is no sea in the Garden of Eden. There is no place within the enclosed landscape of Paradise for the watery horizon whose surface extends as far as the eye can see."[47] The ocean marked the border of God's Creation, divorcing it from the possibility of being part of the "real world," of the nature intentionally crafted by God. This construction made the ocean anti-human as well as anti-nature, "Since Creation was organized around the appearance of man, who was both its goal and its focus, this vestige without form remained alien to him. A creature fashioned in the image of God would never make his abode outside the garden or the city."[48]

As a complement to the Creation tale told in Genesis, the ocean's role in the Apocalypse of Revelations is to herald the end of earthly nature. "On the Day of Judgment the deepest sea creatures, demonically hidden in their submarine lairs, will be brought to the surface by a wrathful God,"[49] and after the Rapture has been completed, "the first thing which the author of the Book of Revelation notices in his vision of the new heaven and earth at the end of time is that 'there was no more sea.'"[50] The end of God's Nature as we know and live in it is marked by the appearance of the anti-natural oceanic denizens upon the shore, and only through this inversion can man live in a post-Rapture world unmarred by the deep, aquatic shadow of Creation.

This characterization would only strengthen as European Catholic theology emerged after the fall of the Roman Empire. Central to the belief in an anti-natural ocean was the doctrine that

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[46] *The Bible*. King James Bible Online, https://www.kingjamesbibleonline.org/Genesis-Chapter-1/, accessed Feb 20th, 2023.
[47] Corbin, *The Lure of the Sea*, 2.
[48] Ibid.
[49] Brayton, *Shakespeare's Ocean*, 24.
[50] Ibid.

the deep sea was a "watery monsters' den…a damned world in whose darkness the accursed creatures devoured one another."[51] The figure of the "monster" as an inverse of man crystalised the fear of, "that state of barbaric vagueness and disorder out of which civilization has emerged and into which, unless saved by the effort of gods and men, it is always liable to relapse,"[52] and the ocean became the mythological repository for these creatures from "before civilization." This belief in ancient monsters primed the peoples of Western Europe to understand the ocean as a home to primordialness itself, a place where time has not moved forward since Creation.

Chief amongst these ancient oceanic monsters within the Western European psyche was the Whale. "Whales have long symbolized the sea itself; emblems of marine ontology, they have been seen as embodying the inaccessibility of the deep."[53] Unlike Maori, Polynesian or Ancient Greek culture, Medieval Western Europeans lacked any kind of culturally organized diving practice due to their belief that what lurked under the waves was outside the realm of the divine. This meant the few Europeans of the period who even saw Whales usually perceived them as daunting shadows upon the water rather than creatures that could be met eye-to-eye. Their vaguery of shape, massive size, and anti-natural habitat culminated in, "the demonization of whales in medieval Europe. For centuries associated with the demonic and the unknown, whales were less familiar than monstrous, evidence of primal chaos and the punitive Flood."[54]

The contexts in which Western Europeans of the era could see Whales clearly were beachings, which attracted their own mythology. Due to a curious coincidence of Whales stranding themselves on Dutch shores often at times of great civil and international conflict, "The spectacle of dying whales on the beach was viewed as a portentous drama of

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[51] Corbin, *The Lure of the Sea*, 7.
[52] Brayton, *Shakespeare's Ocean*, 23-24.
[53] Brayton, *Shakespeare's Ocean*, 79.
[54] Brayton, *Shakespeare's Ocean*, 117.

national-political and soteriological significance."[55] A Whale beaching at the height of tension between two fiefdoms could be read as an omen that war would soon occur, for example. Observers at the sites of these beachings were recorded as believing that Whale corpses were, "disturbing signs of the divine will that evoked the biblical Flood."[56] I would argue that in addition to their connection with the Great Flood, Whale corpses may have become oracular due to the fact that to see one on land felt like receiving forbidden knowledge from an otherwise inaccessible world. A beast usually seen as a shadow upon the waters was suddenly given concrete form.

It should be noted that up until the sixteenth century, European illustrations of Whales in manuscripts and paintings depicted them as large fish or sea serpents. For those who ventured to a Whale beaching and expected to witness an animal like they had seen before in popular imagery, the revelatory shock of discovering a scaleless, smooth-skinned corpse must have been great. In a frightening parallel to the depths throwing up its wretchedest monsters to the surface during the Rapture, a Whale corpse was a material object that suddenly granted upon its viewer knowledge that was quite literally from the beyond.

If the oracular reception of beachings came from the Whale's psychospiritual position as a monster from the inverted anti-natural ocean, then the Indian Ocean was a doubly-inverted space home to even stranger monsters. For Medieval Western Europeans, "The underwater and the Southern Hemisphere were both known as inverted spaces—the first an inversion of land, the second an inversion of Europe."[57] Actual knowledge of the geography and peoples surrounding the Indian Ocean was lost by Europe after the fall of the Roman Empire. This led scholars,

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[55] Brayton, *Shakespeare's Ocean*, 127.
[56] Ibid.
[57] Ann Elias, *Coral Empire*: *Underwater Oceans, Colonial Tropics, Visual Modernity*, (Durham: Duke University Press, 2019), 41.

clergy, and common folk to fill in the gaps with myth. To demonstrate the divide between the actual Indian Ocean and the mythic one dreamt by Europeans of the period, I include the following from medievalist Jacques LeGoff:

> The medieval West knew nothing of the real Indian Ocean. As late as the mid-fifteenth century, the Catalonian mappemonde in the Bilbioteca Estense in Modena shows utter ignorance of the Indian Ocean. On the planisphere of Fra Mauro of Murano (1460), the east coast of the Persian Gulf 'no longer has the form of land.' Despite his use of Marco Polo, Martin Behaim's globe of 1492 shows no knowledge of India. South Africa, Madagascar, and Zanzibar are depicited on it in extravagant and fantastic form.[58]

This lack of knowledge led Western Europeans to believe that, "The lands of the Indian Ocean were…populated by fantastic men and animals, a world full of monsters of both kinds."[59] Like the monsters of the deep, the myths of these fantastic men and beasts originated from, "a conception of India as *anti-nature* and of its marvels as 'counter-natural' phenomena."[60]

In this myth, the Indian Ocean not only held the same oneiric qualities as the Atlantic but the lands it touched were turned topsy-turvy by its presence. This was most clearly articulated in rumors of, "the islands, the innumerable 'fortunate isles' which were supposed to be the pride of the Indian Ocean, a sea dotted with a myriad of islands."[61] Europeans projected onto these islands,

> a vision of a world where a different kind of life was lived, where taboos were eliminated or exchanged for others. The weirdness of this world produced an impression of liberation and freedom. The strict morality imposed by the Church was contrasted with

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[58] Jacques LeGoff, *Time, Work & Culture in the Middle Ages*, trans. Arthur Goldhammer (University of Chicago Press: 1980), 189.
[59] LeGoff, *Middle Ages*, 196-197.
[60] LeGoff, *Middle Ages*, 195.
[61] LeGoff, *Middle Ages*, 196.

> the discomfiting attractiveness of a world of bizarre tastes, which practiced coprophagy and cannibalism; of bodily innocence, where man, freed of the modesty of clothing, rediscovered nudism and sexual freedom; and where, once rid of restrictive monogamy and family barriers, he could give himself over to polygamy, incest, and eroticism.[62]

In a land defined *by* its ocean rather than *against* it, all that is unacceptable in terrestrial Europe is the status quo in aquatic India. LeGoff describes the mythical India and its ocean as the psychic space where medieval Europe, "discovered a mirror image of itself, an upside-down world; it was turned back in on itself by the anti-world of which it dreamed, the oneiric and mythic archetype of the *antipodes*."[63]

I hope that the descriptions of the carnivalesque and the oceanic in Medieval Western Europe illustrate eerie parallels by their mere juxtaposition. That said, their specific connection bears more elaboration. Though there are many psychic overlaps between the carnivalesque and the oceanic that could be drawn forth, the two that are most essential to the aquatic intellectual heritage we grapple with today are "lowness" and primordiality.

As discussed earlier, the practices of Carnival revolved around upending the European hierarchy that placed activities, art forms, organisms, life processes, and even body parts into "low" and "high" positions. According to Bakhtin, within this system,

> "Upward" and "downward" have here an absolute and strictly topographical meaning. "Downward" is earth, "upward" is heaven. Earth is an element that devours, swallows up (the grave, the womb) and at the same time an element of birth, of renascence (the maternal breasts).[64]

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[62] LeGoff, *Middle Ages*, 197.
[63] LeGoff, *Middle Ages*, 198.
[64] Bakhtin, *Rabelais and His World*, 21.

White and Stallybrass refine this concept further, arguing that, "Cultural categories of high and low, social and aesthetic…but also those of the physical body and geographical space, are never entirely separable."[65] Thus, the cultural categories of high and low became psychically confused and geographically interlinked with spaces of vertical extremes. Not only was solemn prayer high and bawdy revelry low, but the hilltop upon which an abbey sat and the field where the Carnival market was held took on these same values. A genuine belief that spaces of higher elevation were closer to Heaven and the inverse were closer to Hell only strengthened the connection between literal lowness and the carnivalesque.

Harkening back to the ocean's position in Genesis and Revelations, the same correlation between low elevation and "low" cultural values is vital to the Medieval Western European attitude towards the aquatic. "Though bodies of water do tend to lie lower than the land, the idea that the ocean lies on a cosmological plane that is 'down,' and therefore in a timeless and unchanging space that predates the Creation, has been a perdurable one."[66] This belief even predates the writing of Genesis, as it was Plato who articulated the idea of functionally infinite abyssal depths:

> Plato's model, which suggested that water passed through the centre of the earth, continued to be widely accepted [throughout the Medieval period]. This belief in a subterranean connection between the earth and the ocean lent credence to the idea of the existence of horrible caverns at the bottom of the seas. Cultural imagery was haunted by the idea of waters moving deep below.[67]

It is no coincidence then that the phrase "the deep" can represent the entirety of the ocean, including shallow waters. By referring to the sea as a whole as "the deep," every aquatic habitat

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[65] Stallybrass and White, *Politics and Poetics of Transgression*, 2.
[66] Brayton, *Shakespeare's Ocean*, 25.
[67] Corbin, *Lure of the Sea*, 11-12.

becomes synecdoche to the deepest part of the ocean, which cements the idea that its lowest point contains its truest essence. This very depth was believed to have a corrupting force that was at least in part responsible for the dark chaos of the ocean. Until the nineteenth century, Western Europeans held that "The sea itself seemed to be rotting. One of the most firmly held beliefs of neo-Hippocratic medicine in the seventeenth and eighteenth centuries was that its emanations were unhealthy."[68] The very lowness of the ocean associated it with the rotting stink of Carnival and Early Modern city streets as perceived by the European aristocracy, spaces believed to transmit disease through a dark, sinister miasma.

Tying these lownesses together is the "sinking" theory of low culture advanced by the early folklorists. In the late nineteenth and early twentieth centuries, these scholars put forward the idea that, "the culture of the lower classes…was an out-of-date imitation of the culture of the upper classes…Images and themes, songs and stories gradually 'sank', as they put it, to the bottom of the social scale."[69] This theory imagines cultural artifacts as stones tossed into the sea, with the lifestyle and practices of the peasants sifting through its murky bottom. Though the original proponents of the sinking theory were German, this view was adopted across the continent. In the eighteenth century, "The mobility and tendency to emulation of English society increased the speed and the depth of the 'sinking' process from high to low culture," though it is vital to note that, "'rising' was also a feature of the new society; it would not be long before Queen Victoria patronised the circus and the public schools took up football."[70] Peter Burke also elegantly refutes the sinking theory, writing that,

> the sinking theory is too crude, too mechanical, suggesting as it does that images, stories or ideas are passively accepted by popular painters, singers, and their spectators and

[68] Corbin, *Lure of the Sea*, 16.
[69] Burke, *Popular Culture in Early Modern Europe*, 58.
[70] Golby and Purdue, *Popular Culture in England, 1750-1900*, 40.

> audiences. In fact they are modified or transformed, in a process which looks from above like misunderstanding or distortion, from below like adaptation to specific needs.[71]

It should be noted that these major critiques of the sinking theory are not written until the 1980s. For close to a century, the idea that low culture was apishly crafted out of the sunken remnants of high culture remained at least popular within folklore studies, if not dominant.

The sinking theory was so widespread because it was one of the key ideologies within "the discovery of popular culture," which itself, "was part of a movement of cultural primitivism in which the ancient, the distant and the popular were all equated."[72] Carnival practices were of key interest to this group of folklorists, because most of the early folklore scholars,

> came from the upper classes, to whom the people were a mysterious Them, described in terms of everything their discoverers were not (or thought they were not): the people were natural, simple, illiterate, instinctive, irrational, rooted in tradition and in the soil of the region, lacking any sense of individuality (the individual was lost in the community).[73]

For these early folklore scholars in the nineteenth and twentieth centuries and for the European aristocracy at large since at least the sixteenth century, peasant practices were always already backward, ancient, and primordial. "For the discoverers, the people *par excellence* were the peasants; they lived close to nature, they were less tainted by foreign ways and had preserved primitive customs longer than anyone else."[74] In some ways, they were not entirely incorrect about the age of peasant Carnival traditions, as "Some scholars have sought the origin of the carnival play in pagan rites and rustic pageants at the onset of springtime, which were to drive

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[71] Burke, *Popular Culture in Early Modern Europe*, 60.
[72] Burke, *Popular Culture in Early Modern Europe*, 10.
[73] Burke, *Popular Culture in Early Modern Europe*, 8-9.
[74] Burke, *Popular Culture in Early Modern Europe*, 22.

out winter and enthrone his successor."[75] Historian William Addison illustrates that some fair practices predate European Christianity, citing that,

> We know that many of our ancient fairs are held on the local patronal festival; but it does not necessarily follow that even with these the fair did not predate the church. It is, in fact, much more probable that when the church was built…it was given the patronage of the saint whose festival fell nearest to the time of the local fair.[76]

However, much like the fixed primordiality of the ocean depths that remained unchanged since Creation, these early folklorists contended that these peasant practices had been static for millenia. These scholars, "tended to locate [folk practices] in an undefined 'primitive period'...and to believe that pre-Christian traditions had been handed on unchanged for thousands of years."[77] This position was even held by those who organized Carnival fairs of the period these folklore scholars were fascinated by, as "official culture locates changes and moments of crisis very firmly in the past. The official perspective of carnival was to look backwards to the past and use it to consecrate the present."[78]

Here begins the construction of a formula for ordering the world within a high and low hierarchy that amalgamates the carnivalesque, oceanic, and primordial into a single entangled concept on the low side, and the Lenten, terrestrial, and modern on high. All that is low becomes in some way representative of Nature, all that is high becomes a marker of Culture, and the tension between the value of these two states of being in the world became a major intellectual and practical struggle from the Renaissance through to today. In this hierarchy, Carnival becomes the time in which people are their most Natural, as during this time of year, "The rules of culture

[75] DuBruck, "German Carnival Plays," 62.
[76] Addison, *English Fairs*, 6.
[77] Burke, *Popular Culture in Early Modern Europe*, 21.
[78] Scribner, "Carnival and the World Turned Upside-Down," 320.

were suspended; the exemplars to follow were the wild man, the fool, and 'Carnival', who represent Nature, or in Freudian terms, the Id."[79] This perceived temporary lifting of Culture itself turned men into animals, which disturbed the Christian cosmology that specifically set Humans apart from beasts at the onset of Creation. Carnival seemed so animalistic in part due to the incorporation of beasts into the low Nature/Carnival/Ocean/Primordial amalgamation. Certainly during the Medieval and Early Modern periods, and arguably still to this day, "Animals, as part of nature, are metonymic of the wild; they may possess social organization but are not seen as producing social organizations, cultures, or cultural products. Nor are those organizations seen as subject to historical change and development."[80] To have a time of the year in which Humans became more like animals became even more disturbing in the Early Modern period, as:

> Early moderns saw the line between human and animal as a boundary constantly under threat and in need of shoring up in acts of discursive articulation centered on establishing and maintaining a firm boundary between human and brute beast. This boundary was iteratively constructed in contradistinction to correlative beings on a 'lower' ontological plane— animals that could be killed without penalty.[81]

As indicated earlier, beginning in the early days of European Christian theology, the ocean was understood as home to the lowest, most ancient monsters imaginable, as well as primordialness itself. It was understood that, "'The sea, in fact, is that state of barbaric vagueness and disorder out of which civilization has emerged and into which, unless saved by the effort of gods and men, it is always liable to relapse."[82] Just as God once threatened to return the whole world to

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[79] Burke, *Popular Culture in Early Modern Europe*, 190.
[80] Jane C. Desmond, *Staging Tourism: Bodies on Display from Waikiki to Sea World*, (University of Chicago Press: 1999), 147.
[81] Brayton, *Shakespeare's Ocean*, 114.
[82] Brayton, *Shakespeare's Ocean*, 23-24.

that barbaric state during the Great Flood, all of high Culture could be reduced back to low, primordial Nature at God's whim.

This relationship between Carnival, the ocean, primordiality, and lowness would not remain the same throughout the centuries, despite the irony of their mutual description as forever unchanging. As the regular crossing of the Atlantic and then Indian Oceans became vital to ever-growing colonial projects, Western Europeans were forced into greater familiarity with the sea. These same colonial projects demanded mass trade that could not be filled by the person-to-person model offered at Carnival markets, especially by the Industrial Revolution of the nineteenth century.

As the Renaissance was birthed out of the Early Modern period, "Between 1660 and 1675, the mysteries of the ocean began to fade with the progress made in England by oceanography. In the same period, Satan began to disappear from the Western intellect,"[83] and shortly thereafter the newly formed bourgeois aristocracy, in alliance with Puritan social reformists, began a sustained campaign of administrational violence against Carnival celebrations. As the most prominent artifact of popular culture among the lower classes,

> it seems likely that distaste for [Carnival] among influential sections of the educated increased during what is conventionally known as the modern period. Religious reformers strove to make men more godly while the effect of the Enlightenment was to raise hopes that they might become more rational. Popular culture appeared neither godly nor rational.[84]

This growing distaste was accompanied by, "a major shift in religious mentality or sensibility. The godly were out to destroy the traditional familiarity with the sacred, because they believed

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[83] Corbin, *Lure of the Sea*, 18.
[84] Golby and Purdue, *Popular Culture in England 1750-1900*, 10.

that familiarity breeds irreverence."[85] This major shift brought under scrutiny the Carnival travesties that many clergy feared induced a rebellious spirit into the peasantry. At the same time, European culture was gaining a familiarity with the sea that catalyzed into a strange mix of irreverence and the sublime.

To illustrate the assassination of Carnival in Western Europe, there is no better example than the history of St. Bartholomew's Fair, the longest-running carnivalesque celebration in England. Though held in August, outside of the time frame of Carnival, "There is a sense in which every festival was a miniature Carnival because it was an excuse for disorder,"[86] and its death is both concurrent with and instrumental to the ending of Carnival festivals throughout the rest of Western Europe. Many apocryphal stories surround the origin of the fair, but what is known for sure is that it was founded by the infamous Rahere, court jester of Henry the First:

> Rahere's is an old story. Weary of the vanities of court, he prayed that a worthier life might be offered to him, and in answer the Apostle Bartholomew came to him in a vision and bade him build a priory at Smithfield, where he might live, with such monks as would join him, the life of prayer and charity. Rahere obeyed the apostle and was himself made prior; but the jester was not dead in him. The clown must have his public, and in order to attract attention to his priory Rahere put out tales of cures and miracles performed at the altar in his church, and though he was eventually denounced as an imposter the public were not to be undeceived. The jester's fair, chartered in 1133, ten years after the foundation of the priory, outlived the saint's and the merchant's, and was only suppressed after prolonged agitation in 1855, by which time it had flourished for more than seven hundred years.[87]

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[85] Burke, *Popular Culture in Early Modern Europe*, 212.
[86] Burke, *Popular Culture in Early Modern Europe*, 199.
[87] Addison, *English Fairs*, 50-51.

Shortly after its chartering, St. Bartholomew's Fair became the most popular fair in London, and in the mid-eighteenth century with, "improvements in roads [that] made it possible for the better organised and more affluent showmen to move around regional circuits appearing at all the principal fairs,"[88] the most popular fair in all of England. Though technically only chartered for three days, the day before the patronal feast of Saint Bartholomew, the day of, and the day after, in keeping with carnivalesque tradition the fair always ran for at least a fortnight. Affection and nostalgia for St. Bartholomew's Fair grew in London over the centuries to the point that it was often referred to as "Old Bartlemy."

After almost six centuries of relatively unfettered feasting, dancing, and the like, the fair received its first challenge. "In the year 1701, Bartholomew Fair was presented as a nuisance ('next only to that of the play-houses') by the Grand Jury of London,"[89] and the subject of forcibly ending the celebration was debated for seven years. Though lengthy, I have included a large portion of the Grand Jury's 1708 resolution on the subject of St. Bartholomew's Fair as it succinctly encapsulates the ideologies that culminated in the death of Carnival:

> This Court taking Notice that the Fair of St. Bartholomew, according to the Original Grant thereof, ought to be holden Annually Three Days, and no longer. And that by continuing the said Fair for Fourteen Days, as of late hath been practised, and the Erecting and Setting up Booths in Smithfield of extraordinary Largeness, not occupied by Dealers in Goods, Merchandises, etc., proper for a Fair; but used chiefly for Stage-plays, Musick and Tipling (being so many Receptacles of vicious and disorderly Persons), Lewdness and Debauchery have apparently encreased, Tumults and Disorders frequently arisen, and the Traffick of the said Fair, by the Traders and Fair-keepers resorting thereto,

[88] Golby and Purdue, *Popular Culture in England 1750-1900*, 37.
[89] Morley, *Memoirs of Bartholomew Fair*, 351.

> greatly interrupted and diminished. After long Debate, and serious Consideration had of the same, and being desirous to put a Stop (so far as in them lies) to the further spreading of Wickedness and Vice, to preserve the Peace of Her Majesty's Subjects, and restore the said Fair to its primitive Institution, and the Traders resorting thither, to the full enjoyment of their Trades, without any hindrance or obstruction. And this Court being of opinion, that no ways will be so effectual for the end aforesaid, as reducing the said Fair to its ancient Time of Continuance, doth *unanimously* resolve, and so order, that for the future, the said Fair shall be kept Three Days only, and no longer.[90]

This resolution did not actually limit the celebration of the Fair to three days at first, largely due to public outcry with, "care for the revenues of St. Bartholomew's Hospital being the chief reason assigned, as being the reason most likely to engage the public sympathy."[91] However, after this resolution was made public,

> the temporary suppression of May Fair was contrived in Westminster. The gentlemen of four successive Grand Juries for the County of Middlesex and the City of Westminster, made presentments of it in terms of abhorrence, as a vile and riotous assembly. Three of these juries took special notice of the 'commendable zeal and worthy to be imitated care' of the magistrates of London, in the limitation of their Fair in Smithfield.[92]

Even though it took until 1808 for St. Bartholomew's Fair to actually be limited to three days, many Carnival celebrations across England and the European continent were suppressed to three days or had their charters revoked in the wake of the decision made by the Grand Jury of London. As historical context for this decision, it is vital to remember that,

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[90] Morley, *Memoirs of Bartholomew Fair*, 394-395.
[91] Morley, *Memoirs of Bartholomew Fair*, 386.
[92] Ibid.

> The desire of religious reformers to transform men into pious, chaste, sober and godly citizens and of economic reformers to make them equally chaste and sober in the interests of economic efficiency and social discipline achieved a dominant intellectual position and maximum political leverage in the mid-seventeenth and again in the early nineteenth centuries.[93]

Meanwhile, as the domestic excitement of Carnival was strangled by increasingly harsh administrational limitations, fear of the mysterious sea was being transmogrified into exotic entertainment to take the place the carnivalesque once held in the Western European psyche. "During the nineteenth century, then the ocean entered the minds, homes, dreams, and conversations of ordinary people. The high seas became a place of travel and adventure, while the ocean's depths were revealed as a fascinating natural environment."[94] In light of the increased familiarity with the sea granted by colonization, the popular Romantic assertion that Nature may be superior to Culture, and the then-recent discovery of the true age of the Earth, this period,

> was when the coasts of the ocean began to appear as a recourse against the misdeeds of civilization, as the place where it was easiest to grasp the new sense of time proposed by scientists, and experience the dissociation of mankind's history from that of the earth. This was where the sublime beauty of the ocean and the pathos of its storms unfolded. Here, more than anywhere else, the individual found the means of encountering the elements and enjoying the brightness or transparency of the water.[95]

In a twist of fate, Carnival became the feared, mysterious, low Other as the possibilities of ocean exploration expanded in the nineteenth century. The fair became perceived by the literary aristocracy as a site of grotesque decadence populated by the unclean masses of the peasantry

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[93] Golby and Purdue, *Popular Culture in England 1750-1900*, 44.
[94] Rozwadowski, *Fathoming the Ocean*, 17.
[95] Corbin, *Lure of the Sea*, 53.

and urban lower classes. As year-round industrial trade made the mercantile function of Carnival useless, the fear of many European administrators was that "Once [fairs] lose their commercial function decadence sets in, and it was for this reason that so many were suppressed towards the end of the nineteenth century."[96]

This fear eventually killed Old Bartlemy. By 1840, the Grand Jury of London decreed that the Fair had to strike "away the exhibitions; and from the meagre list of applicants even the dwarfs and giants were excluded, but wild beast shows were allowed."[97] Devoid of licentious plays due to censorship, of wild dancing due to claims that the noise of it disturbed those with houses nearby, and of much trade due to the proliferation of easily accessible year-round markets, there was so little to do at the Fair that almost no one came. This husk of a festival shambled along for a little over a decade until,

> Bartholomew Fair was proclaimed for the last time in year 1855. The sole existing vestige of it is the old fee of three and sixpence still paid by the City, to the Rector of St. Bartholomew the Great, for a proclamation in his parish…There is entire silence now on the historic ground over which, century after century, the hearts of our forefathers have throbbed with the outspoken joys of life, and with the suppressed agonies of death; in which the concourse of a heroic people has in its youth enjoyed the life and the wit of a gross Fair.[98]

Despite the legislation designed to put St. Bartholomew's Fair to death, it was the opinion of the aristocracy that the Fair naturally died off, that, "What it amounts to is that London had outgrown 'Old Bartlemy' and lost the stomach for its full-blooded coarseness and horse-play."[99]

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[96] Addison, *English Fairs,* 27.
[97] Morley, *Memoirs of Bartholomew Fair*, 492.
[98] Morley, *Memoirs of Bartholomew Fair*, 493.
[99] Addison, *English Fairs*, 58.

Writing just four years after the Fair's closing, literary theorist Henry Morley closed his history of St. Bartholomew's Fair with the following passage: "In its humours, we have seen the humour of the nation blended with the riot of its mob. Yet when the nation had outgrown it, a Municipal Court with the help of but a few policemen put it quietly away."[100] By the end of the nineteenth century, every Carnival fair in Western Europe had experienced the same fate, and the festivals in Southern Europe would not last much longer.

With Carnival dead on land and an explosion of interest in the ocean, the shift in Western European attitudes to the aquatic was gifted a ready-made epistemological model: the Oceanic Carnivalesque. As the carnivalesque now constituted a set of games and artistic modes no longer practiced, to be "of the past" when already considered ancient and unchanging was practically the same as being primordial. The Victorian obsession with Darwin's theory of evolution cast the ocean in an even more primordial role than it had occupied before, as it was now known to be the origin point of life itself. When Carnival died as a practice, the low Nature/Carnival/ocean/primordial amalgamation reminded Victorians and the intellectuals of the twentieth century of the carnivalesque whenever they engaged with Nature, or with the primordial, and indeed, with the ocean.

As media technologies expanded in the late nineteenth and early twentieth centuries, so too did the desire to see the newly accessible world under the waves. In Europe and the United States, there were two places where the curious could go to witness marvels from the depths: the cinema and the aquarium. White "explorers" of underwater worlds across the planet such as Frank Hurley and J.E. Williamson were amongst the first and most famous to film within the ocean, and in much of the writing they produced both to supplement their cinematic work and satiate a public desire for tales of their adventures, we can see the unmistakable legacy of the

[100] Morley, *Memoirs of Bartholomew Fair*, 494.

primordial Oceanic Carnivalesque. In the novelization of his infamous 1924 film *Pearls and Savages*, the Australian Hurley documents his trip to Papua New Guinea, both to discover the world beneath the waves and to document the "primitive peoples" of its shores. Upon diving within a coral reef, Hurley describes the event as such: "We seemed to have entered a region of fairy castles, where beauty slept everywhere and only the droning purr of our exhaust broke the enchantment."[101] In fact, "fairyland" is the most common word that Hurley uses to describe underwater environments, which would become infectious across much undersea media. He recalls during another dive,

> My coral garden is a small one; but a mile or two square…Yet in every square foot, nay in every square inch, there is more wonder and beauty, than one ever dreamt Creation held. You can walk from Dauko shore waist-deep through tepid waters of crystal sapphire, and tread the paths of silver sand amongst the coral beds. You hold your breath in wonder! The glorious flower garden, with its million blooms, and its gay birds, is second to the fairy dreamland around.[102]

All of his undersea descriptions read like a visit to Old Bartlemy, as he writes of, "the dazzling splendours of the coral, surrounded by the flash and gleam of finny beauty and elegance, and engulfed by unutterable loneliness, I was overawed by the unreality of this sublime world."[103]

In his book dedicated to analyzing the works of Hurley, Robert Dixon writes that Hurley, "mimicked the attractions of the cinema and music hall, often exploiting its sexist and racist patter,"[104] and this can best be seen in Hurley's carnivalesque depictions of the native peoples he encountered while creating *Pearls and Savages*. By their associations with the playful ocean, the

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[101] Hurley, Frank, *Pearls and Savages: Adventures in the Air, on Land and Sea - in New Guinea*, *by Capt. Frank Hurley*, (New York: G.P. Putnam's Sons, 1924), 351.
[102] Hurley, *Pearls and Savages*, 104-105.
[103] Hurley, *Pearls and Savages*, 53.
[104] Robert Dixon, *Photography, Early Cinema and Colonial Modernity: Frank Hurley's Synchronized Lecture Entertainments*, (Anthem Press, 2011), 173.

indigenous peoples living in Papua New Guinea become primordial clowns that Hurley exploits for his own amusement. Upon reaching a village built on the shore of Lake Murray, Hurley writes that, "Everything was inexpressibly crude and primitive. We had entered the Stygian home of prehistoric swamp-dwellers living by the shores of a primeval sea."[105] When describing their mode of dress, he describes it as, "the height of prehistoric fashion–a chic grass mode that begins at the waist and ends at the knees; perhaps in the near future your silk bag will carry a wardrobe, for it seems to-day that the ultra-modern is reverting to the prehistoric!"[106]

Where Hurley wrote companion books to his filmic travelogues, J.E. Williamson was an underwater cinematographer who both made his own undersea documentaries and worked in Hollywood as an aquatic specialist for fiction films. In his autobiography, *20 Years Under the Sea*, Williamson fondly recalls a career operating within the Oceanic Carnivalesque. In describing a typical shoot, he writes, "I was to visit the fishes in their home in the coral fairyland, record their life movements and habits, their colour changes; how they appear to make love, fight, make up, and consume one another."[107] He also literalizes this connection between the ocean and the Carnivale, as when describing the perils of communication disconnect between a suited diver and the ship's crew he's connected to he admits, "It is a topsy-turvy world, this realm of the diver. What means something of vital importance to the man up above may mean nothing at all to the man in the suit down below."[108]

The works of both of these men were in turns deeply inspired by the history of the public aquarium, and subsequently served as inspiration to the design and rhetoric of public aquariums in their wake. As the most readily accessible visions of the aquatic as mediated through cinema,

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[105] Hurley, *Pearls and Savages*, 379.
[106] Ibid.
[107] J.E. Williamson, *20 Years Under the Sea*, (Boston: Ralph T. Hale & Company, 1936), 253.
[108] Williamson, *20 Years Under the Sea*, 108.

the attitudes that Hurley and Williamson brought with them underneath the waves reverberated through public discourse and ideology. I open the next chapter with a description of the complicated history of public aquaria, but before I move on, I would like to highlight one thing that will become dire to the rest of this work: just as the play of Carnival in the Medieval period offered a very real avenue for the critique of structuring hierarchies of the time, so too can we harness this power within the Oceanic Carnivalesque. If Old Bartlemy and its many riotous siblings were silenced on land to prevent this critique, perhaps the best way to rekindle it is through the carnivalesque play we can find with our aquatic others within the modern institution of the aquarium.

Building the New Aquarium: Designing for Interspecies Play with Aquatic Others

The first public aquarium in the United States was housed in Barnum's American Museum, located in what is now the Northern Financial District of Manhattan, New York City. The museum opened to the public on January 1st, 1842, though the exact date P.T. Barnum added the aquarium is unclear. However, it is clear that the aquarium was made available for public viewing by June 1st of 1858 at the latest. The United States' first high-profile aquaria enthusiast, Henry D. Butler, opens up his freshwater and saltwater tank maintenance handbook *The Family Aquarium* with a description of his June 1st, 1858 visit to the American Museum's aquarium. He remarks, "As the great pioneer of the AQUARIA in the United States, Barnum's American Museum, in New York, presents, of course, that variety and perfection in the number, quality and surpassing finish, of its specimens in this particular branch of art."[109] Though Butler compliments the "appropriate fish" and "useful and ornamental mollusca,"[110] he makes no mention of the two infamous Beluga Whales that were central to Barnum's advertising of the aquarium.

For twenty-five cents, visitors could wander the five stories of the museum. For most of them, this would be their first time seeing someone with dwarfism such as General Tom Thumb, or a woman with hirsutism like Josephine Clofullia, and indeed it would be the very first time that almost any American would have ever seen a fish swimming behind glass. The connections between the old Carnivale's sensationalization of disabled and racially othered bodies as "monstrous" and the new monstrous bodies of the Oceanic Carnivalesque were already being articulated, even in this early form. As Ann Elias asserts, "Aquariums magnify the view beyond and produce the illusion of closeness to the underwater but maintain a rigid separation between

[109] H.D. Butler, *The Family Aquarium; or, Aqua Vivarium* (New York: Dick & Fitzgerald, Publishers, 1858), v.
[110] Butler, *Family Aquarium*, vi.

human and nonhuman life."[111] What Barnum offered to guests for twenty-five cents was the opportunity to distinguish their own bodies from monstrous ones. In 1865, the American Museum caught fire, reducing most of Barnum's tools of rigid separation to ash and boiling the inhabitants of America's first public aquarium alive. Five years later, Barnum opened his first traveling circus.

I begin with this story because the trajectory of Barnum's American Museum, from carnivalesque boundary project to flaming heap, serves as a microcosm for what I believe to be the historical trajectory of the modern aquarium as a material cultural form. If Barnum's aquarium was the United States' first foray into trapping aquatic bodies to illustrate the topsy-turvy world beneath the waves, then you can feel the flames roiling when you walk into any aquarium today. With rising global temperatures and sea levels, visiting the aquarium as it was originally intended now reinforces terrestrial separation from the oceanic world which we are entangled with more and more by the day.

Could there be another way to live with the animals on the other side of the glass? Is it possible to design aquarium interactions not to reinforce and enact difference, but to create equitable joy *through* difference? These are the questions I seek to answer herein. I argue that by reimagining interspecies encounter design as a tool to encourage equitable play between Humans and aquatic animals, aquariums which currently enforce the rigid separation of aquatic and terrestrial worlds can instead become spaces for modes of joyous living during and after the global climate crisis.

As a theoretical framework to undergird this imaginative design project, I play with ideas gifted to me by Ursula K. LeGuin. More known for her fiction but also a poignant literary

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[111] Ann Elias, *Coral Empire*: *Underwater Oceans, Colonial Tropics, Visual Modernity*, (Durham: Duke University Press, 2019), 6.

theorist, LeGuin once wrote a short essay titled “The Carrier Bag Theory of Fiction,” from which I take her concept of “spear” and “carrier bag” stories. She ties archetypal narrative structures to the neolithic “spear” of hunting and “carrier bag” of gathering, arguing that the violent, single-protagonist spear has colonized our modes of storytelling. To tell a carrier-bag story instead, one that molds and shifts to hold the characters and events that are placed inside, is a radical practice of empathy and care. I extend these narrative ideas to play and make the case that aquariums are currently designed to facilitate Human to non-Human spear play. Engaging in carrier bag play instead can chip away at the ideologies of separation around which the aquarium is currently designed.

To illustrate the designs I imagine for this new mode of aquatic-terrestrial relations I tell three cycles of stories centered around my play with three respective groups of animals: Cuttlefish, Rays, and Octopuses. The first cycle is made of true stories from my time playing with these animals within aquarium spaces hostile to such interactions. In the second, I imagine that I have been given a grant by the New York Aquarium to design toys that could facilitate interspecies play within the current physical and ideological boundaries of the modern aquarium. In the third, I envision a space I call the New Aquarium, an aquatic viewing platform built *into* the ocean that entices aquatic beings to come *to* the glass to engage with Humans, rather than entrapping them in tanks within. By imagining the aquarium itself as a game and applying the logics of game design to interspecies play, I argue that carrier bag play can rewrite aquatic-to-terrestrial relations and destabilize the current differential politics of the aquarium as an institution.

Before telling these stories, let’s examine how spear play and carrier bag play each look and feel at the aquarium. LeGuin says the spear narrative asserts that “culture was explained as

originating from and elaborating upon the use of long, hard objects for sticking, bashing, and killing."[112] Spear play at the aquarium takes no more culturally iconic form than tapping on the glass. Despite (or more likely because of) the fact that the widely known "only rule" of the aquarium is no tapping on the glass, this is the most famous way humans play *at* aquarium residents. Utilizing a ludic framework, it becomes clear why tapping on the glass is so popular. If we think of the aquarium at large as a game, watching a fish simply swim by you is not a very engaging interaction as a player. The spear play solution to this game design problem is to tap the glass when the fish draws close: you tap, the fish is startled and then moves in a different direction than it was previously, most likely away from you. As a player, you've made a meaningful interaction: your environment provided feedback to your input which is the minimum requirement for what we can call a game. That right there is the rub: spear play at the aquarium is undergirded by the idea that those behind the glass are game environment rather than fellow players. In fact, spear play allows for only one player, as LeGuin argues that the spear story has only one true character: the hero. "That story not only has Action, it has a Hero. Heroes are powerful. Before you know it, the men and women in the wild-oat patch…are all part of it, have all been pressed into service in the tale of the Hero. But it isn't their story. It's his."[113] Disturbing aquarium fish to provoke their reaction is almost as old as aquariums themselves, as aquarist scholar Judith Hamera describes in reports of late 19th-century encounters with traveling aquariums,

> Even when the tanks were screened at the tops, people attempted physical contact with the fish. "The spectators would now poke their parasols or fan handles through the screens, and when the mesh of the screens proved too small for these, some did not find

[112] Ursula K. LeGuin, "The Carrier Bag Theory of Fiction," in *Dancing at the Edge of the World* (New York: Grove Press, 1986), 151.
[113] LeGuin, "Carrier Bag," 150.

> it too much trouble to use their hat-pins for the purpose. It gave them so much pleasure when they hit them 'right close to the eye.'"[114]

When aquatic others are "Not quite animals and not quite toys,"[115] which Hamera argues is an idea the aquarium reinforces, the only way to play with them is to use them and extract your own joy out of the difference between you and them. Spear play is thus an extractive play: the one with the spear comes in, gets what they want from the play, and then moves on to the next target at which to shake the stick. One does not extract from their peers, so the spear holder must turn their desired playmate into a play*thing*.

Other modes of spear play I have regularly seen at the aquarium include taking flash photography of animals with sensitive eyesight, and I have not been to an aquarium in at least the last six years without eavesdropping on someone who thinks they're the first one to make a joke about eating the fish behind the glass. This play through verbal imaginings of carnivorous violence is actually the kind of play I notice the most at aquariums, even more so than glass tapping. The first time I visited the New York Aquarium, as I stood watching the sea lions a voice snickered from my left, "Imagine if they let loose a killer whale in here." On a more recent trip, I heard the following from a woman staring at the Giant Pacific Octopus' tentacles: "Honestly this is so fucked up but it's making me hungry." At the inception of the aquarist hobby into the United States, people "faced significant limits to empathizing with residents in the tank. How to engage them other than as things or food was not clear or, as yet, scripted."[116] The script may still yet be missing.

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[114] Judith Hamera, *Parlor Ponds: The Cultural Work of the American Home Aquarium 1850-1970* (Ann Arbor: University of Michigan Press, 2012),132.
[115] Hamera, *Parlor Ponds*, 10.
[116] Hamera, *Parlor Ponds*, 21.

How do we write a new script that allows us to interact with aquatic others as fellow players within the aquarium game? Following LeGuin's description of spear narratives, we can look to her carrier bag narratives for inspiration. She says that the carrier bag process is,

> to put something you want, because it's useful, edible, or beautiful, into a bag, or a basket…and then take it home with you, home being another, larger kind of pouch or bag, a container for people, and then later on you take it out and eat it or share it or store it up for winter in a solider container or put it in the medicine bundle or the shrine or the museum, the holy place, the area that contains what is sacred, and then next day you probably do much the same again.[117]

To engage in carrier bag play is to make space for the beautiful, sacred interactions between players and "do much the same again" over and over, like any other great gameplay loop. Carrier bag play starts by viewing your playmate as of equitable status to your own and designing a game that can carry both of your desires, as well as carry possibilities that neither party had initially considered. The best carrier bag play feels like letting a good dance partner lead; there's always enough room for you to step in and improvise off what the other player just introduced. The greatest miracle of carrier bag play is that it's reciprocal and of eternal return: when you start play from a space of mutual reception instead of exclusive imposition, the possibilities expand exponentially, and ecstasy blooms at the center of a positive feedback loop.

Extending Le Guin's carrier bag stories to carrier bag play is dire to our ongoing survival entangled with the multitude of beings we inhabit the planet with, especially those that have been considered as living on an entirely different planet for so long. When also thinking through Le Guin's carrier bag thesis, Donna Haraway writes that,

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[117] LeGuin, "Carrier Bag," 151-152.

> A common livable world must be composed, bit by bit, or not at all. What used to be called nature has erupted into ordinary human affairs, and vice versa, in such a way and with such permanence as to change fundamentally means and prospects for going on, including going on at all.[118]

Haraway even makes an allusion to this composition as a ludic operation. Describing the models needed to build a world that can struggle its way through "the trouble" of the climate crisis as science fictional or just "SF," she claims that even now, "it remains possible—just barely—to play a much better SF game, in nonarrogant collaboration with all those in the muddle."[119] I believe that playing as a method of ethical interspecies worldbuilding is especially suited to how we are already primed to view our aquatic others, living as they do within the ocean that has been pre-carnivalized for us.

Designing for carrier bag play is at the center of the three story cycles I've included below. I use the term design loosely here to refer to focused action with the intent of creating a repeatable experience, which need not be physical or permanent. My playmates in these stories are particular animals that sparked the fire of game design directly between us in our connection through the glass, but that does not mean that they are the only aquatic others that should be designed for. I hope that by telling these stories of Cuttlefish, Rays, and Octopuses, I open the door to carrier bag play design for Groupers, Seahorses, Sticklebacks, Shrimps, Crabs, Parrotfish, Sea turtles, Nurse Sharks, and any other animal held in any tank anywhere.

The logic behind the sequencing of these cycles is to prompt the imagination toward the realization of a possible new, more equitable future with our aquatic others, specifically one that leads to the complete abolition of the aquarium as it currently exists as an institution. Rather than

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[118] Donna Haraway, *Staying with the Trouble: Making Kin in the Cthulhucene*, (Duke University Press, 2016), 40.
[119] Haraway, *Staying with the Trouble*, 56.

jump straight to its destruction, these story cycles are designed to chart a possible path for the aquarium's cultural transmogrification. Since the only way to effectively start mass change in any institution is to begin with its material realities, the first story cycle tells three true stories of the play I have personally engaged with at a variety of aquariums across the United States. Though the tanks and the buildings that house them in which these stories take place are currently modeled to encourage spear play, I hope that the first cycle demonstrates that we can always choose to play in a kinder way, even if it's not the easier way. In the second cycle, I have done my best to be as realistic as possible when imagining the kinds of concessions toward carrier bag play that an institution like the New York Aquarium would reasonably make within a decade or so of public agitation. By envisioning change that still operates within the overall ideological boundaries of the aquarium, I hope that it illuminates a path through which we can trick oppressive structures into making promises that will guarantee their own demise. The final cycle culminates in a vision of what I call the New Aquarium, a space that takes the original premise of the public aquarium as a space, one in which Humans can view oceanic life without getting wet, but revises its means to be as unextractive as possible. This New Aquarium would be built into the ocean and made as enticing as possible for our aquatic others to come and visit, though with no technologies designed to entrap them. With this final cycle, my aim is to demonstrate that we can take artifacts crafted out of centuries of misunderstanding, malice, greed, cruelty, and more and transmogrify them into something guided by beauty and connection.

CYCLE ONE: REAL PLAY AT REAL AQUARIUMS

As mentioned previously, the following three stories describe my play with Cuttlefish, Rays, and Octopuses at various aquariums across the United States. One thing I noticed across

all of the experiences detailed in this section is that other Humans always take notice when you play with our aquatic others in ways you're not "supposed to." To make up a game with the animal behind the glass rather than force your own game upon said animal goes against the unspoken logics behind aquarium design, and people are often more dedicated to upholding these logics than they realize. However, every time someone has actually asked me about my play with our aquatic others rather than just judging from the sidelines, they're always joyously incredulous when I tell them that you really can play *with* aquarium residents. Though it's perhaps too optimistic, playing with aquatic others out in public like in the following stories could be the first step to getting aquarium attendees and designers to reconsider aquatic-terrestrial relations.

Cuttlefish #1

My dad was the stay-at-homer in my family, so he was the one who took me to the aquarium. He and I usually went in the early afternoon since I was homeschooled. A big Science-Fiction fan, my dad has always been a sucker for stories about humans learning to communicate with strange beings from the outer reaches, be they of space or the deep. It should be no surprise then that my dad and I sometimes spent hours at the Cuttlefish tank during our visits to the Scripps Aquarium in San Diego, California. They met all the criteria for my dad's fantasy of human contact with an alien race, and I just really liked creatures with tentacles. One day, he remarked "Look, they talk to each other by raising their tentacles. Let's see if we can try talking to them." I formed my hand into a Cuttlefish-like shape, raised a couple of fingers, and then the Cuttlefish behind the glass raised its respective tentacles right back. If I raised my pinky instead of my index finger, the Cuttlefish would raise its leftmost tentacle instead of its center

one. My dad and I would never leave the aquarium without flashing semaphores back and forth between us and these aquatic others. In fact, I never leave an aquarium without playing this game of hazy semiotics with the resident Cuttlefish to this very day.

At the Seattle Aquarium in March of 2021, I found myself with the first opportunity to show my life partner the semiotic ritual I developed with my father re: talking with Cuttlefish. Though the Dwarf Cuttlefish at this aquarium were much smaller than the European Cuttlefish I had learned to communicate with, my hopes were high. We each formed our hands into Cuttlefish shapes and started doing our best tentacular semaphores. We caught a W-shaped eye almost immediately, and one of the little fellows started chasing my hand around with rapt attention, though with no tentacle signals back. What he (Cuttlefish are usually kept in all-male tanks) did send back were new color patterns: he switched from a sandy pattern mimicking the bottom of the tank to a striking black and white zebra-esque pattern. Believe me, if I could've done it back, I would've. A second Dwarf Cuttlefish followed the first one's lead, following my hand and adopting the zebra pattern. After a few seconds they suddenly gripped each other, tentacles interlocked in a brutal wrestling match. I dropped my hand immediately. I felt like a cruel God invoking Their little subjects to fight for Their amusement! Had I offended them? Had I sent the Cuttlefish equivalent of "fuck you," and the glass forced them to take it out on each other instead of my hand? After some pondering, I realized what had happened: Dwarf Cuttlefish females are significantly larger than males, and my hand significantly larger than them. They weren't offended, they were fighting over my affections!

When my partner and I visited the New York Aquarium together for the first time in September of that same year, we were ready to do our best to communicate to the resident Cuttlefish without sparking amorous aggression. The New York Aquarium houses Flamboyant

Cuttlefish, which are even smaller than Dwarf Cuttlefish, and Common Cuttlefish, about halfway between the size of Dwarf and European Cuttlefish. We tried our luck with the Commons. When we initially tried to communicate with them, the "Spineless" section of the aquarium (where all of the invertebrates are kept at the New York Aquarium) was so crowded that I can only imagine the Cuttlefish were overloaded with visual stimulation. We got maybe one tentacle raised back, though it could've been for any number of reasons unrelated to our interspecies translation game. My partner and I came back thirty minutes before the aquarium closed, and we were delighted to find that we were the only animals with backbones in the whole area. This time, it was just us and the Common Cuttlefish looking right at one another. To this day, I've never communicated so successfully with any species of Cuttlefish. Not only did the cephalopods mimic our finger movements, but when my partner and I mimicked *their* tentacle movements, the Cuttlefish seemed surprised and, in my opinion, overjoyed. All of us, the Cuttlefish, my partner, and I, continued to test the limits of how we could communicate through the differences and similarities between our fingers and tentacles. When the Cuttlefish changed colors to try to explain what they meant with greater depth, though we sadly could not change color back we made sure to keep reflecting their tentacle positions to let them know we were listening to them. Behind us, we realized an aquarium sanitation employee had been watching us for what had clearly been a little while. I smiled at him and said, "I've been doing this for years, if you shape your hand to look like them and move your fingers like their tentacles, they'll raise their tentacles back and talk to you." My partner nodded their head. "Well," the man said with a smile, "I'll just have to try that the next time I'm in here with them."

Rays #1

When I worked as a VIP Tour Guide at LEGOLAND California Resort, one of my favorite duties was to guide families through the onsite aquarium in the morning before its doors were open to the general public. About halfway through the site's intended path was a squat, circular tank filled almost exclusively with Cownose Rays. Cownose Rays almost seem like they were invented by a plushie company to be the hottest new toy for Christmas: their facial features land right in the nexus between puppy, Jersey Cow, and fish. One Cownose Ray in particular always caught my attention, they were the smallest one in the tank, and I have never in my life met a fish with such a thirst for an audience. Before spotting my tour group and I, they would swim their usual course around the tank, but the second we made eye contact, the aquabatics would start. Underwater twirls, barrel rolls, and backflips culminating in a little leap out of the water from this little ray became an ordinary part of my workday. Given how often we saw each other, I experimented a little to see if their taste was for an audience, or just for underwater kinetics. On days where I would react to their show less or not at all, they would stop their aquabatics early. Cheer and smile at each incredible flip, however, and the little Ray wouldn't stop until you literally left the room.

A few years later, on a crowded Sunday at the New York Aquarium, I was face to face with Cownose Rays again for the first time since I had left my job at LEGOLAND. The New York Aquarium has the Rays in a circular tank as well, though much larger than the one I knew before. Remembering my little friend, I wanted to see if kinetic theatrics was a quirk of that one Cownose Ray, or a favorite style of play for the species in general. So, when a Ray would come near me pressed up against the glass, I shot my arms up to the left or the right with zealous enthusiasm. To my delight, the Rays who saw me do this would shoot off in the direction my arms went, and then would circle back for another round. Two of my friends were with me, and

we decided to come back to the tank during the Sea Lion show when we knew it wouldn't be so crowded. With no one else around, all three of us took turns exciting the Rays and receiving their graceful aquabatics in return. Cownose Rays always look like they're smiling, but I swear they were smiling just a little extra that day.

Octopuses #1

With 30 minutes left until close at the Seattle Aquarium, my partner and I were left with one of the most difficult decisions one can bear: who to play with last before going back to terrestrial life. The tank for Seattle's Giant Pacific Octopus is placed in the center of their first exhibit room, and earlier in the day we caused a bit of an attendee traffic jam trying to watch the world's largest Octopus species for as long as we could. We knew we had to go back. The aquarium was completely empty except for us, the Octopus, and a staff member, who told us that our new friend across the glass was named Kraken. He was missing a tentacle on his upper right side. I gently put a palm up to the glass within his line of sight, and he moved one of his arms so we would have been entangled with one another were it not for the transparent barrier between us. I put another palm up, and he another tentacle, and as we worked our way around the tank together it felt like a game of low-stakes Twister. The staff member told us "Yeah, he loves people, he always wants to check everyone out when they come by the tank." Octopuses are supposed to live with a rich assortment of enrichment toys, which Kraken didn't seem to have. It only made sense then that he found that joy with those of us who were willing to turn "checking each other out" into a game of haptic feedback. This made even more sense as I remembered that the brain of an Octopus is distributed throughout its body rather than concentrated all in one place. For an Octopus, "At the base of each arm is a sort of 'peripheral mini brain' that can

control a few of the arm's functions without central brain control, although overall function and coordination are controlled centrally."[120] We weren't just moving together, we were thinking together!

A little over a year later, on my birthday in 2022, my friends and I were in the same "Spineless" section of the New York Aquarium where my partner and I had previously communicated with the Common Cuttlefish. Physically and iconographically central to Spineless is the Giant Pacific Octopus, who lives in the largest tank in the section and whose likeness adorns the entrance to the exhibit. Octopuses have very sensitive eyes so they can camouflage effectively, which means aquarium designers tend to keep them in dimly lit tanks. Unfortunately, this low lighting combines poorly with the Octopus' "star power," making them regular subjects of flash photography. "Most cephalopods have keen visual acuity, can see well in the dark, and can see polarized light…Most cephalopod species also have 'extra-ocular photoreceptors' that are capable of detecting light," and for many species their, "skin can somehow detect light."[121] Imagine if not only your eyes stung after having your picture taken with flash, but your whole body did as well.

As I approached the New York Aquarium's Giant Pacific Octopus, she came up to the glass in much the same way Kraken had done, but this instantly provoked a flash photo frenzy from the other Human guests. She retreated into the hiding space that kept her safest from the onslaught. After a minute, she came back out to head towards me again, the only person in the crowd who hadn't flashed a bright light directly into her eyes, but of course, this resulted in another round of picture-taking that even hurt *my* eyes. I couldn't handle it anymore. I informed the gentleman next to me that flash photography is harmful to cephalopods and he responded,

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[120] Roger Hanlon, et al., *Octopus, Squid, and Cuttlefish: A Visual, Scientific Guide to the Oceans' Most Advanced Invertebrates*, (University of Chicago Press, 2018), 38.
[121] Hanlon et al., *Octopus, Squid, and Cuttlefish*, 39.

"Well, I didn't see a sign saying that," but in a tone much gentler than it seems on paper. He seemed upset at the *aquarium* for neglecting to inform guests of the Octopus' sensitivities, not at me for interrupting his photography. However, he was just one person out of many in front of the tank, and causing a scene was the last thing I wanted to do on my birthday. When I went back several weeks later, two small official signs were stickered to the tank which read "NO FLASH PHOTOGRAPHY." I watched an old woman take a flash *video* of the Octopus instead. That time, I was just too tired to say anything.

CYCLE TWO: IMAGINED PLAY AT A REAL AQUARIUM

These next three stories move from what is currently possible in the modern aquarium to what *could* be possible. By imagining that I have been given a design grant to demonstrate the practical possibilities of the theories I outlined in the first section of this chapter, I envision the three toys I would design to facilitate interspecies play with the same aquatic playmates from Cycle One. I also imagine a nebulous "team" of fellow designers, engineers, and divers who have assisted me in crafting and installing these interventions. I jump into each of these stories at the point of the initial implementation of the toys into the tank and try to capture what I would hope to be the first moments of play sparked by these new interventions. As I am writing this while living in the New York City metropolitan area and have visited the New York Aquarium many times over the past year, I take the tanks and aquatic others therein from said aquarium as the basis for these play tales. By engaging in this critical fabulation, I hope to outline a path for the modern aquarium that leads to equitable more-than-Human joy during the climate crisis instead of the metaphorical flames of its collapse.

Cuttlefish #2

Though it was hell getting everything waterproofed, all of that hard work feels so worth it now that I'm looking right at the Cuttlefish puppet we've installed into the exhibit. Attached to the right side of the tank, the toy is made of two parts: the puppet itself, which is a mechanically articulated facsimile of a Common Cuttlefish outfitted with a few LED displays across its back, and a touchscreen control panel wirelessly connected to the puppet. The Cuttlefish likeness rests inside the tank so the cephalopods can come up and interact with it while the touch screen is placed on the dry side of the glass for Human guests to manipulate. Special care was made in the initial design of the puppet to make sure it would be read by the Cuttlefish as a toy rather than some kind of uncanny doppelganger. It has no eyes, no fin around the mantle, and its tentacles are a bit oversized to make movements clearer. If we've executed the design correctly, the Cuttlefish will view the puppet as a Human views a doll: a toy clearly distinct from the body upon which the body can be mapped.

The Common Cuttlefish are reintroduced to the enclosure since they were put in a holding tank while the puppet was being installed. Before turning the puppet on, I let the Cuttlefish check it out. They are immediately fascinated by it and actually look at me after a bit of inspection. I bring my hand up to imitate their shape as I have so many times before and bring a finger-as-tentacle up. One mirrors my movement back to me. We exchange gestures for a while, but then he flashes a new brilliant pattern at me from his mantle and I know it's time to boot up the puppet. As quickly as I can, I use the control panel to turn the puppet on and flash back the pattern my companion is flashing to me using the puppet's LED displays. I had spent countless hours watching these Cuttlefish talk amongst themselves and I grouped the many patterns I saw into what seem to me (as an outsider to the Cuttlefish language) as distinct

categories. This was difficult, as, “In some species, observers have catalogued full-body patterns and calculated a potential repertoire of nearly 300 combinations of full-body patterns, partial-body patterns, skin texture and body posture.”[122] Luckily for me, my companion is using a pattern I’ve seen many times, a series of gentle pulsating waves that go back and forth between light beige and dark gray, actually one of the first programmed into the puppet. My companion cautiously raises his leftmost tentacle, and all I need to do to raise one back is shift from the Pattern menu to the Movement menu on the touchpad, and raise the leftmost digital slider. While still displaying the beige and gray pattern, the puppet mirrors my companion’s gesture. Clearly excited, the Cuttlefish quickly shifts to a sand-mimicking pattern and raises his two middle tentacles, one of the most common greeting gestures, as we understand it. My skills are being put to the test. I decide to raise the puppet’s two middle tentacles first while I’m already on the Movement menu, and then switch as fast I can to the sandy Pattern so my companion knows he has my full attention.

By this point, the other Cuttlefish in the tank have gathered around to watch our attempt to play through our linguistic differences. I try taking the conversational lead, hoping I don’t say anything too rude. Keeping the sandy pattern, I raise the puppet's leftmost and rightmost tentacles, leaving the rest down. In my hours of observation, I’ve never seen the Cuttlefish perform this gesture amongst themselves so I could very well just be speaking gibberish. Whether it’s because I’ve said something meaningful or my companion is just humoring me, he raises his outwardmost tentacles in turn. We go back and forth leading these rounds of conversation, but after a few minutes not only does another Human want a turn behind *me*, it looks like another Cuttlefish wants a turn behind my companion. I move to the side, and so does my playmate. With my own hands, I flash him my best facsimile of the two middle tentacles

[122] Stephen Hart, “Cephalopods,” The Animal Communication Project, 2023, https://acp.eugraph.com/cephal/.

greeting. To my surprise, he responds not just with his own gesture, but a pattern I've never seen before: a pinkish-white base with flashing brown spots. It looks like my own freckled skin.

Rays #2

Since the Cownose Ray tank at the New York Aquarium is so large, moving all of its inhabitants while we installed their new toy simply wasn't possible. This made my idea for the intervention, a hoop that human guests could move up and down through the glass to provide a little obstacle challenge for the Rays, difficult to implement. Other aquariums have actually already put hoops into their Cownose Ray exhibits, though so far they have only been bolted in one place, usually on the bottom of the tank facing up. These stationary hoops are a great start, but what we've finally implemented today bridges the gap between the "enrichment" that a Human caretaker gives to an animal other and a toy that two playmates can enjoy together.

It took a lot of hard work from our fantastic divers, but the track for the Remote Controlled Hoop has been laid inside the tank and the hoop itself mounted into it. The track starts inside the tank about four feet from the edge, curves up a foot away from the glass, and then continues up vertically another four feet on the glass. The three-and-a-half-foot diameter hoop (designed to accommodate the three-foot wingspan of the largest Cownose Rays) is set upon a telescoping metal rod: one foot long at its shortest and two feet fully extended. This rod is mounted onto a small platform that's bolted to the track on the sides and outfitted with a set of gears on the bottom which slot into the spaces within the tracks. On the dry side of the tank, beneath the glass are two levers capped with large black balls. The lever on the left has a double-sided arrow pointing to the left and right, and the lever on the right has a similar icon but instead points up and down. As one would guess, the left lever telescopes the hoop in and out,

and the right lever moves the hoop up and down the roughly ten feet of track. I pull the telescoping lever to the left. At a speed slow enough to avoid damaging any playmate on the business end of the hoop but just fast enough for exciting mid-course corrections from anyone trying to swim through it, the rod attached to the platform telescopes out. The wattage of the whole apparatus has been carefully considered to invite maximum engagement from the tank's rays. As is well known, "All elasmobranch fishes [such as rays] possess an elaborate ampullary electroreceptor system that is exquisitely sensitive to low-frequency electric stimuli,"[123] and this electrosense is one of the major pathways through which they perceive the world. By setting the wattage to the higher end of what Cownose Rays find enticing and interesting, we hope that they won't expect it to be food, but rather find it stimulating on both a kinetic and electrical level.

Already intrigued by the movement, a little Cownose Ray comes soaring from the top of the tank down to fly through the hoop. I push the vertical lever up and let the platform truck all the way to the top of the track. I watch the gears push the hoop up the track like a zipper. The same Cownose Ray makes a little loop to try the hoop in its new position without swimming around the entire tank and glides through from the other direction. I notice a larger playmate, sifting through the sand at the bottom of the tank, taking notice of the shifting hoop. I try to bring the platform down to encourage their curiosity, but the lever freezes in my hand. Is it jammed? I look up at the track and see that one of the big bottom-dwelling Stingrays has taken to investigating the track with their mouth, triggering the safety sensor in the platform that stops any and all movement that could result in a crushed fin, wing, or nose.

As I wait for the Stingray to finish their discovery, a whole conga line of Cownoses starts swimming through the hoop! One is even so excited that they enter the hoop in a soaring loop-de-loop to go through an immediate second time, though this does cause a bit of a traffic

[123] Jeffrey C. Carrier et. al, *Biology of Sharks and Their Relatives*, (Hoboken: CRC Press, 2012), 370.

jam. In the outcome of this jam, one Cownose bumps their nose into the outer section of the hoop. I wince. In a similar vein to the safety sensor, the hoop was designed to be as soft as possible to lessen the force of impact in situations like this, but even in Human playgrounds, it hurts to fall from the monkey bars or hit your head on the top of the tube slide. I watch the ray in question carefully. Clearly a little shocked from the impact, they float near the hoop with a ponderous look. After a second to shake it off, they're right back to flying through the hoop! I breathe a sigh of relief.

I hand off the controls to one of the divers who laid in the track and then start watching the Rays play with the hoop from the back of the crowd. As the hoop swings up and down, in and out, not only do the Rays play with the hoop, they even start to play with each other away from the contraption. Inspired by the kinetics of their new toy, they spin around one another and even do the same around other fish in the tank. Some of the non-Ray fish seem confused, but others spin right back and a few join the parade around the swinging hoop after playing with the Cownoses. I'm delighted to the point of tears. The curious Stingray from earlier starts to swim against the glass, showing off the oft-adored, iconic Ray mouth. To my surprise, they haul their sizable girth over to the hoop and then drape themself on it! This prevents the larger Cownoses from swimming through the hoop, but a few of the smaller ones try it with the added obstacle of the Stingray. In a moment of tender connection, the Stingray brings their inquisitive nose up as one of the Cownoses glides by. The Cownose extends their small mouth flaps and holds onto the Stingray's nose with them for just a second and then finishes their lap through the hoop. The Stingray shuffles off from the hoop back to the sand.

Octopuses #2

Unfortunately, as mother Octopuses always do, the Giant Pacific Octopus I had come to know at the New York Aquarium passed away shortly after her eggs hatched. As sad as it was for her to not be around to play with this last intervention, it enabled us to make a radical change to the tank itself while no Octopus lived inside it. Instead of placing a toy into the *tank*, we decided to put something into the glass.

My proposal for the toy to the rest of the team went like this: since tank glass needs to be so thick anyway, what's the harm in having two plates of larger curved glass sandwiching a thinner plate that's wired up to an interactive display? This middle plate would contain a set of touch-sensitive LEDs that could shine in different colors depending upon if they detected a touch from the inside of the tank, the outside, or both at the same time. One LED "pad" could display yellow if touched on the inside by the Octopus, blue if touched on the outside by a Human, and then green if touched by both. These pads could be set up in a four-by-four grid with sixteen of them in total, offering enough options for freedom of visual-tactile multispecies expression while providing creativity-inspiring limitations. Maybe a small animation could even be displayed if the Octopus and one to two Humans work together to touch all 16 pads at the same time!

After convincing the team that this could be designed in such a way that the Octopus would assuredly be kept safe from electrocution, we started on the lengthiest construction process of all three interventions. The Spineless exhibit felt strangely empty for the two months it took to complete the tank's new outfitting. The Giant Pacific Octopus so central to Spineless' identity was replaced by a group of Humans fitting curved glass panels into the cephalopod's old enclosure, though attention to the construction was diverted by the excitement surrounding the neighboring Cuttlefish tank's new puppet.

The aquarium's own enclosure designers made a few adjustments while the tank was open. They were kind enough to place the rocks and other decor in such a fashion that it would encourage the tank's new resident to gravitate towards the LED panel, which we decided to place along a roughly two-foot wide section on the right side of the enclosure. Once we installed everything, we gave it a quick Human-to-Human test: I touched the panels from the outside of the glass and one of our divers stuck an arm in from the other side. It worked just as we hoped! We spread out our arms and even managed to get all of the pads covered, which played the little animation we had programmed. It was difficult working with what were functionally sixteen large pixels, but we managed to program in something that looked enough to us like two wiggling tentacles that we were satisfied.

The new Giant Pacific Octopus was housed in the tank as quickly as possible upon our completion since the New York Aquarium rested uneasy without their Spineless mascot. A six-month old male was placed in the tank, already a decent size. To let him fully acclimate to his surroundings we kept the LED pads off for the first month of his stay, which led to no shortage of guests inquiring "What's that weird grid? It gets in the way of looking at the Octopus." We assured these guests that an intervention similar to the neighboring Cuttlefish puppet was in the process of being set up.

Today is the day that we plan on activating the LED pads for the first time since our Human-to-Human test. My team was informed by the New York Aquarium that if our first three interventions increase engagement and attendance enough we will be considered for another round of funding to facilitate even more interspecies play. Since this is the final one we've been granted a budget for, everyone's nerves are high. The new young Octopus has been especially sociable in the month he's lived at the aquarium, so hopes are up that he'll take as much interest

in the LED pads as we take in him. Aquarium staff named him Jacques, which they attributed to his curiosity of land dwellers being equal to Jacques Cousteau's curiosity of the sea.

I'll have no hard feelings against Jacques if he finds our LED pads boring, though that would make me feel like a failure of a toymaker. Trepidatiously, I give the signal to power them on. I wait to see if Jacques takes any notice just from the slight buzz of the activation. He stays curled up in his favorite crevice in between two rocks. I visited him most days after he was introduced to the tank, so my cautious approach can on occasion draw him to the outer part of the tank. Thankfully, he comes up to greet me, suckers against the glass as we share a moment of eye contact. I saunter over to the side of the tank where we've installed the pads. He trails along but stays in the back of the tank a few feet away. I wait, looking at him through the grid of LED pads, hoping his natural curiosity will have him take the first "turn" in the game I've designed for him. He's clearly satisfied just hanging back. It isn't the ideal sequence of events, but I go ahead and press the top left pad to catch his interest. It glows red as I press my finger to it. I leave my finger there for a few seconds and then let go, watching for Jacques' reaction. He shifts a little and comes forward, but still doesn't reach a tentacle to any of the pads. I take the opposite corner, lighting up the bottom right pad in yellow. I resolve to leave my finger there until Jacques interacts with the toy in some way. Staring at the LED I pressed previously, he gives me a curious look. I nod in assurance without really thinking and in response, he places a cautious tentacle on the top left pad. It glows blue from his touch. In a flash, he retracts back to his original hiding spot.

At first, I'm heartbroken, but then I see the thin end of one of his arms crawling back toward the grid. Keeping his other arms and head safe, he tests out the same pad he tried earlier. This time, when it glows blue, he continues to touch it and even tries to coil his arm around the

light to grab it before he realizes it's within the glass. I weigh my options. I can either show him how we can play with it together now and risk scaring him off, or let him continue to explore the grid and risk having him grow bored. I take a chance and put my finger on the same pad, which makes it glow in a vivid purple since we're both touching it. We programmed the LEDs to glow a bit brighter when touched from both sides than when touched from just one, though of course, we kept Octopus photosensitivity in mind.

Jacques swims over, keeping his one tentacle in place so we stay connected through the glowing light that bridges the gap imposed by the tank. I don't dare remove my finger from our shared LED, but I do extend my right hand to touch the three pads in the upper right corner with my index, middle, and ring fingers. These ones glow right within the line of sight of his left eye. His curiosity pulls him away from the LED we've made purple together, but he glomps wholeheartedly onto the corner I've lit up. In his excitement, he pulls his arm away from the top left corner, but in exchange, we make the whole right side of the grid light up in a technicolor array. I lay my whole left arm across the four pads in the bottom row of the grid and Jacques contorts to cover them with three of his tentacles. I laugh. Memories of the game of low-stakes Twister I played with Kraken at the Seattle Aquarium come flooding back to me. I wonder if he's still "checking people out," and if he would like a toy like this in his tank.

When I zone back in from my reverie, I realize Jacques is doing his damnedest to light up every LED and I've been slacking as a playmate. I hail over one of my teammates to place their arms on the left half of the grid while I cover the right. With his eight arms, Jacques just needs to exercise some lateral logistics to cover the whole grid. My teammate and I step back to watch the little animation and Jacques follows suit. I try to catch whatever expression I can from Jacques' eyes as he views our collective win state. Even as connected as I feel to Octopuses, it's always

difficult to get a grasp on what they're thinking. Though the gulf between human intellect and the intellect of other animals has historically been overstated, there is something to be said about the difference between a mind wired for wide social interaction and one honed for a life spent primarily in solitude. Even still, I see more joy in Jacques than I would be able to merely project. I take a step back and let my teammate continue the game with Jacques, who seems insatiable for play after lighting up the whole grid. Taking in the whole scene of those gathered in Spineless, I breathe a sigh of relief. If aquarium guests are even half as enthusiastic about playing with Jacques as we are, I really do believe that they'll start to see him as more than just the plate of roasted tentacles they had at a nice restaurant last week. In my survey of the crowd around Jacques, I notice something. The Cuttlefish in the neighboring tank are watching Jacques, and I realize they must have been doing so this whole time.

CYCLE THREE: IMAGINED PLAY AT THE IMAGINED NEW AQUARIUM

I see two futures that could arise from the implementation of the interventions I've proposed in the previous cycle. In the first, a series of institutional concessions (first by the New York Aquarium and then by public aquariums at large) usher in increasing opportunities for Humans to play with our aquatic others within the boundaries of the aquarium. Eventually, the connections built up person by person lead a critical mass of aquarium attendees to demand the freedom of each species currently held within tanks. I don't think this would happen all at once. Instead, I think a movement would have to occur advocating for the abolition of capture for, at best, an evolutionary family of beings at a time.

I call this the *Blackfish* Model. When *Blackfish was* released in 2013, I believe that it called as many people to action as it did precisely because so many people had been to Sea

World and discovered a moment of connection with the Orcas held there. What's vital is that the mass call to action wasn't to release all of Sea World's aquatic residents, but just the Orcas. The impulse to hierarchize other animals by perceived intelligence and evolutionary proximity to Humans lends credence to the idea that our aquatic others (and non-Human beings in general) exist on a scale of acceptability for capture and display. I feel that even in a future without the interventions I've proposed, the next candidate for removal from this scale after the Orca is the Octopus. After receiving a boost in publicly acknowledged charisma from *My Octopus Teacher*, revelations on Octopus intelligence abound across recent pop culture. Combine this with a penchant for frequent, and at times even successful, escape attempts from tank confinement and you have most of a stirring underdog story written already for any enterprising documentarian.

By accelerating the rate at which aquarium guests make discoveries of connection with aquarium residents, multispecies play interventions like the ones imagined above could facilitate a *Blackfish* moment for every aquarium resident. In this vision of the public aquarium's future, the final mass abolition moment would come for whatever Snails, Jellyfish, or Sardines lay tank side when all others have been freed. With nothing between its walls but water, sand, gravel, rocks, and glass, the aquarium would appear to a viewer from our time like the aftermath of a piscine Rapture. Serving no purpose aside from a painful reminder of the glee we once derived from incarcerating our aquatic others, maybe the most logical decision would be to burn these buildings down along with the institution they collectively upheld. Since Barnum's aquarium went through its own life cycle from boundary project freakshow to flaming heap, would it not be appropriate for the public aquarium as a form to do the same?

The second vision of the future of the public aquarium would seek its transmogrification rather than its destruction. By harnessing the same connection between Humans and our aquatic

playmates and the same resulting *Blackfish* effect, these interventions could serve as the guideposts for the design of an institution I call the New Aquarium. Built to reverse many of the harmful ideologies inherent to what we may term "the Old Aquarium," this new institution would serve to connect Humans with our aquatic others without incarcerating either party, which is vital as "their home" of the ocean looks increasingly likely to become our home as well as sea levels rise.

The most pertinent difference between the New Aquarium and its current-day equivalent is that the New Aquarium would exist entirely underwater. The typical New Aquarium would be built about 500 feet out from the shore, accessible from land via an elevator that boards at the end of a boardwalk pier. Rather than trapping non-Humans within tanks on land, this undersea viewing platform would have large, thick glass walls that would allow guests to view their local marine environment safely. Though some would be disappointed by the lack of animals from "far-off places," that exoticized sense of wonder would be replaced by the New Aquarium's other guiding principle: multispecies play.

Simply putting a large glass box in the middle of the ocean would not be very satisfying for guests or for the aquatic locals. Locals would have little reason to pay attention to this new addition, meaning guests would often enter the New Aquarium and see nothing but water, sand, and perhaps a few drifting fish. There's nothing wrong with this inherently, but I doubt it would entice many Humans to make the trip from wherever they lived. Instead, each New Aquarium would be outfitted with toys and other interventions specifically designed to attract aquatic playmates to the glass barrier through which they could connect with us land dwellers.

In this final cycle of stories, I imagine that the interventions implemented in cycle two snowballed over the years into the complete abandonment of the New York Aquarium and the

subsequent construction of the (cheekily named) New York New Aquarium, built just off the shore of Coney Island. I jump into these stories several years after the completion of construction, where the Humans of an increasingly aquatic New York City come to the ocean to play and connect with each other and with the residents of the Hudson Canyon. With the removal of tanks, the toys implemented into the glass of the New Aquarium are able to provide more free-form play with aquatic playmates. As with the previous cycles, I focus on play with Cuttlefish, Rays, and Octopuses to show how deep the connection with these beings could be forged if we move on from our current ideas of how an aquarium must operate.

Cuttlefish #3

I've been out of New York State for a while working on other projects, but I made sure to be back for the New Aquarium's third anniversary of its opening. Nothing very regal is planned. The aquarium has no entry fee so we rely on rapidly dwindling public funds and the occasional private donation. On the upside, our operating costs are significantly lower than any old aquarium since we don't pay for food or tank upkeep. All of this combined leaves practically no funds for a celebration, but my old team from the New York Aquarium has agreed to meet up at the New Aquarium to reminisce on the past three years.

I descend the elevator at the edge of the pier and come out into the atrium, which to be fair constitutes most of our New Aquarium. With only as much concrete as is necessary, the rest of the structure is made up entirely of thick glass. I'm a little later than the rest of my team, who are already here. We hug and catch up a little, but then get straight to what I've missed most in my months away: playing. My first stop is the "Cuttlefish Translation Station," which received a pretty exciting software update since the last time I was here.

Back when the Cuttlefish puppet was first implemented, no Cuttlefish species could be found in the wild along either coast of the contiguous United States. Previously, the closest one could find a wild Cuttlefish from the shore of Coney Island would be the coast off of Lisbon. Unlike their Octopus and Squid cousins who are comfortable crossing sea beds and open ocean, every known species of the order *Sepiida* historically clung to warm, shallow waters. A team of researchers in 2016 predicted that the Common Cuttlefish, our playmates in the puppet tank, could reach American shores by 2300 due to rising ocean temperatures and a shift in trans-Atlantic currents.[124] They came to this conclusion using a model with "medium mitigation of greenhouse gas concentrations," of which no sort came. The Common Cuttlefish made it to our local marine environment 250 years ahead of schedule, around the time we began sketching designs for the New Aquarium. Though their appearance may have been ecologically distressing, that doesn't mean we shouldn't play with them as new aquatic neighbors.

Since a Cuttlefish puppet hanging out in the open water would've assuredly led to a Sand Tiger Shark swallowing it whole, we went for a different approach. The Translation Station is a wide tablet mounted into the glass on the South-facing side of the New Aquarium, which we observed to be the Common Cuttlefish's preferred hangout spot after their emigration from the other side of the Atlantic. On the dry side, at the center of the screen is a 3D model of a Cuttlefish facing away from the user. Just like the old puppet, there are controls for raising and lowering individual tentacles and a menu to change color and pattern on the model. On the wet side, another screen displays this Cuttlefish model facing forward, enabling any aquatic passerby who speaks the language to talk back. A wet side camera captures the communications of the playmate, and the visual data is fed into the translation program. When we first designed the

[124] José Xavier & Lloyd Peck & Peter Fretwell & John Turner. (2016). Climate change and polar range expansions: Could cuttlefish cross the Arctic?. *Marine Biology*. 163. 10.1007/s00227-016-2850-x.

tablet, we wrote rudimentary code that read the visual data from the combination of color patterns, tentacle positions, and movement and grouped messages into something closer to "vibes" than concrete sentences. If you greeted a Cuttlefish with the 3D model by selecting the pattern and tentacle movement that we designated as "Greeting," a little text box would pop up that said "Hello!" in English if the playmate on the other side did as well. The last time I was here, we had gotten far enough in communication to understand overall emotions. If a Cuttlefish raised their two center tentacles and flashed white, a message displayed on the dry side of the tablet that said "Back off." Though the Human user could create their own answer manually, two prompts appeared: the default pattern with slightly flayed tentacles that we translated as, "Let's be friends," and a mirror of the "Back off" message that we hoped translated a little closer to "Let's respect each other's space" than "Fuck you."

These little pre-programmed messages were available in a drop-down menu for the Human user, which we described as bearing sentiments such as "I'm hungry," "I'm sad," and "I like you." We disabled the black and white "Zebra" pattern that indicates "I want to breed" after a couple of trial runs. The communications back from the Cuttlefish stayed in a similar level of complexity, popping up as a text box just like the initial "Hello!" message. Any communication that we couldn't translate was automatically recorded for later analysis, and a message would pop up on the Human user side that said "We don't know what this means yet, but we encourage you to use the manual controls to see if you can say something meaningful back!"

Once I have my hands on the tablet this time, the first thing I'm delighted to see is a language option: before I tap anything, I must choose between English, Spanish, Chinese, Arabic, Russian, and Hebrew. A little note in the corner explains that more language options will be coming soon. Due to budgetary restrictions, the initial software only operated in English. I

turn to a member of my team who has stuck with the New Aquarium this whole time and say, “Hey! This is awesome, when did you implement this?” Upon detecting me say “Hey” while I’m very close, the tablet automatically opens in English. I start to laugh. My teammate grabs the tablet, exits back to the language select screen and says “Watch this. Ni-hao!” The software opens back up in Chinese this time. They tell me, “We’ve had a couple issues with people nearby but not using it accidentally setting it, but we’ve got the microphone set up in such a way that it usually will only activate if you’re in the user position.” They exit out of the Chinese for me and step aside.

At this point, a few Cuttlefish have already gathered on the wet side of the tablet. I forgot that the screen on their side plays a greeting message every time the tablet is started up on our side, so I’ve rudely just said “Hello!” twice in a row without reading for feedback. On the left of the 3D model are the old two options, Manual and Phrases, but I notice a new option on the other side of the screen. It reads: “I want to say…” I raise an eyebrow and then tap on it. A big microphone icon appears in the middle of the screen with a keyboard below it. Defaulting to the kind of messages I could send the last time, I typed in “I like you.” The 3D model darkened some of the white stripes of the default color pattern to gray but maintained its sepia base color and spread its tentacles out gently. One of the Cuttlefish, one I actually remembered from my last visit due to a missing left eye, swims a little higher than the screen. They flash a very striking pattern that looks to be the reverse of the Zebra-looking breeding one, white with black stripes instead of the other way around, and puts all tentacles up save for the middle two. To my surprise, the tablet echoes forth with the message, “I missed you.” I’m almost brought to my knees by the shock. I quickly switch over to the phrases menu. What have they translated while I’ve been gone?

Scrolling through, dozens of phrases of varying complexity have been added, some of which are differentiated from each other only by a 15-degree difference in the position of one tentacle. Since there are so many phrases to choose from, a search bar has been added to the top. I press on it. The same microphone and keyboard as the "I want to say…" menu appears and I say "I missed you," more as a genuine response than as an input. The 3D model mirrors my playmate's words of tenderness. The other Cuttlefish comes next to their one-eyed companion and flashes a pattern that the tablet translates as, "How have you been?" I look at my teammate, unsure of how much detail the software can capture with this new update. They say, "Try phrases that you'd learn first in a language class, Donde esta la biblioteca kind of stuff." I speak into the tablet. "I went far away for a few months. I'm happy to be here." Before the 3D model plays anything, a message popped up that said "YOU WILL SAY: Went away for a long time. Home is good," with two buttons below that read "SAY IT" and "TRY AGAIN." I pressed SAY IT. The 3D model went through several different color patterns and tentacle movements. All other communications I've seen before have just been one tentacle movement and one pattern. The two Cuttlefish sit watching and then swim back up to my eyeline. They don't communicate anything, but they do get as close to the glass as possible. Out of instinct, I put my finger to the glass. My playmate with one eye puts one of their tentacles to the same spot. After a moment, they swim back down to the screen.

Hoping to see them give a similarly complex response, I ask "What have you been up to?" To my delight, a slightly different pattern plays than when they asked me "How are you?" The other playmate makes the response and even undergoes a bit of theatrics, putting their outermost tentacles over their eyes at one point. The tablet reads back, "Water has been cold, food has been scarce." A cold snap hit New York pretty hard while I was away. The software

continues on, “Many children were born before cold, they eat too much.” A phrase prompt comes up: the software suggests that I say back “I’m sorry.” I do.

I see that a family with a small child has gathered behind me. I figure it’s time to give this gift to someone else. I say, “Goodbye” into the tablet, and the 3D model bows, flashes a little white circle on its mantle and then disappears. The tablet returns to the language select screen, and I begin walking off toward where I can find my next playmate. The one-eyed Cuttlefish follows me as I walk to the right, away from the tablet, while the other one stays behind as the small child starts playing with the tablet. I look at my friend across the glass. I put my hands together and give my best tentacle wave with my fingers. The Cuttlefish gives it back to me and then swims away.

Rays #3

Unlike Cuttlefish, Cownose Rays have been living off of the coast of New York for millions of years. Though they are bottom feeders, schools of them will often swim near the surface seemingly just for the joy of motion. Keeping this in mind, we built the New Aquarium Obstacle Course as close to the water line as we could, since the top of the structure sits at about 3 feet below the water when the tide is low. Though all aquatic playmates can go through the Obstacle Course, we’ve found that Cownose Rays love it the most.

Using the same track and hoop mechanism from the New York Aquarium intervention, the Obstacle Course is made up of six rings that can be moved up and down across a 20-foot section of the North side of the atrium. As a bit of added flair, these hoops have each been outfitted with green LEDs around their outsides, which shine on when passed through. If all six are passed through in short succession, the rings all blink in triumph for a few seconds. A control

pad much like the one before sits near the glass wall, though this time with six levers but no option for telescoping. Though this lack of telescoping seems like a downgrade, it's because there's a new element to the Obstacle Course that would have never worked in the old aquarium: a parallel track on the dry side of the glass. Six rings sit on the floor with the same spacing as the ones out in the sea, each set on a conveyor belt that moves left and right. When a hoop on the wet side goes up, the corresponding hoop on the dry side goes to the right, and vice-versa. Left and down are tracked together in the same manner. What's more, the two sets of hoops are able to be moved by touch, not just by the levers in the console. A Human user can push a hoop to the right on the conveyor belt, and the seaside hoop will move the same distance vertically. Though rarer than the Human push, every now and again an aquatic playmate will push one of their hoops up or down. So far, each instance of this has looked more like an accident resulting from a miscalculated glide through the hoops, but we leave open the hope that a being like a Cownose Ray could see the change they've affected on the dry side and take some joy from it.

The hoops are all set straight in a row every night around closing, and they're still in that position as I walk up to the Obstacle Course. I jump a quick hopscotch-esque path through them, and they light up green as I do so. This causes the seaside hoops to light up just on the top of each ring, which catches the attention of a few Atlantic Mackerel. Three of them swim through the first few hoops and then dip down towards the seabed. I head to the console and decide to rearrange the hoops into a more interesting sequence to entice some Cownoses. The pattern I choose goes like this: first hoop all the way down, second in the middle, third all the way up, fourth in the middle, fifth all the way up, sixth all the way down. I give it a test on the dry side to see if it sparks the kinetic joy I'm looking for. I giggle when making the last wide jump between

the fifth and sixth hoops, so that seems good enough for me. I run it backward as well just to get the lights flashing, and as I look up I can't believe what I see.

Be it luck or be it fate, a full fever of Cownose Rays is swimming towards shore from the East. This is the time of year that they migrate up north, but I've never seen this many at once at the New Aquarium. I scramble to flip the order of the hoops since I ordered it West to East and I feel strongly that the initial configuration is fun and inviting. They start soaring past, and at first all of them swim right over the hoops. I'm hopping back and forth between the hoops as fast as possible in the hopes that the blinking lights will bring at least a few through the wet side of the Obstacle Course.

My effort pays off. At first, just one dips away from the rest of the crowd, passes through the first hoop and then returns to the fluttering mass of the fever. This catches the eye of a couple more friends, who turn to take a quick detour and then shoot and twirl up through the first three hoops. I spot another coterie of playmates descending from the fever, and I think that they might be more inclined to go through the whole course if I run it with them. I race back to the first hoop and get in position. I time my initial skip right when the first Cownose's cow nose enters the Course and then take off. Between the aero/hydrodynamic differences in our body plans and the varying effects of gravity in air and in water, it's difficult for me to keep up. I make it to the third hoop, look over, and see that four Cownose Rays are staying the course with me. We continue on: I make the wide hop between the last two hoops and all four of my fellow racers make the sharp dive to clear the final hoop on the wet side. Both sides of the Obstacle Course flash bright green and I can't help but cheer out loud.

Chuckling, I look up to see that one Ray from the team of four is staying behind, pressing their mouth up against the glass. The fever of Cownoses is large enough that this one little Ray

isn't being left behind yet, but it's a curious choice from my new buddy. I give a little wave and peer a bit to the right so I can make eye contact. They look back, wiggling as if they hope that the glass will change its mind and let them in so we can swim together. I know the feeling. I walk back and push the middle hoop on my side across the conveyor belt. The corresponding hoop on the wet side moves down. My Cownose buddy swims over to that hoop and investigates it. They look back at me. I smile and push it back up, making sure they're watching. The Ray gets so excited that they push their nose down onto the hoop and, to their seeming amazement, the hoop goes even further down with them. They swim over to the next hoop to see if the first one was a fluke. For the first time since opening the New Aquarium, I see a creature manipulate the Obstacle Course on purpose from the wet side. We go back and forth, pushing the hoops ups and down for them, left and right for me. After setting a fully new route, I run back to the start of the Course. I wait to see if my friend will take the cue and try our new set up together. They swim over all of the hoops and then back down to put their face on the glass near me. I point at the Course and get into position.

They start swimming through it faster than I could've expected, and I stumble getting through the hoops, though thankfully I don't fall. My friend, on the other hand, goes through the wet side of the course so quickly and elegantly that they loop back around for another go before I'm even finished. I walk over to the glass and put a hand to it. My friend puts their nose to the glass in return. Then, noticing that the fever they are traveling with is almost completely out of eyesight, they dart back off into the open sea, though not without one last joyful look back.

Octopuses #3

Walking away from the Obstacle Course, I head down a ramp that leads to the second, lower floor of the New Aquarium. This area was constructed to get a closer look at life on the seabed, and is halfway nestled into the gray sands. Many different playmates cling to the seafloor like Nurse Sharks and Flounders, but in our initial design stages I made it clear that the one thing I wanted more than anything else at the New Aquarium was a place for Humans to play with Octopuses.

When designing a Human-to-Octopus play feature at the New Aquarium, it was important for us to consider the size difference between the Giant Pacific Octopus that we had worked with before and the species local to the Coney Island shore: the Common Octopus. The three foot arm span of the Common Octopus offers a much smaller reach than the fourteen foot arm span of Jacques and his relations. If anything, our work with Jacques had the opposite sizing problem to our challenge at the New Aquarium. In our old intervention, it was important to consider how a playmate significantly larger than a Human could enjoy a toy made at a scale that still allowed for practical use on the dry side. This time, we had to design something that would engage playmates who are small enough to fit in the palm of a diver's hand.

With this challenge in mind, we created the Octo-Human Digital Canvas. An advanced version of the LED pad system we implemented decades before, this device is sandwiched between two plates of glass as before. Comprised of thousands of tiny LEDs rather than sixteen big ones, each is programmed to display ten different colors: black, white, red, yellow, blue, orange, green, brown, purple, and pink. On the left side of the canvas, there are ten icons of dots, each corresponding to one of the ten hues. The whole canvas works like a drawing tablet: touch a dot on the left and the corresponding color will appear where you touch on the screen. The whole canvas can differentiate between a dry side touch and a wet side touch, so Humans can draw

collaboratively with any passing Common Octopus who takes interest. A dot with a white outline and clear middle sits opposite the ten dots on the left side. If either party touches this dot, whatever is currently on the canvas is cleared away.

As I head down the ramp towards the canvas, I see a small crowd has gathered around it. Usually not as popular as the Obstacle Course and Cuttlefish Translation Station, I wonder what could be going on here. I peer over a few shorter members of the crowd. No one is drawing anything on the dry side, but two Common Octopuses are hard at work making art together. This is remarkable because Octopuses of all species famously do not enjoy each other's company. In the past, every Octopus I painted with stuck to the default black unless they pressed one of the other dots by accident. Up on the canvas already are all ten shades in forms that at first I don't recognize. Then I see how they're making this masterpiece.

First, one of them curls one of their tentacles into a particular shape, selects a color from the dots, and then presses their tentacle into the canvas. Then the next one will do the same but with a new tentacle shape and color, and I realize that they must have been doing this for a while because there is no empty space left on the canvas. At this point, they are drawing over older "stamps," which is making the combination of colors and shapes even more intricate.

None of us in the crowd want to interrupt what they're doing, and the room is still in awe. Eventually, looking to be proud of their handiwork, the two Octopuses move back from the canvas and stare at what they've done. At this point, the crowd dissipates. I come and kneel down, taking in their work. The two of them probably can't even see me through the colors up on the canvas. I take a picture of what they've drawn, and then select green on my side. I place my arm and hand from the elbow up, trying to put it in the middle of two of the most recent Octopus

stamps so I cover up as little of their work as possible. In yellow over my armprint, a 2D tentacle just barely curved appears.

Coda: Building a Carrier Bag Future

The stories I tell in Cycles Two and Three sound outlandish, and I accept that they may be. If there is any one thing that I've tried to communicate across the two Chapters of this work it's that the ocean *is* outlandish, in every sense of the word. The social construction of the depths as a carnivalesque anti-Earth, which we received from Medieval Western Europe and was then elaborated on and popularized in the subsequent centuries, has led to attitudes toward the ocean that have resulted in calamities of many kinds. Without the carnivalesque or alien understanding of the ocean, it would likely not be considered a consequence-free dumping zone, or an eerie and mysterious world, and there likely would not be the same impulse to capture its residents and put them on display to demonstrate the evolutionary superiority of the Human race. However, I believe that if we are stuck with the Oceanic Carnivalesque, then it's our duty to embrace its constructed outlandishness and reappropriate its mysterious allure to radical ends.

There are many ways to inject the topsy-turvy positionality of the ocean into our terrestrial systems. For some, the most pressing issue may be reorganizing global food systems to work in harmony with the sea rather than extracting from it. For others, the question may be centered around how to rethink Human housing for a more amphibious future. I dedicate myself to what I think to be the most achievable route toward freeing our incarcerated aquatic others from the aquarium system.

Because we have inherited the Oceanic Carnivalesque, play is something that people already associate with our aquatic others. Therefore, it's easier to convince a crowd to play with

any given Cuttlefish, Ray, or Octopus than to descend upon the aquarium with hammers to break its glass and nets to return its captives to the sea. Entertainment has brought people to the aquarium since the mid-nineteenth century and it's that same promise of entertainment that brings them to the institution today. The trick is to rewrite that entertainment, which is currently modeled as a modern freak show where guests are intended to look and be instructed on the radical difference between their world and the one on the other side of the glass. This is the aquarium that invites, and perhaps even begs for, spear play. To rewrite this script and create a carrier-bag aquarium, the interventions I have imagined above are certainly not the only path, but I believe them to be a start that could be implemented by any aquarium anywhere right now, if those who run them chose to.

Despite it all, I love the aquarium. I love it more than I could ever truly say. As a young child more interested in the ocean than anything else, it felt so good that there was a place I could go any day of the week where the world that meant so much to me but seemed so far away was brought directly to me. In the ensuing years, family, friends, and lovers have all accompanied me to the nearest aquarium wherever I've lived. I've said I love you to people dear to me in aquariums more truly than I've said it anywhere else. Most importantly to everything I've written herein, the aquarium is where I looked deep into the eyes of beings I once thought of as just animals and learned that they were also people, and soon after came the realization that all animals everywhere are also people. It's the place where I came to know in my heart that no person should be locked up anywhere.

So, I firmly believe that the key to unlocking the aquarium's tanks is to encourage people to switch from playing *at* our aquatic others with spears to inventing carrier bag games that Humans and aquarium residents can play *with* each other. Spear play and carrier bag play can

both be virulently mimetic if made enticing enough, and the only thing keeping the doors open at every aquarium is being enticing enough. To get the aquarium to shift from enforcing difference to creating joy through difference will require mass carrier bag action, but there's no cultural form better suited to transition from one person to a crowd (and a crowd to the world) than play. If we could achieve this, maybe the trajectory of the aquarium wouldn't have to be from carnivalesque boundary project to flaming heap. Maybe, instead, it could be from a cruel circus to an Oceanic Carnival.

CONCLUSION

I hope that through these two sustained pieces of work, looking at the Oceanic Carnivalesque's past, present, and potential futures, I have outlined the beginning of another path of sustained inquiry both within the space of oceanic humanities and carnivalesque folklore

studies. In my own life, I often feel like something of an aquatic clown, hence the title of this thesis. I heard once from a deeply influential pedagogue that you know you've discovered your calling in research when you're reading the relevant literature and it feels like everyone is dancing around (or in my case, circling the drain) what you find so important, like what you want to argue seems to be on the tip of everyone else's tongue. In my case, it felt as though the carnivalesque was always briefly addressed within oceanic work though never lingered upon, and vice versa within the canon in the wake of Bakhtin's *Rabelais and His World*. By putting these two fields of research together, I hope to lay the first few bricks of the boardwalk pier where others may also study the Oceanic Carnivalesque.

In the immediate future, I hope to continue this research in a myriad of forms. Expanding the end of Chapter One, the analysis of the works of early twentieth-century undersea documentarians and the demonstration of how they expanded the Oceanic Carnivalesque through mediated practice, is the most pressing to my mind. Beyond that, designing actual prototypes for the interventions proposed in Cycle Two of Chapter Two to begin facilitating play with our aquatic others would be a thrilling avenue of sustained effort. For those better trained in the "hard science" of marine biology, I can only hope that this work will inspire a deeper look into the possibility of transforming aquatic animals from research subjects into playmates.

With all of the work herein, I do not mean to undermine the dangers of the climate crisis, and I hope it does not read that way. Rather, I feel strongly that even if extractive industrial activity ceased around the globe tomorrow, sea levels will continue to rise due to the pollutant inertia built up by a century and a half of the careless violence of colonial capitalism. The sea is coming to our front door no matter what we do, but what we can change is how we feel about it. Saltwater upon the soil can either be the end of the world, or it can be the introduction to new

neighbors and playmates to whom we owe our best efforts at keeping our planet vibrant, beautiful, and fun to live upon, no matter the kind of destruction wrought before. If these new neighbors remind us of clowns due to cultural attitudes passed down to us from people we never knew who died centuries ago, then so be it. I would rather play with these Squids and Fools in a new world unfamiliar to me than to claim that their presence has ended the only world I've ever known.

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