MORTAL KOMBAT

GAMES OF DEATH

DAVID CHURCH

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LANDMARK VIDEO GAMES

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There are numerous excellent *Mortal Kombat* fan sites out there; among those consulted for this project, I must credit the Mortal Kombat Wiki, Mortal Kombat Online, the Realm of Mortal Kombat (TRMK), and Mortal Kombat Warehouse. The International Arcade Museum and Killer List of Videogames, and the Cutting Room Floor, were websites with useful additional sources of contextual information. My gratitude

to those who scanned and uploaded 1990s-era video game magazines to websites like Retromags and Retro CDN, which allowed me to revisit many magazine issues that I owned as a youth plus many more that I did not. Other fans uploaded behind-the-scenes footage, comic book scans, and other videos to YouTube, in addition to creating and uploading emulated ROMs (read-only memory files) of old fighting games to the Internet Archive. Emulators may not be able to properly recreate the original gaming experience offered by period-era hardware, but they have been invaluable in providing some semblance of gameplay experience for otherwise long-vanished games.

A special thanks to Aisha Shelton for loaning me her SEGA Genesis after the cruel discovery that my own semi-broken console and its cartridges were lost in a renovation of my boyhood bedroom. Logging yet more hours with the *Mortal Kombat* games on the same console upon which I long ago played the games was more than an exercise in misplaced nostalgia. I also revisited the original trilogy through play on vintage arcade cabinets whenever available, and in attenuated form on the Arcade1Up replica machine.

Finally, my heartfelt gratitude to my parents for their patience with me during my preteen *Mortal Kombat* infatuation. I hope this book's attempt to take such games seriously will help to have made it all somehow justifiable in the end.

Introduction

ABACABB

> There is no knowledge that is not power.
> —*Mortal Kombat 3* (1995) ᴀᴛᴛʀᴀᴄᴛ ᴍᴏᴅᴇ
> —ʀᴀʟᴘʜ ᴡᴀʟᴅᴏ ᴇᴍᴇʀꜱᴏɴ (1862)

Since its premiere as a coin-operated arcade game in October 1992, the *Mortal Kombat* game series, co-created by Chicago-based Midway employees John Tobias and Ed Boon, has collectively sold over 35 million units for home consoles, spawned a transmedia franchise earning well over $5 billion worldwide (Makuch 2015), and was inducted into the Strong National Museum of Play's World Video Game Hall of Fame in 2019. Still, outside its instrumental use in a plethora of psychological-effects papers, the *Mortal Kombat* series has received relatively little academic attention commensurate with its enormous cultural influence—not despite but precisely *because* of its notoriety in popularizing both the fighting game genre and widespread anxieties over video game violence. As Rachael Hutchinson (2007, 238) observes, fighting games already comprise a culturally "low" genre among video games and are often denounced "in terms of simple entertainment, lacking narrative power and encouraging an apathetic and passive attitude to violence," an association that this series doubles down on with its spectacular geysers of blood and viscera. Hence, it is perhaps no coincidence that the less overtly violent *Street Fighter* series (Capcom [JP], 1987–)[1] has earned far more scholarly

notice to date (Surman 2007; Harper 2014; Gregersen 2016; Goto-Jones 2016b; Ware 2016; Skolnik and Conway 2017; Hutchinson 2019; Patterson 2020). Upon the release of its home ports in September 1993, *Mortal Kombat*'s title alone became a convenient shorthand for everything supposedly wrong with the rapidly growing medium, especially as coin-operated arcade games increasingly gave way to the market penetration of 16-bit home consoles and beyond. To video game historian Raiford Guins (2014, 165, 240), for example, the rise of fighting games in the *Mortal Kombat* vein marked a fall in the creativity and generic diversity of earlier arcade games, heralding the beginning of the end for a coin-op market whose whimpering decline was masked by the enthusiastic adoption of home gaming systems. As the primary object of a nationwide controversy in the United States centered on the entry of violent media content into the home (see chapter 3), the series helped politicize the already-suspect medium of video games as a growing threat, much to the chagrin of many industry insiders and everyday gamers alike.

But to those of us for whom the macabre tone and sensationalistic violence of the *Mortal Kombat* series served as an initiatory experience into the unseemly social space of arcades, a marker of youthful rebellion against parental strictures, and an entrée into the rapidly expanding world of home consoles, Guins's declension narrative is certainly subject to competing nostalgias. I can attest that for a boy of approximately ten to thirteen years old during the 1992–95 height of the *Mortal Kombat* craze, there was no other series of games with the same capacity to fire one's imagination at the arcade or alongside the horror movies that my friends and I avidly consumed during weekend sleepovers. Through revisiting the games and their historical moment for this book, I have even surprised myself at the number of dredged-up memories attesting to just how intensely *Mortal Kombat* became a part of my life during those transitional years from childhood to adolescence—from the shameful act of occasionally pilfering a small bill from my parents' wallets to supplement my arcade-bound excursions (sorry, Mom and Dad!) to crudely storyboarding hypothetical sequels whose new characters and their special moves my younger brother and I would acrobatically practice on our backyard trampoline. I say this not to suggest that there was anything especially distinctive or idiosyncratic about my love of *Mortal Kombat* during those few years, but rather that these games held a deep fascination for millions of young Americans during the early to mid-1990s, and this book attempts to sketch the contours of how such a controversial "bad object" moved from cult status to cultural phenomenon in the United States.

As such, this book does not argue that *Mortal Kombat* is as canonical and groundbreaking as the hit fighting game with which it was initially developed to compete, Capcom's *Street Fighter II: The World Warrior* (1991). In fact, throughout the series' lifespan, *Mortal Kombat*'s battle for industrial success has often been spurred by being one step behind many competing developments in the fighting genre, especially those introduced in games imported from Japan. I will instead posit here that the first few *Mortal Kombat* games differentiated themselves from their competitors through the very same traits that eventually led to the series' own late-1990s decline in popularity: outlandish violence, elaborate world-building, and cinematic aesthetics.

Nor will this book deem *Mortal Kombat* a great work of art, for it not only predated the post-2000s "games-as-art" debates,[2] but, more importantly, it also exemplifies a period when video games lacked First Amendment rights as "protected speech" and were thus subject to potential government intervention, the threat of which quickly led to the implementation of the Electronic Software Rating Board (ESRB) in 1994. Although not deliberately trying to court such an outsize response from would-be reformers, it should be readily apparent that the game's lowbrow appeals to gore and shock value are vigorously opposed to conventional standards of "artworthiness" in the first place, even as quality gameplay would still separate this series from its more crassly motivated imitators (see chapter 4). If *Mortal Kombat* remains important beyond simply the generic history of fighting games, it is also a landmark game from a moment when public policy attempted to intervene in the remediation of cinematic aesthetics within interactive digital games and in the transition of public gaming spaces into the domestic sphere.

As a scholar of exploitation cinema (i.e., low-budget, often independently produced genre films using sensationalistic subject matter and bodily spectacle as their main appeal), I cannot help seeing strong parallels between *Mortal Kombat* and the martial-arts films that inspired its original development (see chapter 2), in addition to how the lurid inclusion of animated blood and "fatalities" wrested attention away from market leaders while further inspiring a wave of poor-quality imitators. As we will see across this book, the extent to which *Mortal Kombat* prioritized such end-of-round "finishing moves," effectively reorienting the genre away from the primacy of in-round gameplay—that is, shifting the focus from *fighting* games to *killing* games—has remained a point of contention among both moral entrepreneurs and fighting game enthusiasts. Moreover, the many cinematic allusions that self-described "kung-fu

movie fanatic" John Tobias included in the games (Hickey 2018, 178), paired with *Mortal Kombat*'s oft-imitated use of live actors to become photorealistic sprites, begs a methodological approach combining cinema studies and game studies. This will allow us to unpack the web of ludic, cinematic, and cultural influences that have intersected in *Mortal Kombat*'s form and content—a patchwork that literally "fleshes out" its viscerally brutal gameplay and gothically dark diegesis.

That said, the limited scope of this book focuses primarily on what I call the "Mortal Moment," or the brief period between 1992–95 when moralistic hand-wringing around Midway's original trilogy of games (henceforth abbreviated, after their first mention, following the games' own stylization, as *MKI, MKII* [1993], *MK3* [1995], and so on) spawned widespread sales and cross-media franchising, engendering a fully fledged media phenomenon. Although the later games in the franchise (1997–) are not without their respective points of interest and continue to sport a robust fandom as new entries are released, I will also explain why so much of what made the original trilogy so distinctive to those of my gaming generation was lost or at least displaced as the series continued across the next three decades. Many of the series' continuing fans will no doubt disagree with me on that front—and my predominant interest in the "Mortal Moment" is admittedly colored by my own period of personal investment in the series—but I will largely leave *Mortal Kombat*'s later entries and their ongoing fandom as topics for others to unpack. Hence, I have tried to write a short and accessible volume that will provide a useful introduction for media scholars but also add something substantial to fans' contextual understanding of at least the first three games.

In chapter 1, I situate the first three *Mortal Kombat* games within their generic context by briefly exploring the historical genealogy of 2D games featuring hand-to-hand combat, leading up to the 1991 introduction of *Street Fighter II* as the first "modern" fighting game. By tracing the early divergences between boxing, beat-em-up, and fighting games, we will see how the latter genre's conventions gradually coalesced into the model that the *Mortal Kombat* games would adapt and exploit for their own purposes. After discussing the initial development and gameplay of *MKI*, I will explore the three most significant generic developments popularized by the series' earliest entries: the use of finishing moves (fatalities), the incorporation of "Easter eggs" and other secrets into the game architecture, and the use of pixilated actors as digitized sprites. Overall, then, the first chapter will focus on the specific elements of gameplay that

differentiated *Mortal Kombat* from its competitors in the coin-op market, especially in the context of the American arcade as a liminal social space.

Chapter 2 expands beyond the photorealism of the pixilated actors as a means of opening up *Mortal Kombat*'s distinctly cinematic qualities but with particular focus on its narrative content. Most of the games' framing narratives, however scant at first glance, are variations on a theme: a no-holds-barred fighting tournament forms the stakes for an epic battle between earthly good versus otherworldly evil for the ultimate salvation of the world, pitting supernatural forces against each other in a series of brutal clashes. In detouring through not only Hong Kong *wuxia* and kung fu films but also the game's origins as an abandoned vehicle for actor Jean-Claude Van Damme, we find many of the cultural reference points that inspired John Tobias's development of the *Mortal Kombat* story and characters. By delving into the history and politics of martial-arts cinema as a transnationally circulating form, I will argue that Midway's use of actual martial artists as actors thereby gains greater resonance as an American-made game drawing upon a mishmash of East Asian influences. To wit, *Mortal Kombat* evinces orientalism as an inherently biased system of knowledge that claims to understand "the Orient" as an exotic, dangerous realm onto which Western-colonialist fantasies and anxieties can be easily projected (Said 1978). Moreover, by comparing *Mortal Kombat* to the types of sensationalistic exploitation films that inspired its imagery, we can better contextualize the stereotypical racial and gender representations flagged by early critics of the franchise. Although I do not see such criticism as wholly unfounded, I suggest here that the very transnationality of the games' influences also complicates (but does not absolve) any simple condemnation of the games' roots in an orientalist imaginary. Rather, the strong influence of fighting games and martial-arts cinema indicates "the inescapability of Asian associations" or a sense of "the Asiatic" with which "players of all backgrounds" can ludically engage (Patterson 2020, 27).

Whereas chapter 2 explores *Mortal Kombat*'s lore-filled diegesis as heavily influenced by martial-arts cinema, chapter 3 examines the controversy that the game's photorealistic violence provoked. As an important episode in ongoing debates over video game violence, the governmental and journalistic debates around *Mortal Kombat* have already been explored in other histories of video games, but this chapter delves more deeply into some of the specific anxieties that charged this crisis moment. By comparing *Mortal Kombat* to the other two games singled out in U.S. Senate hearings, *Night Trap* (Digital Pictures [U.S.], 1992)

and *Lethal Enforcers* (Konami [JP], 1992), we will see how all three games, despite their obvious generic differences, share distinctly cinematic qualities that rendered their violent content (albeit tame by today's standards) all the more alarming by threatening to collapse together disparate media forms: movies and video games. Meanwhile, the controversy was furthered by the collapsing of disreputable arcade spaces into the family home as these games were ported onto 16-bit home consoles, with the arcade fidelity of violent content serving as not only a highly visible test of these new consoles' technological affordances but also a referendum within the gaming community on whether *Mortal Kombat*'s value could be separated from its reputation for gore.[3] By exploring the critical reception of *MKI* and *MKII* ports by both Nintendo and SEGA amid the birth of the video game rating system, we will see how crucial the *Street Fighter II* versus *Mortal Kombat* battle was in the so-called console wars of the 1990s (Kline, Dyer-Witheford, and de Peuter 2003; Harris 2014), and how these industrial conflicts over technological superiority and market share became caught up in wider cultural anxieties. The chapter concludes with a brief look at the media-effects research that continued using the *Mortal Kombat* games in psychological studies even after the public phase of the controversy had died down, and how confirmation bias has often exaggerated the purported effects of violent game content.

If chapter 3 looks at the anxieties surrounding *Mortal Kombat*'s introduction to the domestic sphere, chapter 4 explores how the franchise subsequently capitalized on its notoriety to promote a cross-media glut of increasingly family-friendly spin-offs and merchandising, including a stage show, live-action movies, comic books, and an animated series. This chapter also examines the many post–*MKII* clone games whose exploitative imitation of a successful franchise both cheapened the brand and provided inadvertent inspiration for later *Mortal Kombat* sequels. With the late-1990s rise of more advanced game consoles, whose 3D graphical capabilities rivaled that of arcade machines, the *Mortal Kombat* series eventually followed the fighting genre's larger trends toward 3D modeling and different modes of gameplay, abandoning the coin-op market after *Mortal Kombat 4* (Midway, 1997) while branching into spin-off console games in other genres. This final chapter thus explores how market oversaturation by both ancillary texts and cheap imitators killed off the "Mortal Moment." It also looks at how the later *Mortal Kombat* franchise compensated for its awkwardly belated transition into the realm of 3D fighting games by reinvesting in transmedial storytelling and cross-

generic exploration, even as the gameplay and overall aesthetic of its flagship entries became increasingly indistinguishable from generic peers. The chapter concludes with a brief look at the most recent entries in the franchise to date and how they have attempted to reboot the series by returning to *Mortal Kombat*'s original 2D fighting aesthetic.

Overall, then, *Mortal Kombat* stands as a game series that undeniably achieved fame and courted controversy by delivering previously unseen levels of realistic violence, helping popularize the fighting genre in the 1990s. Yet, even beyond its blood-spattered aesthetic, these games also have an important and frequently overlooked place amid several major transitions in video game history: the creation of industry self-regulation standards, the convergence of cinema and video games, the popularization of 16-bit home consoles, the shift from 2D to 3D game engines, and so on. If *Mortal Kombat* once seemed to offer little more than a gory gimmick, it has since become a well-established landmark in video game history, its one-time notoriety now tamed by familiarity and longevity. But by tracing its place in a web of cultural, generic, and industrial influences, we can continue to unlock its more occulted secrets.

Ludic Precursors and Generic Innovations

It would not be a stretch to argue that *Mortal Kombat* (hereafter *MKI*, et al.) has become one of the most iconic examples of the fighting game genre, but to understand how this came to pass, we need to first backtrack into the history of that genre and discern how some of its more enduring conventions were formalized. After briefly examining some of the early trends leading up to the breakthrough success of *Street Fighter II: The World Warrior*, I will describe the origins and development of *MKI* at Midway during 1991–92 as an attempt to take on Capcom's coin-op smash hit through deliberate markers of product differentiation. As we will see both here and in chapter 4, the *Mortal Kombat* series has often lagged one step behind major developments in the fighting genre, especially those introduced by Japanese game designers, but it is precisely this underdog status that has also spurred Midway's drive for creative distinction. Indeed, had *Street Fighter II* not already been the market leader in coin-op fighting games by 1992, it is doubtful that *MKI* would have seemed so strikingly different in the first place. Moreover, as Tara Fickle (2019) and Christopher B. Patterson (2020) argue, the competition between such "global games" cannot be wholly separated from longer histories of imperialist competition, such as Japan's post–World War II/post–Occupation recuperation of its global reputation via a "soft power" program of industrial exportation that achieved market dominance in goods like computing software and digital games.

I will focus on three defining features that initially distinguished *MKI* from its competitors in the arcade market: the potential enactment of fatalities and other finishing moves as spectacular endings to each match;

the incorporation of "Easter eggs," including hidden characters, levels, and in-jokes, all lurking beyond the not-so-secret methods of performing the finishing moves; and the use of pixilated sprites based on the photographic capture of live martial artists. None of these supposed innovations were unprecedented in their own right, and yet Midway's refinement and combination of these ingredients in *MKI* and *Mortal Kombat II* proved unexpectedly successful competition against their generic kin.

<div style="text-align:center">The Early History of 2D Fighting Games</div>

Popular histories of video gaming often cite *Heavyweight Champ* (SEGA [JP], 1976) as the first coin-operated fighting game (Donovan 2010, 221). Its large, monochromatic boxer characters fight from a stationary stance against a simple black screen, each positioned beneath a point counter tracking the number of successfully landed punches. Each crude avatar (or player-character) is controlled with a one-handed interface resembling a red boxing glove fixed to a lever on the front of the arcade cabinet. Grasping the metal handle inside the "glove," each player can manipulate the mechanical arm up or down for high or low attacks, while pushing the handle in or out to strike. Although it might be better classified today as a boxing game, the side-view profiles of each fighter and the capacity for two-player, mano a mano play are both important precursors to the fighting games that would follow. Later boxing games, however, would largely follow the model popularized by Nintendo of Japan's *Punch-Out!!* (1984) and *Super Punch-Out!!* (1985), which situates the player's second-person perspective from behind the back of their avatar, looking up at the facing opponent, as more traditional joystick and button controls allow one's avatar to move back and forth, in and out, within one half of the ring, dodging and landing various punches. SEGA's 1987 reboot of *Heavyweight Champ* would, for example, combine the mechanical-arm interface of the original game with this newly popularized camera perspective.

Among other notable precursors, the sword-fighting game *Warrior* (Vectorbeam [U.S.], 1979) presents close-quarters combat between two armor-clad fighters in a sword-and-sorcery setting (at least according to the cabinet artwork). Gameplay itself consists of two wire-frame fighters, seen from a bird's-eye overhead view, as they start from different corners of a rectangular arena with two pits in the center and stairs circling around the outside edges. This fixed backdrop provides a crude illusion of depth, for players can walk or be knocked into the pits if

not careful—an early version of the automatic-loss hazards built into the arenas in some later fighting games (such as the "ring outs" in 3D fighting games like *Virtua Fighter* [SEGA, 1993] or the "death traps" in *Mortal Kombat: Deception* [Midway, 2004]). Whereas one cannot block or defend against counterattacks in the original *Heavyweight Champ*, *Warrior*'s player can at least parry swords until a direct hit occurs, at which point the losing player's avatar dies and regenerates in their respective corner. As it coalesced into a genre unto itself, the fighting game would become increasingly marked by both defensive and offensive capabilities (Begy 2012, 212).

Meanwhile, another generic thread focused on hand-to-hand combat was developing into what would colloquially become known as the "beat-em-up" or "brawler" game.[1] In one of the earliest examples, *Chuck Norris Superkicks* (Xonox [U.S.], 1983; later retitled *Kung Fu Superkicks*), the player as the titular action star travels toward a monastery to rescue a captured man, earning different martial-arts belts and moves along the way. The avatar, clad in a white *gi*, advances through a vertically scrolling over-level, which is periodically interrupted by a side-view battle screen. In the battle screen, he must move both horizontally and vertically in fighting against a handful of progressively difficult opponents, who appear from the screen edges and can each be dispatched with a clean blow. Although the second-generation home consoles for which the game was developed (e.g., Atari 2600, ColecoVision, Commodore 64) have very simple graphical capabilities, the game nevertheless sports a narrative progression through various battle levels toward a clearly defined goal of saving a specific non-playable character (NPC). The PC-DOS game *Bushido: Way of the Warrior* (Ebenel Enterprises [U.S.], 1983) is more graphically advanced but also involves a series of side-view battle screens in which the player must use unarmed combat to defeat a handful of *katana*- and *shuriken*-armed ninjas on each screen, advancing through different non-scrolling levels of a Japanese dojo but all the while susceptible to a one-hit loss.

The following year, the coin-op title *Kung-Fu Master* (Irem [JP], 1984) would further develop this generic direction in its story of a martial artist who must fight his way through five side-scrolling levels, each culminating with a boss character, as he advances up the "Devil's Temple" to rescue his captured wife. Inspired by the multilevel progression of Bruce Lee's posthumously finished film *Game of Death* (Bruce Lee and Robert Clouse, 1978), described in more detail in chapter 2, *Kung-Fu Master* allows the avatar to punch and kick his way through a

plethora of generically indistinguishable opponents (e.g., jumpsuit-clad fighters, snake-filled pottery), with the ability to jump over or crouch under projectiles as a defensive tactic. Unlike earlier games, the avatar and boss characters each have a health meter and can sustain multiple hits before death—an important influence upon later fighting games. However, as a beat-em-up game, *Kung-Fu Master*'s side-scrolling format and swarms of easily dispatched enemies per level differs from the one-opponent-at-a-time quality of proper fighting games. Subsequent beat-em-up games, such as *Double Dragon* (Technōs Japan, 1987), *Golden Axe* (SEGA, 1989), and *Final Fight* (Capcom, 1989), follow suit in stressing the avatar's endurance in fighting off innumerable enemies (hence the alternate nickname "brawler"), and would not only incorporate usable offensive objects (such as weapons or barrels) into each level but also feature heavily raked (i.e., inclined upward and away) levels whose isometric perspective creates the illusion of depth through some degree of vertical avatar movement in conjunction with the overall side-scrolling (Gaboury 2016, 362). Overall, though, this focus on melee combat meant that beat-em-up games increasingly split off into a different generic path from other fighting games by the late 1980s, with two-player cooperative modes far more common in beat-em-ups than two-player competitive gameplay.

If *Kung-Fu Master* charted this increasingly divergent branch, another arcade game from that same year, *Karate Champ* (Technōs Japan, 1984), represented a different but related generic trajectory. Set within a series of non-scrolling karate arenas (a dojo, a stadium, etc.) as one advances through different stages of a one-on-one martial-arts circuit, the player(s) use a dual-joystick interface to perform a variety of special moves enabled by two-handed combinations of the four directions on each of the joysticks (see fig. 13–14). Not only does the game focus on the mastery of specialized moves—albeit rooted in the twin joystick controls instead of the single joystick and multiple-button combinations endemic to later fighting games—but the game also determines the winner of each match through a best-of-three system. And while later fighting games typically use per-round health meters, *Karate Champ* stages its matches as a point-based system, with the first landed blow earning a half point and two subsequent full-point hits winning the match. It is also distinguished by its use of bonus stages, such as striking and evading flying projectiles, breaking a stack of boards, or knocking out a charging bull with a well-timed blow; such interstitial stages would carry into later fighting games, such as the "Bonus Stages" in *Street Fighter* and its sequels, in

addition to *MKI*'s "Test Your Might" game (in which the player quickly taps the buttons to charge up their avatar's power for breaking materials of increasing hardness).

Other fighting games made refinements of these basic elements, but after the spate of games beginning with *Karate Champ*, they increasingly featured some form of one-on-one martial-arts combat. *Karateka* (Brøderbund [U.S.], 1984) combines one-on-one combat with the use of a health meter, but unlike either the beat-em-up's side-scrolling progression toward the terminus of a given level or *Karate Champ*'s stationary arenas, *Karateka* features an arena that horizontally tracks from side to side along a flat plane as the combatants advance on each other, using background imagery to provide one-point perspective for the foreground action (Sharp 2014, 108). This use of one-point perspective would become a convention in most of the later 2D fighting games. *Karateka* is also distinguished by its early use of rotoscoping, with the hand-drawn character animation modeled from video of a live martial artist—a technique that *Karateka* designer Jordan Mechner would later refine for his adventure game *Prince of Persia* (Brøderbund, 1989).

Although *Karateka* follows the model of single-hit wins or losses used in earlier games like *Warrior, Yie Ar Kung-Fu* (Konami [JP], 1985) follows *Kung-Fu Master* in using a health meter—in this case, a segmented one in which each character can sustain eight hits before losing. Unlike the battles between unnamed red and white fighters in *Karate Champ, Yie Ar Kung-Fu* also features a succession of different opponents in each match, each with their own distinct name, appearance, and weapon. Overall, this advancement through a succession of distinctly different characters with their own fighting styles would soon become a generic trademark of the fighting game, along with the following traits: an option for two-player competitive play, the use of an in-round health meter, a multi-round/best-of format for each overarching match, the existence of both standard and special moves, and (typically) some small amount of framing narrative to motivate the match progression (Begy 2012, 210; Surman 2007, 208; Harper 2014, 13).

These traits would all go into Capcom's 1987 *Street Fighter*, which boasts larger sprites and better graphical capabilities than most of its precursors but whose two playable characters, Ryu and Ken, are still basically "palette swaps" of each other (i.e., sprites of identical visual design, apart from different coloration), sharing the same standard and special moves (including the *Hadōken* "fireball," perhaps the first palm-fired projectile of magical energy seen in a fighting game), and separated by

little more than hair and gi colors. Specific joystick movements needed to perform the special moves were not marked on the cabinet (much as *Mortal Kombat*'s special moves would not be), leaving them up to the player's discovery, and the cabinet's original incarnation sported a kinetic interface (designed by Atari) with a joystick and two pressure-sensitive pads—one each for the avatar's punches and kicks—that would respond accordingly to light, medium, and heavy contact (fig. 1). After overzealous players began damaging either the pads or the cabinet, however, a revised version of the cabinet replaced the two pads with a six-button array corresponding to each set of three punch and kick commands (Ashcraft 2016). Thus was born not only an interface with multiple buttons for punches and kicks but also the emphasis on superhuman special moves as a central part of gameplay commanded by such newly numerous controls.

Until the late 1980s, what we would now consider fighting games were often categorized in gaming magazines like *Computer Entertainment* under the broad banner of "sports" games, conflating martial arts, boxing, wrestling, and other full-contact sports as similar athletic endeavors. Indeed, *Karate Champ*'s U.S. publisher, Data East, filed a copyright infringement suit against Epyx, the U.S. publisher of a 1986 port of *International Karate* (System 3 [JP], 1985), which had been retitled *World Karate Championship* for the American market. Although a decision was first made in Data East's favor, an appeals court reversed the decision on the basis that, despite the potentially infringing game's many similarities in look and feel, the fact that both games were based on a real-world sport meant that the underlying concept could not be copyrighted, and thus any competition-based karate game could be expected to share certain commonalities (Kent 2001, 368–70).[2] And yet the shift from seeing one-on-one games rooted in martial-arts combat as *fighting* games instead of *sports* games also rested on the growth of diverse in-game characterization and a framing narrative with Manichean "good versus evil" overtones. According to Dominic Arsenault (2014, 226), fighting games are best seen as a subset of the larger supergenre of action games, much as, I suggest, martial-arts films have become seen as a subset of action cinema. Whereas boxing games and some of the earlier martial-arts games have little framing narrative beyond rising through the ranks to become the champion—a motivation shared with all manner of competitive sports— the character dynamics in late-1980s fighting games increasingly share the beat-em-up's loose narrative context of a good-versus-evil conflict,
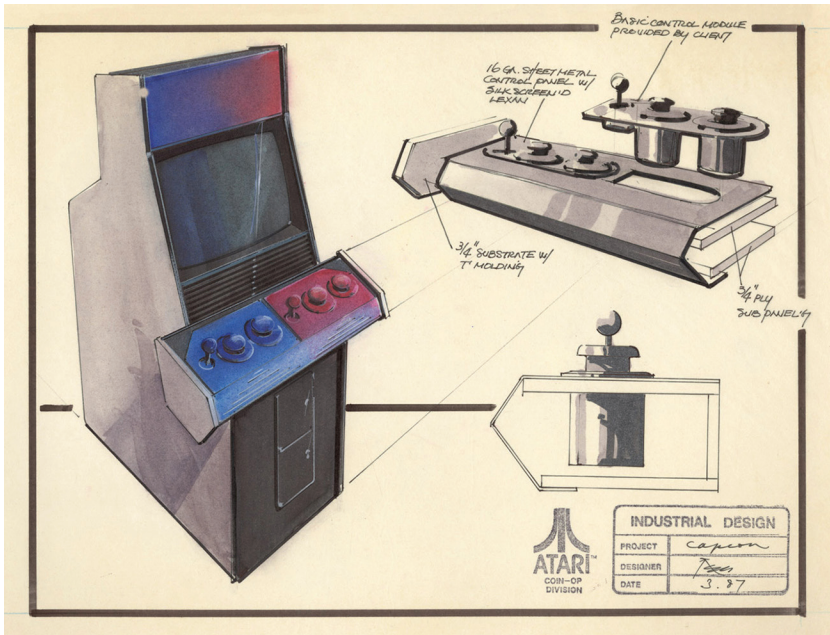
Fig. 1. Atari's concept art for Capcom's original *Street Fighter* arcade cabinet, with pressure-sensitive pads to register the strength of the player's blows.

much as martial-arts films are typically fueled by far more than the spirit of wholesome competition (see chapter 2).

Street Fighter II vs. *Mortal Kombat*

Capcom's release of *Street Fighter II: The World Warrior* (hereafter *SFII*) into the coin-op market in March 1991 is today considered a pivotal moment for the fighting genre, for the game not only set the standard for all "modern" fighting games but also began drawing players back to arcades at a time when the overall coin-op market was slumping (Kent 2001, 446; Harper 2014, 11; Skolnik and Conway 2017, 10). The game introduced several major innovations, including a full roster of playable characters, each with their own distinct design, special moves, and array of strengths and weaknesses—vastly widening gameplay strategy beyond simply mastering a few preprogrammed moves (fig. 2). The Light, Medium, and Strong attacks also frequently differ from one another in not only speed and strength but also the accompanying animation, allowing different

Fig. 2. Large, cartoonish sprites in *Street Fighter II*, featuring Ryu launching his "palm power" *Hadōken* fireball as one of his special moves.

standard attacks to be more efficient against different opponents. Capcom had previously used a three-character roster of selectable avatars, each with their own distinct fighting style, in its 1989 beat-em-up *Final Fight*—initially promoted as a sequel to *Street Fighter* before its generic distance from a proper fighting game led to *Final Fight*'s rebranding as a separate series—which was therefore an important inspiration for *SFII* (Gregersen 2016, 65).

Each *SFII* character represents a different nationality in a rather stereotypical way, as also conveyed through the background details and music provided in each of their home-field arenas, and the overall game is motivated as a globe-trotting tournament (as previously seen in *International Karate*) to defeat an evil dictator-cum-boss. Now that certain characters would be more effective against others, issues of game balance became far more significant than overcoming the awkward interfaces or unfair advantages in artificial intelligence (AI) seen in some earlier fighting games. Yet, as David Sirlin (2016, 171–74) suggests, because the different strengths and skill sets offered by different character options make such fighting games inherently "asymmetric" (or imbalanced), a compensatory measure is providing more starting options.[3] Guile and Dhalsim, for example, were seen as "unstoppable" in the first iteration

of *SFII*, until the designers corrected such imbalances and added four playable boss characters in the updated version, *SFII: Champion Edition*, released in spring 1992 (Sushi-X 1993, 36).[4] Players may be limited to performing the types of moves, both standard and special, that come programmed into the game's code, but they are still given more creative and strategic leeway in being able to frequently come back to the Character Select screen to select a new avatar after each match (at least in two-player mode) (Hutchinson 2007, 293–95).

SFII also innovated through its incorporation of simple combos, or unblockable chains of hits that, in this specific game, were largely made possible by the sheer speed of successive close-range blows. Following the lead of these circumstantial combos, preprogrammed combo systems would later become coded into many fighting games, including *Mortal Kombat 3*, as a crucial ingredient of gameplay. Despite the blocking of an opponent's attacks having existed in fighting games since as early as *Karate Champ*, the use of the block function (achieved in *SFII* by pushing away on the joystick) became more important given the gameplay's extensive use of long-range projectile attacks, to say nothing of the even faster gameplay and enhanced special moves included in its December 1992 update, *SFII Turbo: Hyper Fighting*. Over its various iterations, *SFII* also became the first fighting game to inspire competitive tournaments between skilled arcade gamers, effectively bridging intradiegetic and extradiegetic spaces via the tournaments increasingly unfolding in coin-op venues (Skolnik and Conway 2017, 10).

Although Capcom's many updated editions of *SFII* refined its overall gameplay and helped consolidate its surprising success in the coin-op market, these new editions were also developed in part to compete with the sudden rise of rivals for coin-op players' eyeballs and quarters. Fellow Japanese developers SNK responded with imitators like *Fatal Fury* (1991) and *Art of Fighting* (1992), including these and other games in their Neo●Geo Multi Video System arcade units (introduced in 1990), from which players could select from six different SNK games, modularly replaceable with different ROM cartridges as new games were released to arcades. A Neo●Geo home console, also launched in 1990, contained identical processing power, allowing arcade-perfect ports of their fighting games, but SNK's tight proprietary control over their software and hardware meant they did not pose a significant threat to Capcom's more diversified market strategies. By contrast, Capcom sued their Japanese competitor Data East for copyright infringement over the many similarities between *SFII* and *Fighter's History* (1993), in part because Data

East also ported their game to home consoles like the Super Nintendo (Super Famicon) Entertainment System, thus encroaching on console territory already occupied by Capcom's licensed ports. Given the fact that Data East had previously sued Epyx over infringement on *Karate Champ*, this reversal of fortunes was rather ironic, but the court decision was quite similar: Capcom used *SFII*'s 1991 release date and huge popularity as evidence that they were first to market with a pioneering game, but Data East ultimately escaped a guilty verdict because their characters were based on various national-cultural stereotypes and preexistent fighting styles that could not be copyrighted in the first place.[5]

With *SFII* clones increasingly trying to cash in on Capcom's success in the coin-op market, it was perhaps little surprise that a well-established American company would attempt to compete, albeit with more product differentiation than seen in the SNK and Data East games. By 1991, Midway Games, *Mortal Kombat*'s Chicago-based developer, had become a major force in the arcade world through a combination of successful games and industrial consolidation. Midway was founded in 1958 as an amusement machine manufacturer, but it was purchased by Chicago pinball company Bally in 1969. Midway moved into coin-op video game development in 1973, developed the most popular coin-op game of 1976 (*Sea Wolf*), and absorbed Bally's pinball division in 1981. Both companies were purchased by Chicago-based WMS Industries, another old-time pinball manufacturer and the parent company of Williams Electronics (creator of *Defender*, 1980), during the arcade market's 1988 downturn. Yet Midway's brand name was so well known at this time that the Williams game development division was absorbed under Midway's auspices and Bally was dropped from the company name in 1991 (Kent 2001, 7, 101, 137, 144; Budziszewski 2012, 67–68; Boothroyd 2012, 409; Ali 2019, 37).

The consolidation of Midway/Bally/Williams into a single corporation created a strong pool of talent, including *Mortal Kombat* designers Ed Boon and John Tobias. Boon began designing pinball games at Williams after graduating with a computer science degree from the University of Illinois at Urbana–Champaign, and his first proper programming job was on the coin-op football game *High Impact* (Midway, 1990) and its sequel. Meanwhile, Tobias, a former student at the American Academy of Art, was an artist at NOW Comics before joining Midway, where he worked as an animator on top-down, multidirectional action shooters like *Smash TV* (1990) and its follow-up, *Total Carnage* (1992) (Kunkel 1993b, 42; Bieniek 1995c, 50–51; "*Mortal*'s Master" 1995, 38–40; "Game Makers" 1996, 34–36; Kent 2001, 462). Loosely inspired by the Arnold

Schwarzenegger sci-fi/action film *The Running Man* (Paul Michael Glaser, 1987), *Smash TV* was a coin-op hit, but *Total Carnage* was a commercial failure, leading Tobias in a different generic direction (Ali 2019, 55, 62).

By their own admission, *SFII*'s success, in addition to the large size and detail of its character sprites, inspired Boon and Tobias to make a fighting game, but it was not until the producers of the film *Universal Soldier* (Roland Emmerich, 1990) approached Midway's director of marketing, Roger Sharpe, to produce a tie-in game featuring rising action star Jean-Claude Van Damme that Boon and Tobias felt justified in pitching their idea to upper management. Yet, despite the Midway team's hopes to license Van Damme's likeness to play either a character or himself, the negotiations fell through when Van Damme's agent demanded a prohibitively expensive licensing fee and (perhaps as a negotiating tactic) informed Midway that the star was already signed to a game in development at SEGA. Determined to make a freestanding fighting game without a licensed movie tie-in, Tobias instead developed a framing narrative involving bits of Chinese mythology combined with tropes from martial-arts films. Using his background as a visual artist and memories of playing *Karate Champ* as a youth, Tobias designed the characters and their backstories, while Boon served as main programmer. Joined by composer and sound designer Dan Forden and background artist John Vogel, the four-man team created *MKI* in approximately six to ten months—a more compressed schedule than the typical twelve to fourteen months at Midway (see LaMancha 1994, 34; Kunkel 1994, 38–39; Quan 1994b, 26; Kent 2001, 462; Mick-Lucifer 2012). It was released to arcades in October 1992, only five months after *SFII: Champion Edition* and three months after the theatrical release of *Universal Soldier*.

If *MKI*'s overall gameplay is faster paced than *SFII* (at least until the latter's *Turbo* upgrade), it also has a sort of brutal simplicity by comparison; most rounds boil down to some combination of jump kicks and leg sweeps as common standard attacks, with high-damage standard attacks like uppercuts and roundhouse kicks used where available. Indeed, the uppercut became one of the game's most emblematic standard moves, drawing as much blood as many of the end-of-match fatalities and even providing novice players with an easy means of performing *MKI*'s sole "stage fatality" ("The Pit," an elevated arena in which the victor can uppercut the loser onto a bed of spikes far below) without any specialized knowledge of other finishing moves. *MKI*'s characters sport a similar number of special moves as *SFII*'s fighters (two or three), but overall, special moves serve a more central role in *MKI*'s gameplay—and would

gain strategic diversity when their number per character was doubled in *MKII*. Projectiles, for example, do not always cancel each other out when they encounter each other (as they do in *SFII*), since Tobias felt it was more exciting for the projectiles to pass through each other to cause mutual damage to both characters (Quan 1994b, 116). Unlike the speed- and strength-based gradation of attacks in *SFII*'s six-button interface, *MKI* sports a five-button interface arranged around the placement of attacks (High Punch, Low Punch, High Kick, Low Kick), plus a dedicated Block button (fig. 3). As Boon recalls, "We always found it odd that you would get a 'free block' if someone was attacking you while you were walking backwards," hence "blocking should be a much more deliberate action that the player should initiate" (Jones 2007, 29). Whereas Capcom deliberately designed the fluid joystick movements for *SFII*'s special moves to kinesthetically recall the avatar's corresponding onscreen movements (Surman 2007, 210–11),[6] *MKI*'s dedicated Block button (which holds the avatar in place) allows many special moves to be executed via directional tapping of the joystick, thus giving the embodied experience of *MKI*'s gameplay a more staccato feel. Still, Midway was so confident in *MKI*'s ability to compete with *SFII* that its operator's manual prominently features instructions on how to retrofit an existing *SFII* cabinet to play *MKI*'s central processing unit (CPU) boards (see Midway Games 1992).

According to James Newman (2016, 409, 415), video game walk-throughs and strategy guides are often denigrated by gamers as cheap shortcuts or forms of cheating, but he argues that we might actually see their historiographic value as records of period gameplay. Following this suggestion, I have consulted several strategy guides for *MKI* and *MKII* to discern the major gameplay differences observed at their time of release. *MKI* effectively competed with *SFII* in part because it popularized another form of circumstantial combo, based less on sheer speed and proximity than on successfully knocking one's opponent off their feet and then "juggling" them with another attack (typically a special move), with "up to three juggle hits" possible before the final move of the combo (Char-Li, Vega, and Guzman 1994, 84). Sub-Zero and Johnny Cage, for instance, can knock their opponents into the air with a "deep" jump kick that connects below the opponent's waist, then immediately follow this with a shorter-range jump punch/kick as their opponent is still falling, and finally end the combo with a laterally traveling special move like Sub-Zero's slide or Cage's shadow kick. As Boon and Tobias recall, these juggling-based combos initially "happened almost by acci-

Fig. 3. Five-button control interface for Midway's *Mortal Kombat*. Author's photo.

dent" during early tests of the game but were refined to "be flexible enough for kids to come up with their own custom combos" and thus deliberately differ from *SFII*'s gameplay (Quan 1994c, 115). Although the early release version of *MKI* was criticized for "perpetual juggling in the corner" (Quan 1994d, 46)—a game balance problem that also highlights the arbitrariness of arena boundaries in 2D fighting games— *MKII* would incorporate more "teleport" moves, allowing one's avatar to magically jump to the opposite side of the arena, escaping the spatial compression of such arena edges and potentially disorienting one's opponent by reversing the characters' left-right orientation. *MK3* would introduce double-decker arenas that allow one to uppercut their opponent into the arena above, where the match continues (a feature that also evocatively fleshes out the diegesis by highlighting the spatial connection of seemingly unrelated backgrounds). Knocking characters off their feet might also be done with a so-called cross-up or turnaround punch/kick (a technique introduced in *MKII*, in which one jumps over one's opponent and then plants a surprise midair blow on their far side), or with a special move intended to stun one's opponent (e.g., Scorpion's spear, Sub-Zero's ice blast) and set them up for a high-damage hit or

combo. Characters in *SFII* might be stunned by an opponent's particularly strong melee, temporarily standing defenseless with stars orbiting their head, but Capcom's game frames such stuns as more of a reward for high damage already incurred than as *MKI*'s strategic setup for a combo. Overall, based on rankings by competitive players, *Mortal Kombat*'s top-tier characters are marked by "their abilities to attack both low and high with their various arsenals" (Char-Li, Vega, and Guzman 1994, 83),[7] and advanced skill often hinges on the timing and placement of jump kicks.

With such differences in gameplay as one major deciding factor in coin drops, camps of *Street Fighter* versus *Mortal Kombat* loyalists began to form, although some fans also hoped for a franchise crossover game that would literalize the Capcom versus Midway industrial battle (Kanter 1997), despite the various legal and practical barriers to such a game's development.[8] In assessing the ludic differences between the growing *SFII* versus *MKI* "Arcade War" of 1992–93, an early reviewer (and self-admitted *SFII* partisan) for *Electronic Games* praised *MKI*'s graphics and sound as the best in the industry but described its dedicated Block button as less intuitive than *SFII*'s reverse-joystick push, while ultimately observing that *MKI*'s gameplay "feels sluggish and imprecise"; because *MKI* supposedly contains "very few combos" and less individuated characters than *SFII*, "the action becomes repetitive" (Sushi-X 1993, 37–38). Even as the sequels in each franchise were released, critics would laud *MKII*'s "cool story line," well-balanced new characters, even faster gameplay, and increased ability to protect against corner combos (in which a fighter knocked off their feet drops straight down at the arena edge, making it easier for cheap juggles) as all adding up to more than "merely an *MK: Champion Edition*." But there were still concerns that "once you've logged some hours with *MKII* . . . you'll notice some weaknesses. You often feel like there are only so many patterns, and you're seeing the same stuff over and over again." The "one-dimensional combo system" for quickly chaining one special move into another was also accused of feeling less like an organic combination of moves than a product of the programmers' timing glitches (Quan 1994a, 30–31). To be far more charitable, however, *MKII*'s improved avatar control (plus an almost imperceptible shortening of the lag time between when a successful blow registers and when the sprites of the struck character visually react) had made *MKI*'s interface seem positively sluggish by comparison.

MK3 would attenuate the juggle-based combo system by giving each character a set of simple and more advanced preprogrammed combos—also known as "chain combos," or "dial-a-combos" as sometimes dismis-

sively termed—where one button push automatically sets up the next potential hit and so on, creating a nearly unblockable series whose number of successive hits (typically between four and seven blows, linked via a corresponding chain of button pushes) and percentage of damage done to the opponent are touted in an onscreen message. Although I will describe in chapter 4 how these notable revisions were developed in response to generic developments in other coin-op fighting games, including the heavily combo-centered gameplay of U.K.-based Rare's *Killer Instinct* (1994; published by Midway), *MK3*'s less popular addition of a dedicated Run button to enable brief sprints (inspired by the Turbo button on Midway's concurrent coin-op hit, *NBA Jam* [1993]) was also intended to increase the game's potential for two-player competitive play as gaming tournaments became more widespread in the mid-1990s. But despite its attempts to distinguish itself from the *Street Fighter* series through in-round gameplay, the game's most iconic and notorious markers of product differentiation—the inclusion of blood and fatality moves—would also complicate its standing within the gaming community.

Blood and Finishing Moves

Beyond the mechanics of in-round gameplay, *MK1*'s most spectacularly noticeable difference from *SFII* is a largely aesthetic one: animated sprays of blood accompanying many landed blows, and fatality moves that provide an optional ending to each match. Whereas *SFII* has occasional inklings of blood—such as on the defeated opponent's face in a post-match taunt screen (a convention begun in the first *Street Fighter* game, showing the faces of both fighters and a taunting quote from the victor)—the spilling of blood is a constant occurrence in *MK1* and its sequels. Moreover, each of *SFII*'s rounds dramatically ends with the defeated character spiraling in slow motion to the ground, but *MK1*'s characters simply flop backward like a plank. The dramatic payoff instead comes at the end of each match, with the narrator shouting, "Finish Him/Her!" as the stunned opponent wobbles in place for a few seconds to afford the victor the opportunity for a coup de grâce. If the victorious player performs the correct joystick/button combination (often little more difficult than an in-round special move) from the correct distance, then the screen goes dark and the winner violently dispatches the loser. Needless to say, there is no post-match taunt screen to reassure players that the bloodied loser has survived to fight another day.

Blood and gore in video games is already part of a longer tradition within the medium's history. The light-gun shooter *Chiller* (Exidy [U.S.], 1986), for example, uses the horror movie setting of a haunted castle filled with ghouls and creepy creatures, but several of its levels include gory torture chambers filled with non-playable human characters; the game's objective to beat the timer by shooting the most targets requires mutilating these helpless victims with gunshots and execution devices. Haunted houses and castles in the *Castlevania* (Konami, 1986–) platform games and the *Splatterhouse* (Namco [JP], 1988–) beat-em-up series also provide varying amounts of gore appropriate to their inspirations in horror cinema, while Midway's shooter *Smash TV* features a seemingly endless stream of defeated enemies dissolved into clouds of blood and indistinct body parts. Perhaps the closest precursor to *Mortal Kombat*'s fatalities is the PC-DOS sword-and-sorcery-themed fighting game *Barbarian: The Ultimate Warrior* (Palace Software [U.K.], 1987), which opens each match with the ominous narrator announcing "Prepare to Die!" and can conclude with the opponent's gory decapitation if a late-round sword blow to the neck is not parried. But *Mortal Kombat* helped bring such lurid spectacle to a newly popular level, especially in conjunction with the photorealistic sprites of pixilated live actors being torn asunder, not just crudely animated characters.

As John Tobias recalls, "We originally had planned for our end boss character, Shang Tsung, to decapitate the player's character [with a katana] in a single[-]player match. But we ended up using the frames to give the players a chance to do it to each other in a one-on-one match," in place of the initial plan for nonlethal beatdowns to cap each match (Hickey 2018, 176). This method of "put[ting] a big exclamation point at the end [of the match] by letting the winner really rub his victory in the face of the loser" was not deliberately intended to create controversy but rather to improve the overall gameplay experience while differentiating the game from *SFII* (Donovan 2010, 227). The dimming of background lighting for fatalities spotlights the action in a rather theatrical, Grand Guignol fashion while also perhaps recalling the dimmed lighting of the arcades themselves as an extension of the game world's "magic circle" (Huizinga 1949, 10) of space-time suspended outside the bounds of everyday life wherein such amoral acts of extreme violence obviously would not be permitted.[9] And yet Midway's inclusion of a dual in-line parallel (DIP) switch, allowing the arcade operator to manually turn the blood and fatalities on or off (see Midway Games 1992), served as tacit acknowledgment that not only was the game's violence poten-

tially unsuitable for family-friendly locales but also that blood and fatalities are not *intrinsic* to gameplay—even if heavily expected by fans. Letters to gaming magazines, for example, complained about finding such expected features turned off on *MKI* cabinets at Disney theme parks (Hornibrook 1993).

Despite their centrality in the game's appeal, fatalities are not justified by gameplay itself, since performing them is not essential to winning either individual matches or the game as a whole, and they are seldom justified by the game's overarching narrative. Although some characters are narratively motivated by vendettas or evil ambitions (see chapter 2), it is highly questionable how much any given player actually chooses or identifies with their avatar based on such narrative concerns, since the affordances of each character's gameplay strengths are likely a more important factor in character selection (Ware 2016, 164; Hutchinson 2019, 72–73). Hence, the novelty value of the game's fatalities—and the game's blatant use of the "Finish Him/Her!" moment to bracket their potential enactment—allowed critics to see such finishing moves as more of an arbitrary gimmick than a core part of gameplay (see chapter 3). Among competitive fighting gamers, the *Mortal Kombat* games are often written off as more "casual" games compared to the "deep play" offered by the *Street Fighter* series (Harper 2014, 55), since *Mortal Kombat*'s gameplay can seem more motivated by the race to perform preprogrammed finishing moves rather than the pleasures and strategies of in-match combat—though several of the rebooted *Mortal Kombat* games have been periodically featured in competitive gaming tournaments, such as the Evolution (EVO) Championship Series, since 2011. By the release of *MKII*, for instance, its predecessor's point-based score system was replaced with a total Wins counter, eschewing the older coin-op convention of high scores for a tally of defeated opponents. Much as Chris Goto-Jones (2016b, 37n10) notes that the inclusion of gore marks the American *Mortal Kombat* series' cultural difference from the relative restraint of Japanese fighting games like *Street Fighter*, *Mortal Kombat* seems to be a far more life-negating game, thus earning a lower cultural reputation more akin to gory horror movies. While its industrial position as the brash American upstart taking on the Japanese master sounds like a narrative straight out of *Street Fighter*, *Mortal Kombat* gameplay also hails the sort of "cynical and self-interested egotists who fight because they enjoy violence," in contrast to the values of self-transformation through martial-arts mastery narratively represented by *Street Fighter*'s iconic Japanese hero, Ryu (198).

I agree that *Mortal Kombat*'s fatalities largely originated as a gimmick, but they are at least consistent with the macabre, gothically tinged tone of its diegesis; this is not the bright, candy-colored world of *Street Fighter* but a game that instead exudes a seductive sense of mystery and menace. The inclusion of "stage fatalities," or deaths caused by interactions with some element of the combat arena (such as a floor or ceiling covered with spikes, a nearby vat of acid, etc.), was another popular innovation in this regard, tying finishing moves to setting in a more coherent way. Although *SFII*'s gameplay has mild stage interactions (with barrels, boxes, and statues that can be destroyed by a fighter's falling body), *Mortal Kombat*'s "Pit" levels are good examples of arenas that prove especially evocative, because their narrow bridges not only diegetically justify the back-and-forth horizontality of 2D gameplay but also transform the visual environment's background qualities into part of the practical consequences for winning or losing the match (fig. 4). The overhead shot of the defeated combatant falling to their death in *MKII*'s "Pit II" arena also offers the only break from a side-view camera perspective in the first three games—hence its memorably "cinematic" qualities.

In my estimation, the sadistic pleasure that critics and moralists have attributed to performing fatalities is rather overstated, since (again) the player arguably has less of an emotional investment in particular rivalries between characters or second-player opponents than a generalized desire to win. Rather, the fatalities allow the winning player to use the game architecture in momentarily becoming a showperson, potentially dazzling both themself and other viewers by performing brief moments of lurid spectacle. Indeed, the suddenly dimmed backgrounds to spotlight the upcoming gore recall the viewing atmosphere for the fictional recreation of executions that were such a popular subject of the early "cinema of attractions," offering moments of spectacle wrested free of narrative context to winkingly acknowledge the viewer's interest in novelty value, trickery, or sensationalism (Rhodes 2018, 222–28; Schott 2016, 68–69). According to David Surman (2007, 207, 210, 212, 215), the performance of special moves in fighting games produces two registers of pleasure: the visual spectacle of the performed move itself and the player's sense of reward/gratification in performing it successfully. These hypermediated moments—as exemplified by the fatality move, I argue—create a carnivalesque merging of player and avatar such that these fleeting spectacles can outweigh the pleasures of simply winning a given match. Moreover, successfully performing the fatalities may well be satisfying in itself, but within the social space of the arcade, these finish-

Fig. 4. As an elevated arena, "The Pit" in *Mortal Kombat* justifies the game's 2D horizontal gameplay while also allowing players to execute the series' first "stage fatality" with a simple uppercut, as illustrated here.

ing moves also demonstrate mastery and provide the winner with a brief moment of *collective* admiration.

Jesper Juul (2014, 7, 21, 122) suggests that the unpleasurable experience of failure within the safely bounded context of video game play (since the most one really loses is a few quarters) often inspires us to play more, rather than less, in order to redeem our previous inadequacies and mistakes. Following this idea, I find that one of *Mortal Kombat*'s most brilliant innovations is the ability to win a match but still "lose" in the sense of failing to successfully perform a finishing move. These mixed emotions, of both triumphing over an opponent yet failing to perform on cue, may generate an especially strong desire to play again, until such "secret" moves can be mastered. While fatalities are not technically required to win the match/game, there may be both internal or external pressure to perform them, based on the presence of spectators (including the losing player) or even simply the winning player's desire to exploit the game's technological affordances. If "to play a video game is therefore to interact with real rules while imagining a fictional world, and a video game is a set of rules as well as a fictional world" (Juul 2005, 1), then playing *Mortal Kombat* involves not only playing alongside a human- or AI-controlled opponent but also imaginatively playing with the game's designers to execute the visual centerpieces encoded into its architecture.

That said, Tobias himself has suggested (somewhat defensively) that the fatalities can get boring and repetitive to watch after some time, so there must be some deeper gameplay elements that keep bringing players back to the series—such as, perhaps, the increasingly complex storyline laid out across the sequels and spin-offs (Hollingsworth 1995; Bieniek 1995c, 51). To increase the game's playability and novelty value, every character received two fatality moves in *MKII*, but other varieties of finishing moves introduced in *MKII* never achieved comparable popularity, because they were so tonally inconsistent with the series' overall dark and macabre ambience. "Babalities" (which magically transform the defeated opponent into a crying infant), for instance, can only be performed after winning the final round using just the Kick buttons—thus intended to humiliate the loser by not only mocking their presumed desire to throw a childish tantrum but also by defeating them with one's hands tied behind one's back. In addition to the Babalities sending one's opponent back to the beginning of their life instead of delivering their demise, Tobias claims that the "Friendships" in *MKII*, in which the winner presents the loser with a gift or other sign of amity, were added in anticipation of the December 1993 U.S. Senate hearings on video game violence (see chapter 3) as a means of preemptively offsetting *MKII*'s doubled number of fatalities per character (Kent 2001, 480). As I will discuss in chapter 4, finishing moves have remained *Mortal Kombat*'s most indelible contribution to the fighting genre, with many imitator and parody games taking them as de rigueur; however, the influence would begin to move back the other direction, with later *Mortal Kombat* sequels re-adapting different types of finishing moves from competing games. And yet this increase in different finishing moves per character also complemented the growing incorporation of more and more secrets and hidden features into the games—one of *Mortal Kombat*'s oft-overlooked influences upon the larger genre.

Hidden Characters and "Easter Eggs"

The centrality of finishing moves as an expected (if not required) part of *Mortal Kombat*'s gameplay required knowledge of their existence and execution, but Midway's resistance to publicize such secrets during the games' initial coin-op run only added to the series' mystique. Special moves may have already been conventionalized with *SFII*, but the secrecy surrounding *Mortal Kombat*'s tantalizingly macabre fatalities strongly complemented the series' own dark and gothic tone, especially

the occultish Outworld settings created by environment artist Tony Goskie for *MKII*, by literally *occulting* the game's most spectacular features. That is, the mysterious quality of the diegesis itself was enhanced by the implication of hidden mysteries within the game's internal code. Amid the transient social space of the arcade, players with more experience might appear with knowledge of how to perform such moves in a newly released version of the game and only sometimes be willing to share such information with the uninformed. In this regard, much of the games' initial appeal can be linked to the acquisition of what Mia Consalvo (2007, 184) has termed "gaming capital," or the subcultural knowledge and competencies around video gaming that are largely social and paratextual in nature, able to build a sense of superiority in relation to their relevant game over time.

Gaming magazines would also publicize the finishing moves, even as this did not necessarily quell players' requests for more information. Chris Bieniek (1995a, 8), executive editor of *Video Games*, for example, complained that "there are days when it seems as if half of the [readers'] letters say, 'Can you tell me all of the fatalities for *Mortal Kombat II*?' and the other half say, "Here are all of the fatalities for *Mortal Kombat II*!" Likewise, a February 1994 issue of *GamePro* ("Reader Report," 14) observes that two-thirds of readers' letters requested information about hidden secrets in home ports of *MKI*, with particular emphasis on how to perform uncensored fatalities on the Super Nintendo or how to play as hidden or boss characters. As noted in chapter 3, the "blood code" for the uncensored fatalities in the SEGA Genesis (SEGA MegaDrive) port of *MKI* was already a widespread non-secret, published in gaming magazines and also available through a customer service line. Still, reader demand was so great in Midway's hometown that the *Chicago Tribune* even began publishing finishing moves and cheat codes for the newly released games (Carter and Carter 1993a; Carter and Carter 1996).

Rather than following Capcom's strategy of releasing updated *SFII* editions several months apart, Midway released new iterations of the same game as additional tweaks to the game's code were rolled out, with arcade operators expected to install boards of the latest version in their cabinets. Gaming magazines also tracked and publicized the differences by version number, allowing players to stay informed on such features as new fatalities, hidden characters and games, and other "Easter eggs" (secret messages, tricks, and in-jokes encoded by game designers). Of course, the inclusion of Easter eggs in video games was not a new phenomenon in itself—with examples dating back to the game designer

credits hidden in *Adventure* (Atari [U.S.], 1979)—but they were not typically associated with the fighting genre before the *Mortal Kombat* series made them a both promotable and diegetically plausible addition. By the time *Mortal Kombat* imitators appeared in the mid-1990s, the inclusion of hidden characters and other layers of secret techniques was highly promoted as a means of competing with Midway's franchise (e.g., "*Way of the Warrior*" 1994, 172).

Most notably, Tobias and Boon created *MKI*'s hidden non-playable fighter Reptile—who would occasionally appear at random before matches and provide clues on how to unlock a fight against him—as an in-joke referring back to an infamous mistranslation in the American coin-op release of *SFII*. In Capcom's game, Ryu's post-match taunt screen should translate from Japanese as "If you cannot overcome the *Shōryūken* [his 'rising dragon punch' special move], you cannot win!" but through a localization error, this phrase was mistranslated by way of Chinese pinyin into the English phrase "You must defeat Sheng Long to stand a chance!" After American players began wondering whether there was a secret fighter named Sheng Long hidden within the game, *Electronic Gaming Monthly* ("Tricks of the Trade" 1992, 60) published a 1992 April Fool's joke claiming that he could be unlocked through an arcane series of gameplay requirements.[10] *MKI* was in development at the time, so Tobias and Boon decided to again do what *SFII* did not (Kunkel 1994, 42), deliberately incorporating Reptile into the game as a hidden character (fig. 5), and later making him a playable character in *MKII*.[11] Other hidden NPCs, such as Smoke and Jade, appeared in *MKII*, peeking out from behind trees in the "Living Forest" arena, and were made playable fighters in sequels. In a nod to video game history, hidden mini-games were also included, with players able to play *PONG* (Atari, 1972) after reaching 250 consecutive matches (or the equivalent of $125 at fifty cents per match!) in *MKII*'s two-player mode, and *Galaga* (Namco, 1981; published in the U.S. by Midway) by reaching 100 matches in *MK3*.

Other rumors originated from deeper in *Mortal Kombat*'s code, such as *MKI*'s audit menu (a gameplay log accessible only by arcade operators) listing the number of "ERMACS" (short for "error macros," or manifestations of coding bugs) just below the counter for "Reptile Battles" (LaMancha 1994, 34).[12] When rumors began circulating that "Ermac" was another hidden character, this became a running joke within the series, with one of *MKII*'s hidden opponents, Jade, occasionally appearing before matches to announce "Ermac Who?" Other red herrings included a "Kano Transformations" counter in *MKII* and a "Johnny Cage

Fig. 5. Hidden fighter Reptile appears at random before a round in *Mortal Kombat*, providing hints about the multiple steps needed to trigger a match against him.

Transformations" counter in *MK3*, to trick players into believing there was a way to unlock characters missing from those sequels—though, again, these rumors would have to travel via word of mouth from an arcade operator with access to the audit menu, which ordinary players could not see. Most of these hidden fighters (e.g., Reptile, Smoke, Noob Saibot, Jade, Ermac, Rain, Chameleon, et al.) are "palette swap" characters of existing sprites, thus allowing "new" characters to be included with a simple color change instead of burdening the arcade board's limited memory capacity with a whole new set of character sprites. "A lot of the [secret] things aren't based on the story," Tobias admitted; "they're just random events" (Quan 1994b, 29). Indeed, when many of these fighters were later introduced as playable characters in more completist sequels like *Ultimate Mortal Kombat 3* (Midway, 1995) and *Mortal Kombat Trilogy* (Midway, 1996), their gameplay abilities were often poorly balanced and their backstories seem tacked onto the increasingly sprawling story world.

What we see, then, is *Mortal Kombat*'s creative team increasingly seed-

ing rumors into the series—and, in many cases, incorporating onetime rumors into later games in a sort of feedback loop driven by players' and magazine editors' overactive imaginations. The constant proliferation of rumors, revised iterations, and Easter eggs ultimately proved to be a marketing coup in terms of keeping *Mortal Kombat* featured in gaming magazines, thereby fueling players' interest in what might come next. As they previously did with the *SFII* Sheng Long rumor, gaming magazines often reported on the word-of-mouth rumors spread in the arcades—such as the "Animality" finishing moves merely rumored in *MKII* but incorporated into *MK3* ("*Mortal Kombat III*" 1994, 113)—and also helped spread tongue-in-cheek rumors of their own, such as a hoax about a hidden *MKI* character called "Nimbus Terrafaux" ("Tricks of the Trade" 1994, 96).

Yet, by the time *MK3* was released to arcades in April 1995, the internet had become a more widespread means of "spoiling" the game's secrets, so Midway initially planned to release different iterations of the game to arcades in different parts of the country with the version numbers deliberately hidden, thus making it more difficult for players to know which features were or were not present on any given machine (Grossman and Harris 1995, 111). Although this plan was apparently abandoned, *MK3* did incorporate a "Kombat Kodes" feature in two-player mode, in which players use their buttons to enter six-symbol codes during the pre-match Vs. screen that can trigger a variety of different gameplay variations and hidden battles/games. And when permitted to enter an "Ultimate Kombat Kode" after the Game Over screen, the correct code unlocks Smoke, a cybernetic version of one of *MKII*'s hidden NPCs, who is now permanently added to the Character Select menu. *Mortal Kombat: Deadly Alliance* (Midway, 2002) would also introduce a currency-based system of secrets, with effective gameplay earning "Koins" that can unlock hundreds of bonus features (e.g., new arenas, alternate costumes, hidden games, cut-scenes, etc.), stored in a repository of unmarked coffins called the "Krypt."

Overall, then, a major (if often underappreciated) part of *Mortal Kombat*'s cult appeal is its heavy focus on Easter eggs and hidden features—some treated more seriously than others—which has fueled the series' fan following by not only deepening the games' mysterious feel but also foregrounding the game's designers as auteurs. Whether including digitized versions of their own skewered heads at the bottom of the Pit in *MKI*, or in *MKII* including a hidden character with the reversed surnames of Boon and Tobias ("Noob Saibot") and an in-round cameo

of Dan Forden's head popping up in the corner of the screen to say "Toasty!" the *Mortal Kombat* design team has often inscribed their own winking signatures into the games. (They would also do so in *NBA Jam* and its sequels by including themselves among a large roster of hidden playable characters that, in an early release, included playable *Mortal Kombat* characters before the National Basketball Association nixed that possibility in further revisions, citing *Mortal Kombat*'s association with violence [Ali 2019, 123–27, 136].) These Easter eggs and in-jokes may be self-consciously puckish nods to the game's authorship, helping foster a playful sense of connection between designer and gamer, but they also serve an important role in constructing the series' occult vibe as a marker of difference from its original coin-op competitors.

Pixilated Photorealistic Sprites

Aside from the inclusion of blood and gore, perhaps *Mortal Kombat*'s most apparent aesthetic distinction from its competitors like *SFII*, at least in Midway's original trilogy, was the use of character sprites animated in a stop-motion manner from digitized video still frames of live actors performing the fighters' movements. Whereas *SFII* still looks more akin to earlier generations of fighting games in its use of cartoon-ish sprites, it is difficult to overstate just how revolutionary the photorealistic quality (however dated by today's standards) of *Mortal Kombat*'s character sprites seemed in 1992–93. But here, again, there were certain predecessors. Recall that *Karateka* used rotoscoping, or the use of filmed human movements as a visual guide for form-tracing hand-drawn animation (an animation technique dating back to the 1910s), as the basis for its lifelike martial-arts movements. But rotoscoping, while technically an *indexical* record (Peirce 1977) of physical movement and timing taken from real-world performances, lacks photography's overtly indexical quality of an actual connection between sign and signified (e.g., a record of the light that bounced off a real-world photographic subject and was captured on film or video) and therefore differs from the techniques used in *Mortal Kombat*.

The indexicality of photorealistic graphics would instead be pioneered in laserdisc-based video games descended from early examples like *Quarter Horse* (Electro Sport [U.S.], 1981), a betting game featuring prerecorded full-motion video (FMV), and *Exterminator* (Gottlieb [U.S.], 1989), a shooter featuring photorealistic backgrounds with animated sprites playable in the foreground (Wolf 2008a, 97; Wolf 2008c, 99–

101). Other games would reverse this equation, using stop-motion animation techniques to provide photorealistic sprites in the foreground, set against hand-drawn backgrounds. In the fighting game *Reikai Doushi* (aka *Chinese Exorcist*) (Home Data [JP], 1988), for example, the character sprites are derived from stop-motion animation of big-headed dolls resembling something from a Rankin/Bass holiday special, though the head of each demonic opponent bloodlessly falls off when defeated by the protagonist. Inspired by Ray Harryhausen's pioneering special effects on fantasy films like *Jason and the Argonauts* (Don Chaffey, 1963), this use of character animation from stop-motion miniatures would later be used in *Mortal Kombat*'s monstrous, four-armed sub-bosses Goro (*MKI*) and Kintaro (*MKII*) and also employed by *Mortal Kombat* parodies like *ClayFighter* (Visual Concepts [U.S.], 1993) and imitators like *Primal Rage* (Atari, 1994). These are all examples, then, of what Jay David Bolter and Richard Grusin (1999, 91) term "remediation," or the interpenetration of one media form by another, with newer media like video games often trying to gain legitimacy by incorporating elements from earlier media forms like photography and film.

But using human actors as stop-motion subjects—an animation technique known as "pixilation"—for playable sprites would be most notably introduced in *NARC* (Midway, 1988) and *Pit-Fighter* (Atari, 1990), although Midway had been toying with the technology as early as 1983 (Ali 2019, 34). Both coin-op games—a side-scrolling shooter and a fighting game, respectively—use digitized photographs of human actors as sources for simple animation, though both also use such photorealism to enhance the violent feel of each game. Midway would use this technique for the human NPCs in its rail-shooter *Terminator 2: Judgment Day* (1991), a merchandising tie-in for James Cameron's special-effects-heavy 1991 blockbuster movie. Indeed, Bolter and Grusin (1999, 101) note how, rather than creating cinema's sense of immersion through the immediacy of such imagery, representations of graphic violence in video games tend toward a hypermediated effect, reminding one of the cartoonishness of such excess when filmic elements are transposed into a new medium. Although *NARC* and *Terminator 2* were both successes in the coin-op market, *Pit-Fighter*'s clunky gameplay and crudely animated sprites made it seem as low-rent as the underground, bare-knuckle fighting arenas where the game's story is set. Midway, then, was already sympathetic toward using pixilation to render playable character sprites when Boon and Tobias pitched the idea of an *SFII* competitor, because "by using the digitizing technique we could achieve a high amount of

detail, given the size of the onscreen characters, in an expedited amount of time" (Donovan 2010, 227).

By this time, *Terminator 2*'s commercial success had convinced Midway that coin-op games with elements licensed from high-profile properties could be a lucrative cross-marketing tool (Ali 2019, 71). Once digitizing Van Damme was no longer an option after the *Universal Soldier* licensing deal collapsed, however, Tobias looked for credible martial artists in the Chicago area and recruited some acquaintances from Lakeshore Athletic Club as the game's original cast.[13] About ten years older than the rest of the cast, Daniel Pesina (Johnny Cage, Sub-Zero, Scorpion) had already trained Richard Divizio (Kano), Ho-Sung Pak (Liu Kang, Shang Tsung), and his younger brother Carlos Pesina (Raiden) in the Chinese martial-arts performance style *wushu* (see chapter 2) from their teenage years, while latecomer Elizabeth Malecki (Sonya) was trained as a dancer and gymnast, not a martial artist. Several of them also had experience as stunt extras in the Chicago-shot *Teenage Mutant Ninja Turtles II: Secret of the Ooze* (Michael Pressman, 1991) by the time Tobias came calling. Daniel Pesina took the lead, performing potential moves for Tobias in test footage shot over three eight-hour days at Midway (fig. 6) and advising on the combat styles that he and his former students could bring to the game (McCarthy 2018). In total, Pesina contributed up to eighty on-camera hours, earning fifty dollars per hour for the first game and seventy-five dollars per hour on the sequel (Leone 2018). Each of the actors is also credited by name in the game's closing credits as their characters jump onto the screen for a final curtain call.

Tobias used a Hi8 camera to record the actors holding various still positions as they slowly went through their movements (with ramps and other scaffolding, later edited out, used for the jump kicks and other aerial moves). Because these character movements would not be rendered as FMV (except for a two-second bit of FMV during each character's introduction screen in *MKI*'s attract mode) but rather as still frames to be edited together in a stop-motion manner, he used AT&T's *TIPS* video-capture software to import and formally extract the still images of these figures before manually touching up the colors, lighting, and muscle definition. These video-captured stills would then be combined with more traditional animation for the game's more supernatural touches, such as projectiles, character transformations, and gore effects (figs. 7–8). For instance, Liu Kang's *MKII* fatality of morphing into a dragon to bite his opponent in half, or Kung Lao splitting his opponent down the middle with his razor-edged hat, were products of Tobias's hand-drawn

Fig. 6. Fight choreographer Daniel Pesina (as Scorpion) and Ho-Sung Pak (as Liu Kang) pose during the motion-capture process on *Mortal Kombat II*. Photo courtesy of Daniel Pesina.

animation: "I'd have the [actors] fall to the mat and tell them to pretend that they're like a banana and they're peeling. I'd go into the images and split them in half and add all the insides and body pieces" (Quan 1994c, 114). As such, the indexicality of the photorealistic character sprites may recall the 3D-ness of the live actors but is always held in tension with the 2D qualities of the painted backgrounds and other blatantly animated elements (e.g., blood and gore).

   With Hi8 video recording at the equivalent of thirty frames per second, Boon and Tobias still had to figure out how to drop from thirty to eight frames per second, for the sake of the *MKI* arcade board's limited processing power, while not producing the sort of unnaturally jumpy movements seen in predecessors like *Pit-Fighter*. To create the illusion of smoother animation, then, each fighter's pre-move resting stance employed an above-average frame rate, making it look more fluid compared to the drop-frame frame rate for the combat movements. *MKI* was designed using a 32-bit Texas Instruments 34010 graphics processor, but the color palette provided by the Hi8 video source still had to be downscaled to accommodate the 24-bit color palette of the cabinet's

Figs. 7–8. In one of the gorier *Mortal Kombat II* fatalities, Kung Lao splits Jax down the middle with his razor-rimmed hat, showcasing how digitized character sprites are augmented with hand-drawn blood and gore animation.

CRT (cathode ray tube) screen (Kunkel 1993b, 43). By *MKII*, however, a larger production budget meant the design team could invest in a twenty-thousand-dollar, broadcast-quality Sony digital camera for higher-quality image capture, a big step up from the consumer-grade analog quality of Hi8 video. They also used a blue-screen process on *MKII* to more easily and efficiently isolate the images of the live actors, while the digital-to-digital workflow of *MKII*'s image capture permitted much higher graphi-

cal resolution (Quan 1994c, 114). The *MKII* arcade board itself boasted a 96-megabit memory capacity, compared to the 48-megabit capacity of *MKI*, thus allowing more detailed graphics and more space for additional character sprites (LaMancha 1994, 30).

Electronic Games called these digitized sprites *MKI*'s "most appealing aspect," because "the process has been refined a hundred times over since *Pit-Fighter*" (Sushi-X 1993, 37). Midway's success with the pixilation technique inspired them to use it in further games, such as *NBA Jam*, the Aerosmith-inspired rail-shooter *Revolution X* (1994), and *WWF Wrestlemania: The Arcade Game* (1995).[14] Several of the live actors digitized for *MK3* had previously appeared in those other Midway games, including Kerri Hoskins (Sonya), Sal DiVita (Nightwolf, Cyrax, Sektor, Smoke), and Tony Marquez (Kung Lao) (Bieniek 1995b, 46). *Mortal Kombat*'s use of pixilation was so influential that it became commonly used (to varying effect) in many of the clone games developed during the "Mortal Moment" (see chapter 4).

Pixilation's formal roots arguably extend back as far as the precinematic sequential photography used in Eadweard Muybridge's 1870s-80s animal locomotion studies, but as an experimental animation technique it is perhaps better exemplified by the work of Canadian animators Grant Munro and Norman McLaren. McLaren's Oscar-winning short *Neighbours* (1952), for instance, bears fascinating visual similarities to *Mortal Kombat*'s digitized sprites. A darkly funny Cold War allegory, *Neighbours* depicts two suburban men going to war (and soon destroying each other) in a battle of ownership over a beautiful flower that has appeared on their property line. Knocking each other across their lawns with comically exaggerated blows, levitating and spinning in the air, and even tearing down their respective opponent's home to kill their wife and child with brutal efficiency, the combatants in *Neighbours* move in obviously fantastical ways but are still eerily all too human in appearance. As Laura Ivins-Hulley (2013, 279) says of Czech surrealist Jan Švankmajer's films, pixilation differs from traditional 2D or puppet-based animation because its treatment of actual flesh-and-blood people in an animation technique more commonly associated with frame drawings or inanimate objects "purposefully charges headlong into the space that most animation and visual effects attempt to avoid: the uncanny valley." Likewise, Lisa Perrott (2015, 124, 132) describes pixilation as producing a sort of spectral effect due to the loss of frames in the stop-motion process, with human bodies becoming visually rendered in a space somewhere between action and inaction, living and nonliving.

Grainy, behind-the-scenes home-video footage of *Mortal Kombat*'s live actors performing their moves was once the stuff of electronic press kits but is now widely available on YouTube (Neogamer 2018). Looking back at this footage today, those of us who grew up seeing these movements performed in pixilated form in the games themselves are likely to be struck by a sort of inverted "uncanny valley" effect: visually recognizing the once-digitized movement first and then being struck by the strange déjà vu of retrospectively seeing the same motion performed by the on-set actor as part of a wider range of fluid human movements. And yet it is important to note that the actors' physical ability to perform a movement has more than a purely aesthetic dimension, since any given actor's range of movement also impinges on their character's playability; the reach of an uppercut, the length of leg extension on a kick, and so on, must all become part of a player's strategy, since these movements will help determine the strengths and weaknesses of the characters in different matchups. (When the same actor portrays different characters across different *Mortal Kombat* games, or when an earlier character is recast with a new actor in a sequel, the similarities and differences between each actor's physical abilities come into particular focus.) In this regard, the indexicality of the photorealistic graphics becomes grounded in the overall quality of gameplay, strengthening the sensory linkage between the pixilated image and the performing bodies of actor and gamer alike. Not all critics, however, were so taken by these traits. For Steven Poole (2000, 33), the motion capture of live actors represents the "Achilles' heel of the [fighting] genre," because "once an animation has started, it must finish before the next one can start." With players constrained by whatever movements actors performed in the development studio and how those moves are encoded into the game, more realistic fighting strategies like feints cannot be performed, so the player is arguably allowed less control than in later generations of fighting games using 3D physical modeling for sprites (48).

However, when using real-life people as actors for animation processes, issues of control can take on unexpectedly complex ramifications. As Ivins-Hulley (2013, 271, 275) and Perrott (2015, 127) both note of pixilation, it can be difficult to discern how much agency and creative authority should be accorded to either the actors or the filmmaker/animator, since the actors bring certain skills to their performances while the animators bring talents for frame selection, timing, and overall manipulation of raw footage. Midway was, in fact, unsuccessfully sued by several former actors from *MKI* and *MKII* (including Daniel Pesina, Eliz-

abeth Malecki, Katalin Zamiar, and Philip Ahn) over infringement on their right of publicity, especially over unpaid royalties from the games' home console ports, despite the fact that the actors had all signed release forms for their per diem labor.[15] Although both of these lawsuits stressed the plaintiffs' athletic abilities as the reason why Midway first cast them, primary authorship was established based on the act of videotaping their choreographed movements into a "fixed" work that was then digitally manipulated by the design team, especially because the resulting sprites can perform aerobatic moves that would be physically impossible for an actual person to perform. Because Midway claimed sole ownership of the underlying game code to make such characters come to life in animated form, the actors' on-set ideas for particular moves did not qualify as joint authorship:

> Midway alone decided which portions of plaintiffs' "performances" to digitalize [*sic*] and alone transformed the video images into the cartoon-like images in the game. It is apparent to the court, in viewing videotapes of the actual games, that the superhuman gyrations and leaps high into the air of the characters, including plaintiffs' characters, are fanciful products of the imaginations of the creators of the source codes.[16]

Despite the plaintiffs in both cases losing their claims against Midway, and their characters becoming subsequently recast with new actors in sequels, the lawyers who represented Midway have since raised questions about the very legal loopholes that benefited their corporate client. Gerald O. Sweeney Jr. and John T. Williams (2002, 108–10) now caution that, with the increased ease and ubiquity of computer-generated imagery (CGI), unauthorized, digitally created performances may begin infringing on celebrities' right of publicity unless nationally recognized statutes are enacted to prevent such derivative works from digitally manipulating an actor's appearance enough to qualify as a transformative work. By framing their caution as of special relevance to the movie industry, they also acknowledge the cinematic qualities and influences exploited in *Mortal Kombat*'s early games, which is the topic to which the following chapter now turns.

Cinematic Influences and Cultural Politics

We make movies. The only difference is that ours come in a box. Whether it's a video-game cabinet or a home machine, we're creating movies.

—ROGER SHARPE, DIRECTOR OF MARKETING, MIDWAY GAMES

The genre of fighting games is not typically known for its strong narrative content—unlike, say, the deep character immersion and long quests associated with more reputable genres like role-playing games (RPGs)—and fighting games are more often associated with the quick and largely disposable thrills of each matchup. Although the post-match taunt screens of the *Street Fighter* games might offer some small glimpse into particular characters' personalities, for example, players are far more likely "to know our on-screen equal through the expressive range of their movements (the iconic language of animation)" during in-match gameplay and the overall investment in mastering a given character's special moves (Surman 2007, 215). While the challenges of two-player competition depend on the respective skill of one's human opponent, the single-player mode of most fighting games is typically arranged as a series of bouts against either a representative selection or a full roster of computer-controlled opponents, with the AI difficulty ratcheting up as one approaches a final "boss" character(s). As Chris Goto-Jones (2016b, 45) argues, then, most game genres make mastery of the control scheme an instrumental starting point for exploring a larger virtual world, but

fighting games rehearse incrementally more difficult battles in order to make mastery of the control scheme the game's overall goal. And as Nicholas Ware (2016, 159) adds, the "repetition of the fight-through-the-tournament structure of storytelling is a patterning that frames not only the individual narratives of the playable characters but also the experience of the player."

Rachael Hutchinson (2007, 286) notes that broadly sketched characters, especially ones that embody certain cultural stereotypes, may be "much easier to write and create than complex realistic characters," in addition to allowing players "to quickly and easily distinguish characters from one another, so players can recognize their opponent and adjust their fighting style appropriately." The storytelling limitations of fighting games are thus largely generic in nature but also contingent on technological and design limitations. The character roster in early *Mortal Kombat* games was partly determined by memory constraints, for instance—hence why separate storylines for each character might be a convenient justification for including so many "palette swap" characters (e.g., Scorpion/Sub-Zero/Reptile, Kitana/Mileena/Jade) (Begy 2012, 211). In other cases, new characters in sequels evolved from unused character designs that time or space did not allow in previous games, such as *MKII*'s Jax having initially been planned in place of *Mortal Kombat*'s Sonya, before the designers elected to replace him with *MKI*'s sole female character; or Baraka's (*MKII*) original character design as a fighter armed with hook swords, which later became the basis of *MK3*'s Kabal. Moreover, an *MKII* subplot involving *MKI* characters Kano and Sonya being captured by the evil emperor Shao Kahn (and shown held in chains in one of the *MKII* arena backgrounds) was solely invented due to memory constraints, since there was not enough space for all *MKI* characters to return alongside the newly introduced character sprites, and the audit menus in *MKI* machines had already shown Sonya and Kano as the first game's least-selected characters (Quan 1994c, 118).

Mortal Kombat's cocreator John Tobias admitted, "It's difficult to set up a storyline with an arcade fighting game," because "you're pretty much limited to the Attract Mode" (Kunkel 1994, 38). Hence, comic books, strategy guides, and other paratexts can provide extra narrative information that cannot be conveyed through in-round gameplay alone (Wolf 2001, 101). Indeed, *MKI*'s attract mode offers not only a brief justification for the titular tournament and short character biographies of each selectable fighter but also Midway's mail-order offer for a *Mortal Kombat* Collector's Edition comic book (Tobias 1992), which provides additional

backstory. Even before the first game's success was a sure thing, then, comic books were already a crucial part of the world-building process that would become all the more apparent across the sequels, especially in the increasingly baroque cosmology introduced in conjunction with *Mortal Kombat 4.*

The backstory established in the attract mode and comic book for *MK1* begins five hundred years ago, when the mysterious sorcerer Shang Tsung emerges as the unexpected winner of a Shaolin martial-arts tournament. After being bested by a Shaolin master, the Great Kung Lao, Shang enlists a secret weapon—a four-armed demigod named Goro, prince of a desolate parallel dimension called the Outworld—to defeat Kung Lao and maintain indefinite control over the tournament. Relocating the once-a-generation tournament to his island stronghold in the East China Sea, Shang uses Goro's ensuing five centuries of victory for turning the onetime Shaolin-hosted tournament into a death match and absorbing the souls of dispatched combatants to ensure Shang's own immortality. Among the newest challengers at the Mortal Kombat tournament are Liu Kang, a Shaolin monk intent on restoring the tournament to its former glory; Johnny Cage, a Hollywood martial-arts star joining the tournament out of egotism; Kano, a wanted member of the Black Dragon Society criminal organization; Sonya Blade, a U.S. Special Forces lieutenant in pursuit of Kano; Raiden, a thunder god guiding the human combatants in their challenge to the forces of evil; Sub-Zero, a mysterious member of a Chinese assassin group, the Lin Kuei; and the revenant Scorpion, formerly a member of a rival assassin group (the Shirai Ryu), now returned from Hell (or the "Netherrealm") to exact revenge on Sub-Zero for the (apparent) murders of his family and himself.

According to the *MK2* attract mode and Collector's Edition comic book (Tobias 1993), Liu Kang kills Goro and defeats Shang Tsung during *MK1*'s tournament, while Scorpion kills Sub-Zero, and both Kano and Sonya are drawn through a dimensional portal when Shang retreats to the Outworld to beg a second chance from the evil emperor Shao Kahn. The emperor devises a plan to win ownership over the Earth (or "Earthrealm") through a new winner-takes-all tournament held in the Outworld, headed by the newly revivified Shang and another monstrous four-armed warrior, Kintaro. Liu Kang returns home to find the Shaolin Temple destroyed by Baraka's band of Outworld warriors at Shang's command, but there he reunites with an eponymously named descendant of Kung Lao (a fellow member of the secretive White Lotus Society, founded by Raiden). Two factions of combatants form—the evil Out-

worlders led by Shao Kahn (Shang, Kintaro, Kitana, Mileena, Baraka, Reptile) and the Earthrealm warriors led by Raiden (Liu Kang, Kung Lao, Johnny Cage, Sub-Zero, Scorpion, and Sonya's former teammate Jax)—and we eventually learn that, by dint of the Elder Gods, the victor of ten Mortal Kombat Grand Championships in a row entitles their represented realm to gain possession of an adjacent realm. Goro had been defeated by Liu Kang short of one remaining victory, thus holding off the interdimensional takeover, but regardless of the newly announced tournament's outcome, it is merely a distraction from the Outworld's impending invasion of Earth.[1] Although Liu Kang is again victorious in this second tournament, the invasion finally occurs in *MK3*, in spite of the Elder Gods' prohibitions, via a dimensional rift opened when Shang reincarnates Shao Kahn's long-deceased wife, Sindel (former queen of the realm of Edenia), on Earth and crosses over to retrieve her, with much of the action occurring in a postapocalyptic Chicago.

Yes, if this all sounds rather arcane, it still pales in comparison to the inordinately expanded story through which later sequel/prequel games and paratexts would "retcon" (i.e., establish retroactive continuity with) the original trilogy's narrative events via a plethora of additional subplots, characters, and alternate timelines (see chapter 4). Whereas video games tend to allow the player's imagination to fill in the gaps left by general nods toward world-building (Wolf 2012; Aranda 2016, 419), even from this simplified overview we can see that the series contains far more narrative cues than the average fighting game, thus complementing the games' aforementioned inclusion of hidden characters and other "Easter eggs" as clues to a much larger implied diegesis than can be conveyed through gameplay itself. Although *Mortal Kombat* was arguably the first fighting game series to develop "lore," fighting games are a deceptively complicated genre for maintaining a coherent series-long narrative, because each playable character likely has some (small) degree of backstory, and winning the game as a given character typically reveals a character-specific ending that bookends their competition (Hutchinson 2019, 72–73). As Ware (2016, 160) posits, the fighting between different characters thus implies a fighting of different narratives for supremacy, but it is difficult to tell which of these character endings is "canon" until a sequel game confirms who actually won the previous tournament. Consequently, a garden of forking paths is retroactively shoehorned into a serialized framing narrative whose potentially clumsy convolutions bespeak the various narrative fragments that are either confirmed or denied in each subsequent game.[2]

And yet I argue that in addition to clarifying this overarching frame narrative through Midway's authorized paratexts, a web of cinematic allusions and other cultural touchpoints also serve as important extradiegetic fabric for the *Mortal Kombat* series. Much as Janet Staiger (1992) notes that early tableau-based films like *Uncle Tom's Cabin* (Edwin S. Porter, 1903) may look very "primitive" and narratively confusing to modern viewers because we lack the close familiarity with Harriet Beecher Stowe's then-popular 1852 novel that period viewers would have already gained through that cultural moment's intertextual surround, we might see a variety of films and other references as helping to flesh out the story world in *Mortal Kombat*'s many tableaux of hand-to-hand combat. This is not to say, of course, that all *Mortal Kombat* players (especially given their youth demographic) would have recognized the many films that John Tobias has cited as either direct or indirect inspiration on the series. Still, the games' overall narrative has far more coherence when one has some familiarity with both the wuxia and kung fu strands of Hong Kong martial-arts cinema, plus the Jean-Claude Van Damme films that had initially brought that star to Midway's attention before the failed *Universal Soldier* licensing deal.

A number of earlier martial-arts-themed video games had at least superficial links to movies, especially when tied to particular stars: from *Chuck Norris Superkicks*, to *Kung-Fu Master*'s Japanese reissue as an unlicensed tie-in with Jackie Chan's martial-arts comedy *Meals on Wheels* (Sammo Hung, 1984), to Datasoft's (U.S.) 1984 *Bruce Lee* platform game. But few fighting games possess *Mortal Kombat*'s dense indebtedness to specific films and cultural mythologies previously transmitted through cinema. By tracing the history and influence of Hong Kong martial-arts cinema up through the popularity of Bruce Lee in the 1970s, the Americanization of such films via rising stars like Van Damme in the 1980s, and the wuxia revival in pre-reunification Hong Kong's "New Wave" films, we will find a mélange of historical signifiers that may indeed have been cobbled together from an orientalist cultural imaginary among an all-white team of American game designers but whose very transnational circulation also complicates some of the more one-sided accusations of racism and sexism leveled at the early *Mortal Kombat* games.

From Wuxia to Kung Fu Films

The history of Chinese martial-arts cinema extends back to the long-running Shanghai-made serial *Torching the Red Lotus Temple* (1928–31),

also considered the first masterpiece of *wuxia pian* (chivalric swordplay films). Wuxia films are typically set in a fantastical version of China's premodern past, featuring sword-wielding heroes (both male and female) with superhuman abilities to fly weightlessly through the air and unleash energy bursts (dubbed "palm power") from their hands or weapons. Over half of all Shanghai film production from 1928 to 1931 consisted of wuxia films, but government censors cracked down on their production in 1931, fearing not only that their supernatural elements might promote superstition but also that their mix of old folk culture with new cinematic special effects might slow China's path toward modernization (Desser 2000, 31; Cheuk 2008, 86–87; Hunt 2003, 6–7; Zhen 2001, 55–57). After World War II and the 1949 Communist Revolution, much of this production shifted to Hong Kong, from which companies like Shaw Brothers could more easily distribute films across the Asia-Pacific region (Chung 2007, 671–75). Wuxia films made intermittent comebacks over subsequent decades, especially once the success of Japanese *chanbara* films like the *Zatoichi* series (1962–89) led Hong Kong studios to send aspiring filmmakers to train in Japan and come back ready to revive wuxia films as a homegrown Chinese form of swordplay cinema. But wuxia films were largely considered passé after the box-office failure of King Hu's *A Touch of Zen* (1971) (Hunt 2003, 3; Teo 1997, 98; Teo 2009, 143).

Kung fu films, by contrast, emphasize the variety of empty-handed combat styles that, according to legend, were developed in Bodhidharma's time at the Shaolin Temple in Henan Province during the Northern and Southern dynasties (420–589 CE), though the films themselves are typically set in somewhat more contemporary settings. Shaw Brothers' *The Chinese Boxer* (Jimmy Wang, 1970) is often credited as the first breakthrough kung fu film, with its success and the following year's Bruce Lee vehicle *The Big Boss* (aka *Fists of Fury*, Lo Wei, 1971) helping displace the wuxia film's popularity by 1972 (Teo 1997, 103). Whereas wuxia films relied heavily on montage and special effects like wirework to depict their heroes' superhuman attributes, kung fu films increasingly highlighted the pro-filmic authenticity of martial artistry, with stars like Lee effectively "re-masculinizing" martial-arts cinema by displacing wuxia's frequent female heroes and elevating masculine spectacles of bodily mastery (Tasker 1997, 322–38; Hunt 2003, 46, 53, 119; Bowman 2011, 64). Warner Brothers, meanwhile, helped popularize kung fu with Western audiences by first distributing the Shaw Brothers' *King Boxer* (aka *Five Fingers of Death*, Jeong Chang-hwa, 1972), producing the television series *Kung Fu* (1972–75; starring David Carradine as a former Shaolin monk

in a role originally considered for Lee), and finally coproducing Lee's crossover vehicle *Enter the Dragon* (Robert Clouse, 1973). With many kung fu films deliberately made for export, and distributed by exploitation film companies to inner-city grindhouse theaters on double bills with horror and blaxploitation films, kung fu became so popular that Hong Kong–made films outgrossed Hollywood films at the box office for much of 1973 (Desser 2000, 20, 22–26, 34–35).[3]

Meanwhile, within the realm of martial arts itself, a series of governmental initiatives—first during China's Republican era and then following the 1949 Revolution (A. Morris 2004)—formulated wushu in order to consolidate China's many disparate fighting styles beneath the banner of a state-approved, competitive gymnastics style increasingly distanced from the practicalities of hand-to-hand combat. Although there are no hard-and-fast distinctions between regional styles (Kennedy and Guo 2005, 80–83), wushu is more indebted to the kicks and lower body strikes commonly associated with Northern Chinese martial-arts styles, as opposed to the fists and upper body strikes from the Southern styles later associated with "kung fu."[4] With acrobatic movements derived from Chinese opera traditions and the associated spectacle of long kicks, wushu became more closely aligned in the popular imagination with the realm of myth, fantasy, and pastness also seen in wuxia films, as opposed to the relatively more modern, realistic, and historically specific connotations of kung fu films. Overall, Chinese viewers discerned wushu and kung fu as very different styles during the 1960s and 1970s, with the former seen as more of a gymnastic sport than the latter's association as a web of practical combat styles (Hunt 2003, 29–31; Teo 1997, 98; Bordwell 2000, 201).

This distinction is significant for my purposes because many of *Mortal Kombat*'s live actors, such as its original martial-arts consultant Daniel Pesina and his students, used their wushu training to develop the game's moves. This fact helps explain not only the series' emphasis on jump kicks and other long leg attacks; the popular linkage between wushu and wuxia's fantastical elements also helps justify the series' use of energy projectiles and other forms of "palm power" (already popularized by Ryu's Hadōken in the *Street Fighter* series). The dropped frames of its pixilated sprites additionally recall the use of "undercranking" to artificially speed up the filmed movements in kung fu films—a controversial practice among purist fans of martial-arts movies, for supposedly "cheating" the authenticity of the filmed martial artist's speed. (Many of the *Mortal Kombat* clones discussed in chapter 4 are marked by inferior pixilation

techniques, recalling the campier aspects of sloppy undercranking in some low-budget kung fu movies.)

The successful double-billing of kung fu and horror movies certainly resonates with *Mortal Kombat*'s supernatural characters and gory fatalities. The carnivalesque, gross-out quality of the latter—which prevents players from ever taking such winkingly outlandish deaths *too* seriously—provides another link between the sense of lowbrow vulgarity that courses through much of Hong Kong genre cinema (e.g., grotesque forms of abjection, slapstick tomfoolery, ribald bodily functions) and also finds a home in the culturally "lower" end of the horror genre (Bordwell 2000, 7, 97). Take, for instance, Jeffrey Sconce's (1994, 112–13) discussion of the "highly self-reflexive and comic mediation on the spectator" in *Freddy's Dead: The Final Nightmare* (Rachel Talalay, 1991), when Freddy Krueger (Robert Englund) sucks a stoned teenager into a video game, toying with the teen before killing him off with a nod to the tagline for Nintendo's 1989 Power Glove peripheral ("Now I'm playing with power!"). This moment arguably looks ahead to the *Mortal Kombat* games in its temporary suspension of framing narrative and character identification alike to foreground the film's central appeal: "incredible spectacles of death" delivered by an impishly effective showman. Krueger himself would become a playable character (available as a premium download) in the rebooted *Mortal Kombat* (NetherRealm Studios, 2011), while *Mortal Kombat X* (NetherRealm Studios, 2015) would offer other downloadable horror avatars, such as Jason Voorhees (*Friday the 13th* [Sean Cunningham, 1980]), Leatherface (*The Texas Chain Saw Massacre* [Tobe Hooper, 1974]), and the titular monsters of *Alien* (Ridley Scott, 1979) and *Predator* (John McTiernan, 1987)—thus indicating the horror genre's easy overlap into *Mortal Kombat*'s own generic territory.

Of course, a major difference between kung fu movies and fighting games is that, regardless of the long-take aesthetic privileged by martial-arts purists, many kung fu films still rely on montage and other quick editing tricks to depict spectacular combat moves, whereas each round of a fighting game constitutes a single long take within which all the action unfolds, even as combos still recall the precision of Hong Kong fight choreography (Hunt 2003, 2, 36, 39, 193). Aaron Anderson (1998) observes that watching cinematic martial-arts fights feels closer to experiencing music or dance than actual real-world fights, and the combat tends to fall on a spectrum between depicting characters as rarely seriously injured (e.g., the slapstick combat of Jackie Chan) and depicting characters as sustaining graphic and painful-looking injuries. And unlike

many martial-arts films, where the visible accumulation of fatigue and bodily damage signals the approaching end of a fight, the health meters in fighting games invisibly monitor the character's remaining vitality. That is, the combatants in most fighting games (with notable exceptions like the "body damage system" in *Bushido Blade* [Lightweight [JP], 1997]) do not realistically slow down or lose their abilities to inflict damage across the course of a given round, regardless of the rather unrealistic degree of damage their bodies should have suffered throughout.

Much like exploitation movies, fighting games are also full of fast, cheap thrills and forms of readymade spectacle (e.g., special moves) that are geared for quick player turnover more appropriate to the coin-op market than long-play games designed for home consoles. And unlike the long training sequences, romantic and political subplots, and other extended backstory in martial-arts films, the gameplay of fighting games is largely confined to the actual fights themselves (Poole 2000, 56–57, 188)—more like engaging with the trailer for a martial-arts film (i.e., all the most sensationalistic "good parts") than the film as a whole. The *Mortal Kombat* games, then, would seem to operate at both ends of Anderson's (1998) spectrum, with combatants' fighting abilities visibly unaffected, despite the many spurts of blood they may lose during each round, but with the end-of-match fatalities serving as a sudden shift toward graphic mutilation that reinforces the severity of the loss.

The overall gameplay in the early *Mortal Kombat* games combines the empty-handed combat of kung fu movies with the more supernatural elements of wuxia films (e.g., "palm power"), thus representing a combination of what were once considered distinctly different fighting aesthetics. Swordplay itself did not become a major factor in the series until *MK4* allowed each playable character to draw and wield their own distinctive weapon during combat, while more "authentic" combat styles were added as playable options in *Mortal Kombat: Deadly Alliance* (2002), albeit with the menu interface flattening these culturally localized fighting traditions into just one of many toggleable choices.

Although some allusions to Japanese mythology were included (e.g., "Raiden" from Raijin, a mythological god of thunder), Pesina argued for including more Chinese cultural influences in the games, including not just the influence of wushu itself but also related weapon techniques like the rope dart (*sheng biao*), originally a medieval Chinese weapon that here became the basis for Scorpion's spear. Pesina likewise pushed for characters such as Sub-Zero to be depicted not as Japanese "ninjas" (a trope cinematically popularized in the United States by Cannon

Films' *Enter the Ninja* [Menahem Golan, 1981]) but rather as part of the mythical Lin Kuei ("forest ghosts"), a nomadic clan of secretive Chinese warriors who supposedly date back to the Shang dynasty (ca. 1600–1046 BCE) and later crossed into Korea and Japan, becoming a formative influence on Japanese *ninjutsu* (McCarthy 2018).[5] The Lin Kuei were actually the invention of American martial artist Randall Brown (1984), writing in the mid-1980s under the pseudonym Li Hsing (1984; 1986), who dubiously describes having been trained by the last surviving Lin Kuei master, an émigré to the United States who had since bequeathed this secret history in an effort to keep the clan alive in America.

According to John Tobias's original concept art, Liu Kang was initially going to be a Japanese character named "Minamoto Yoshitsune" (after Minamoto no Yoshitsune, a military commander immortalized in the twelfth-century epic *Heike monogatari*), before he was later made a Shaolin monk and thus more clearly tied to the mytho-historical origins of Chinese martial arts. The actual Shaolin Temple in Henan Province had been destroyed multiple times over the centuries—albeit, and contrary to legend, not by the Qing dynasty—though Qing authorities did suspect the monks of harboring anti-Qing rebels due to the temple's past support of the Ming dynasty (1368–1644). Nevertheless, this legend about a late seventeenth- or early eighteenth-century temple burning—which supposedly scattered fugitive priests with martial-arts expertise throughout China—spread through popular martial-arts fiction (and, later, movies) (Shahar 2008, 184–85, 190–96). Leon Hunt (2003, 48–52, 58, 69, 71) observes that the Shaolin Temple mythos was not popularized in martial-arts cinema until the television show *Kung Fu* and a concurrent series of films including, among many others, *Shaolin Martial Arts* (Chang Cheh, 1974), *Five Shaolin Masters* (Chang Cheh, 1974), *Shaolin Temple* (Chang Cheh, 1976), *Executioners from Shaolin* (Lau Kar-leung, 1977), and *The 36th Chamber of Shaolin* (Liu Chia-liang, 1978).

Another mytho-historical allusion is Liu Kang's supposed neglect of the Shaolin Temple (as implied in the *MKII* comic book [Tobias 1993]) in favor of the "White Lotus Society," which in sequels is described as an ancient sect cofounded by Raiden and Shaolin Temple elders. The actual White Lotus religion (*Bailian jiao*) was a loosely organized sect dating back to the Eastern Jin dynasty (317–420 CE), whose millenarian beliefs "took on violent and rebellious characteristics as it incorporated elements of Daoist magical techniques, Manichean theologies, and folk shamanism" by the time of the Ming dynasty (Wang 2014, 42). Due to its millenarian beliefs, White Lotus adherents were allegedly involved in

many anti-dynastic uprisings, with the very name "White Lotus" becoming a catchall label for stereotyping and persecuting heterodox sects and political dissidents during the Ming and Qing dynasties (ter Haar 1992, 244–45, 249). Much as Qing authorities falsely blamed the Heaven and Earth Society (*Tiandihui*), a secret society rumored to date back to the same fugitive Shaolin priests, for helping foment the Boxer Rebellion (1899–1901), the White Lotus Society was scapegoated for their seemingly magical beliefs and intense secrecy (ter Haar 1992, 281; Shahar 2008, 184; Murray and Baoqi 1994, 82, 152). Indeed, orientalist scholars turned to Pu Songling's 1740 book *Strange Tales from a Chinese Studio*, a collection of supernatural tales about ancient China, as a reference point for attempting to link the White Lotus Society's "magic" to modern imperial struggles like the Boxer Rebellion (Goto-Jones 2016a, 163–64). Like the story of the Shaolin Temple itself, then, kung fu films such as *Intruder at White Lotus Temple* (Chi Lo, 1971) and *Clan of the White Lotus* (Lo Lieh, 1980) would mix myth and history in dubiously verifiable ways.

The Bruce Lee Influence

Such mixtures of historical facts and legends primarily descend to *Mortal Kombat* by way of *Enter the Dragon*, the 1973 Bruce Lee film upon which *MK1*'s narrative is most closely modeled. In this transnational coproduction between Warner Brothers and Raymond Chow (founder of Golden Harvest, the largest producer of martial-arts films aside from the Shaws), Lee plays a Shaolin monk who must restore the temple's honor and avenge his sister's death by fighting in an invitation-only tournament held on a private island by Han (Shih Kien), a former Shaolin student who has turned his martial-arts training toward evil. Because Han's island occupies international waters off the coast of Hong Kong, over which the British colonial powers have no authority, a British spy agency tasks Lee with digging up dirt on Han's criminal enterprises during the tournament, with the assistance of two American combatants, Roper (John Saxon) and Williams (Jim Kelly). As Leon Hunt (2000, 76, 78, 80–81) argues, the film was deliberately made as a transnationally traveling text. Its espionage plot and orientalist archvillain recall *Dr. No* (Terence Young, 1962), many of the Asian actors' dialogue is post-dubbed into English, and Kelly's casting as Williams was deliberately meant to appeal to the Black crossover market between blaxploitation and martial-arts films. Hence, the film leans heavily toward orientalist kitsch, evincing a tension between "Asiaphilia" and "Asiaphobia" by both "fetishiz[ing]

the 'Orient' and replay[ing] 'Yellow Peril' archetypes" (Hunt 2003, 158; see also Frayling 2014).

Although *Enter the Dragon*'s modern setting means that it does not share the mythical temple-burning story presented in so many Shaw Brothers films, Han's name conflates the Han Chinese with the Qing (Manchu) ethnic minority who conquered them in founding the Qing dynasty. This helps justify why Han so closely resembles Sax Rohmer's infamous archvillain, Fu Manchu, a Qing loyalist who would have opposed Shaolin rebels against the dynasty. As Hunt (2000, 81) notes, Williams's rebuke that Han "come[s] right out of a comic book" is even a reference to Marvel Comics' deal with the Rohmer estate to revive the Fu Manchu character in their *Master of Kung Fu* series (1973–83).[6]

In *MKI*, then, *Enter the Dragon*'s conflict between Lee and Han becomes reworked into Liu Kang's battle against the Fu Manchu–inspired Shang Tsung, another usurper of the Shaolin Temple's former glory. While hardly the only fighting game character to be modeled after Lee, Liu Kang's high-pitched vocalizations—an example of the "expressive amplification" of sound effects that David Bordwell (2000, 232–33) finds so endemic to Hong Kong genre cinema—are another obvious allusion to his cinematic inspiration, as further confirmed by Liu Kang's Dragon Transformation fatality in *MKII* and explicit use of Jeet Kune Do (the martial-arts system developed by Lee in 1967) in *MK: Deadly Alliance*. From Han's and Shang's private junks sailing the combatants to the island (as depicted in the *MKI* Collector's Edition comic), to both Han and Shang sitting on golden dragon–decorated thrones as they watch the tournament unfold, to characters like Roper prefiguring the money-driven egotist Johnny Cage, *MKI*'s setting and framing narrative share many inspirations from *Enter the Dragon*. Yet, as Paul Bowman (2011, 78–79) observes, the supposed "Shaolin kung fu" that Lee uses in *Enter the Dragon* is an exaggerated fantasy of "kung fu," not an authentic representation of actual styles—in part because Lee's self-developed Jeet Kune Do was itself a cultural hybrid of different styles, not unlike how his character mixes the mytho-historical Shaolin monk with the Cold War–era spy.

Lee's fighting style, however, would become the crux of another cinematic influence on *Mortal Kombat*: his unfinished original production, *The Game of Death*. Lee began filming *Game of Death* for Golden Harvest in 1972, shooting about one hundred minutes of footage before agreeing to pause production to star in *Enter the Dragon*, but his untimely 1973 death meant that the project was aborted. (*Enter the Dragon*'s director, Robert Clouse, would later cobble together eleven minutes of Lee's 1972

footage into a ridiculous framing story featuring a handful of Lee looka-likes, but this 1978 *Game of Death* bears little resemblance to Lee's origi-nal concept and is better considered one of the many "Brucesploitation" films released to cash in on Lee's death.) In Lee's original version, he would have starred as martial artist Hai Tien, whose family is being held for ransom by Korean mobsters until Hai battles his way to the top of a wooden pagoda to acquire a treasure for the mob, with each of the pago-da's five stories guarded by a master of a different martial art. Joined by several accomplices, each step in Hai's vertical ascent is meant to show-case Jeet Kune Do's ability to adapt to and overcome the best of compet-ing styles (Goto-Jones 2016b, 47).[7] If this sounds familiar, recall that the 1984 beat-em-up game *Kung-Fu Master* was directly based on a similar ascent through five levels of a temple to rescue the avatar's wife. For our purposes, though, we can see the vertical ascent through a series of fighters with different styles and skill sets as inherited by *Mortal Kombat*'s "Battle Plan" screens (renamed "Ladders" in later sequels), which visu-ally represent the sequence of upcoming fights as, for example, climb-ing a mountain (*MKII*) or a derelict skyscraper (*MK3*), with the bosses positioned at the top. And much like Jeet Kune Do's goal of becoming so adaptable to an opponent's style that it becomes a sort of "non-style," *MKI*'s "Mirror Match" requires one's avatar to fight against their doppel-ganger before continuing on to the bosses, as if overcoming the weak-nesses of one's own style is a prerequisite for reaching the top. *Mortal Kombat*'s status as a "game of death" in its own right, then, arguably owes a major debt to several of Bruce Lee's posthumously released works.

Tsui Hark and the Return to Wuxia

Although John Tobias cites Shaw Brothers and Golden Harvest kung fu films, plus the obvious influence of *Enter the Dragon*, as inspirations for *Mortal Kombat*, he recalls, "My biggest influences came from Tsui Hark films—*Zu Warriors* [*sic*] & *The Swordsman*. We had to get them from boot-leggers in [Chicago's] Chinatown" (@therealsaibot, September 1, 2011). As one of the leading lights of Hong Kong New Wave cinema (ca. 1979–90), Tsui Hark's energetic, genre-bending films are credited with reviving the wuxia film in the 1990s, with *The Swordsman* (1990) and the *Once Upon a Time in China* trilogy (1991–94) depicting ancient Chinese mysticism confronting (and eventually adopting) Western weapons and science during the late Qing dynasty. Critics disagree whether the mythicized pasts in Tsui's wuxia films nostalgically recall a period of national(ist)

unity or instead signal a more postcolonial/transnational awareness of the arbitrariness of borders, but they tend to concur that his films serve as loose allegories for Hong Kong's impending 1997 handover to China (Sarkar 2001, 163–71; Teo 2009, 148, 162; See-Kam 2010, 45, 48–49).

Born in Vietnam but relocating to Hong Kong during the war, Tsui later studied filmmaking in the United States at a time when optical special effects in big-budget films like *Star Wars* (George Lucas, 1977) were starting to dominate the global film market. Upon returning to Hong Kong, Tsui prefigured the later wuxia revival with his early film *Zu: Warriors from the Magic Mountain* (1983), an ambitious attempt to combine Hong Kong–style wirework with Hollywood-style optical effects overseen by an imported team of U.S. special-effects artists. Aspiring to compete in the global market, this Golden Harvest production returned only HK$3 million on its $30 million budget, with its narrative about unlikely heroes striving but perhaps failing to restore national stability thus sharing an ironic resonance with the film's own costly gamble (Schroeder 2004, 3, 10, 12, 32–33, 41–43).

Set in the enchanted Zu Mountains during an ancient period of intertribal warfare, West Zu army scout Ti Ming-chi (Yuen Biao) deserts with an East Zu soldier (Sammo Hung), and they adventure to a cave where they are rescued from flying humanoid creatures by itinerant swordsman Ting Yin (Adam Cheng). They are soon united with several warrior-monks on a journey to destroy the Blood Demon, an evil entity temporarily held at bay by the magician Long Brows (Sammo Hung). Reeling from their first encounter with the Blood Demon, the team takes refuge at the Ice Countess's (Brigitte Lin) fort. Although Ting Yin remains possessed by the Blood Demon's magic, the rest of the team scales Heaven's Blade Peak to retrieve the Twin Swords, the only weapon that can defeat the demon. They manage to vanquish the demon just as Long Brows' magical hold loosens, but despite achieving victory through unlikely teamwork, the two original soldiers finally return to their respective armies to find them engaged in perpetual combat.

With its gloomy and fantastical diegesis, the mystical world of *Zu* bears a closer resemblance to *MKII*'s Outworld than anything in the first game, complete with haunted temples and dark forests and wastelands. The shadowy presence of Shao Kahn as an evil emperor was inspired by *Star Wars*' Darth Vader (Mick-Lucifer 2012), but the horn-covered Blood Demon also bears a fascinating similarity to Shao Kahn: both characters attempt to overrun borders but are held off by a Raiden-like figure's (inadequate) magical boundaries (Schroeder 2004, 34). Some of the

"palm power" elements in *Zu* closely prefigure certain moves in the *Mortal Kombat* games: from the Ice Countess's ability to freeze her opponents with bursts of blue ice energy (à la Sub-Zero), to the warrior-monks using their blade-rimmed hats as throwable metal discs (à la Kung Lao), to Ting Yin's sword blade spreading out into a spinning array like Kitana's fan. The projectile moves in *Mortal Kombat*—in which characters do not throw actual weapons so much as energy projections from those weapons (e.g., Kano's knife, Mileena's *sais*)—are a convention straight out of wuxia films like *Zu*. And we might even see Bhaskar Sarkar's (2001, 169–70) argument about the "tropes of physical amputation" in Hong Kong New Wave films, allegorically reflecting hysteria over the prospects of Hong Kong's post-reunification body politic, rendered into an apolitical visual trope in *Mortal Kombat*'s over-the-top fatalities.

Zu was also John Carpenter's biggest inspiration for his martial-arts fantasy *Big Trouble in Little China* (1986), a secondary inspiration for *Mortal Kombat* (Swires 1986, 13). Much as the influence of kung fu films descended by way of *Enter the Dragon*, this Americanized take on Tsui's attempted wuxia revival finds cocky Anglo-American trucker Jack Burton (Kurt Russell) teaming with San Francisco restaurant owner Wang Chi (Dennis Dun) and magician Egg Shen (Victor Wong) to infiltrate the Chinatown underworld, battling rival gangs and a Fu Manchu–esque sorcerer in order to save several kidnapped women. Throughout, magic is depicted as a dark and wondrous force transplanted from the Orient, much as Western stage magicians during the late nineteenth and early twentieth centuries invoked and perpetuated orientalist stereotypes in order to "conjure" entertainingly mysterious images of Asia for their patrons (Goto-Jones 2016a).

Across Carpenter's oeuvre, "the [western genre's] frontier mythology lingers, but its trajectory is reversed. . . . The primitive forces of wild places are not so much to be overcome as survived, and it is often those forces that seem inevitable and overwhelming, reclaiming the spaces abandoned by an American culture in retreat" (Phillips 2014, 125). In this regard, the orientalist mise-en-scène in Carpenter's film—also shared by Steven Spielberg's *Indiana Jones and the Temple of Doom* (1984), whose main villain gave us Kano's *MKI* Heart Rip fatality—takes on even more racialized "Yellow Peril" overtones by locating an "unassimilated" core of ancient Chinese magic amid an ethnic enclave within one of America's largest cities.

Sylvia Shin Huey Chong (2012, 272) observes that the 1980s saw multiple films about Chinatowns as sites where "good Asian Americans" might

Figs. 9–10. Lightning (James Pax) shoots electricity from his hands in *Big Trouble in Little China*, an inspiration for *Mortal Kombat*'s Raiden.

be separated out from "bad Orientals," as part of wider post-Vietnam concerns about the extent of Asian American assimilation.[8] In Carpenter's film, the sorcerer, posing as elderly and reclusive Chinatown banker David Lo Pan (James Hong), must appease the evil God of the East by sacrificing the kidnapped women to regain his youth, not unlike Shang's reprieve from Shao Kahn in *MKII*. Meanwhile, three demigod figures loyal to Lo Pan—Thunder, Lightning, and Rain—provide obvious inspiration for Raiden by wearing conical bamboo hats, shooting lightning from their hands, and flying through the air (figs. 9–10), although the death of one such character, blowing up like a balloon until he pops, also prefigures Kitana's *MKII* Kiss of Death fatality (figs. 11–12). There

Figs. 11–12. One of the Three Storms blows up like a balloon and explodes in *Big Trouble in Little China*, much like Kitana's Kiss of Death fatality in *Mortal Kombat II*.

is even a moment at the film's climax where Lo Pan and Egg Shen use "palm power" to conjure battling avatars, connected to their hands by long strings of energy, as if playing their avatars with home console controllers!

Films like *Big Trouble in Little China* illustrate how Chinatowns and other East Asian diasporic communities within the United States can serve as convenient backdrops for non-Asians' fantasies about cultural slumming in "exotic" and "edgy" locales, even as these same locations may also be sites of more authentic transnational exchange. As Tobias recalls, venturing into Chicago's Chinatown was necessary to acquire bootlegs of the Tsui films at a time when they were not yet officially distributed in the States, since diasporic video stores filled this gap.[9] Moreover, the *Mortal Kombat* design team photographed examples of orna-

mental Chinatown architecture—including the main Chinatown gate and a smaller "Welcome to Chinatown" display at the intersection of Wentworth Avenue and Cermak Road—to be mapped into the backgrounds of several *MKI* arenas (such as the "Courtyard" scene depicted in fig. 10). Both filmic and real Chinatowns, then, were sources of *Mortal Kombat*'s inspiration in multiple ways, albeit largely as a means of supplying the games with orientalist texture.

The Van Damme Connection

Finally, we can return to the game's aborted origins as a vehicle for Jean-Claude Van Damme, since his films—and, more specifically, how his films narrativize the appropriation of East Asian martial arts for American sensibilities—were a major early influence on the *Mortal Kombat* series. Tobias clearly went back to Van Damme's low-budget Cannon Films releases like *Bloodsport* (Newt Arnold, 1988) and *Kickboxer* (Mark DiSalle, 1989) as inspiration once the *Universal Soldier* tie-in deal fell through. By Tobias's own admission, the character of cocky movie star Johnny Cage "ended up being a spoof on the whole Van Damme situation" (Quan 1994b, 26), with Cage's initials and splits-punch move as allusions to the real-life star. As several scholars have argued, Bruce Lee's Vietnam-era crossover fame among American audiences led to the popularity of 1980s-era white action stars like Van Damme, who appropriated East Asian martial arts as a means of rendering them racially "closer" for American viewers to comfortably appreciate (especially when those skills were turned back against "Oriental" villains), while also fitting into wider Reagan-era attempts to redeem America's past involvement in Vietnam. Military-colonial encounters had provided the context for such cultural appropriation even before the Vietnam War, with American servicemen bringing martial-arts knowledge back to the United States after World War II, the Occupation, and the Korean War (Desser 2000, 38–39; Hunt 2003, 9–10, 12; Chong 2012, 178–79, 186, 251).

Take, for instance, the plot of *Universal Soldier* itself, which opens during the Vietnam War in 1969 as American soldier Deveraux (Van Damme) and his commanding officer Scott (Dolph Lundgren) kill each other when Deveraux attempts to prevent the mad Scott from executing innocent Vietnamese civilians. Frozen and later reanimated as part of a secret team of cyborg-zombie soldiers remotely controlled by the military (a premise that seems readily adaptable to a video game), Deveraux eventually regains his autonomy and goes rogue after flashing back

to what happened in Vietnam; Scott is sent to take him out in a replay of their past conflict. The film clearly frames Deveraux's rediscovery of his past moral fiber as a means of redeeming America's culpability for the war; as if to cement the point, Deveraux even realizes his past identity while watching a TV interview of Richard Nixon explaining how he had accepted Gerald Ford's pardon for the crimes committed during his presidency. Although the plot of *Universal Soldier* is, compared to Van Damme's earlier movies, more of an attempt to replicate the success of *RoboCop* (Paul Verhoeven, 1987) and *Terminator 2: Judgment Day*, its linkage of Van Damme's star image with redeeming the war tells us something about his previous martial-arts films set in places like Hong Kong and Bangkok.

Based on Frank Dux's dubious account of winning the *Kumite*, a secretive martial-arts tournament held by the International Fighting Arts Association (Stewart 1980),[10] *Bloodsport*'s Hollywoodized narrative of Dux (Van Damme) deserting the army to compete in the Hong Kong–based tournament in memory of his mentor Senzo Tanaka (Roy Chiao) adds a fictional backstory that nicely allegorizes Dux/Van Damme's own appropriative relationship to East Asian martial arts. During a flashback, we see young Dux and his friends break into his future mentor's home to steal a Japanese katana sword, but when caught in the act, Dux begs for the chance to earn the sword by training alongside Tanaka's son. After Tanaka's son unexpectedly dies, Dux convinces Tanaka to finish training him so that Dux can fulfill the father's desire for a new familial generation of Kumite competitors. Despite Tanaka's initial resistance (due to Dux's non-Japanese ethnicity), the now-grown Dux completes his training and effectively becomes Tanaka's surrogate son. In this story of a white man "redeeming" himself by earning his right to the Asian martial arts that he initially attempted to steal—and later confirmed by Dux's climactic defeat of the murderous (Asian) champ Chong Li (Bolo Yeung)—*Bloodsport* presents the Euro-American appropriation of martial-arts traditions as justified, much as Van Damme's own star image inherited Lee's cinematic legacy. The film even draws a clear contrast between the serenely meditative Dux (depicted, like Tanaka himself, as a first-generation immigrant, though likely a convenient excuse for Van Damme's thick Belgian accent) and the more stereotypical American represented by his friend and fellow Kumite combatant, Ray Jackson (Donald Gibb), a boorish biker who is not far off in characterization from *Big Trouble*'s cowboy-like Jack Burton.

In light of the fact that "*Ultimate Kumite*" was a working title for *Mortal*

Figs. 13–14. Frank Dux (Jean-Claude Van Damme) proves unexpectedly talented at playing *Karate Champ* on his way to compete in the Kumite in *Bloodsport*.

Kombat (Mick-Lucifer 2012), Dux and Jackson's initial scene of Americans bonding abroad, with Dux defeating the boastful Jackson at several coin-op rounds of *Karate Champ* in their hotel lobby (figs. 13–14), is retrospectively all too appropriate:

> JACKSON: You like this kind of fighting, huh? You want to see some real fighting, you can see me fight at the Kumite.
> DUX: I'm here, too, for the Kumite.
> JACKSON: Aren't you a little young for full contact?
> DUX: Aren't you a little old for video games?

In this playful exchange, the conflation of the Kumite with a canonical fighting game looks ahead to *Bloodsport*'s influence on *Mortal Kombat* via its no-holds-barred tournament setting in a shadowy Hong Kong underworld, depicted not unlike the Chinatown underworld in *Big Trouble in Little China*. *Bloodsport*'s main villain, Chong Li, is even played by the hulking Bolo Yeung, who had a similar role as one of Han's murderous enforcers in *Enter the Dragon*. Both Chong Li and the similar, long-queued villain Tong Po (Michel Qissi) in Van Damme's *Kickboxer* provided visual inspiration for *MKI*'s four-armed monster Goro—a deeply problematic linkage of Asian-ness with monstrosity that, in a more feminized form, again stretches back to Fu Manchu. As Eric Lichtenfeld (2007, 111–15) notes, Van Damme's early films for Cannon tended to follow this formula of a shadowy tournament milieu with racially marked villains, and his contract to keep making low-budget exploitation films for Cannon prevented him from achieving the same level of breakout mainstream success as another European expatriate with whom he was initially compared, Arnold Schwarzenegger. Yet, whereas many of the so-called hardbody action films of the 1980s featured their stars' passively displayed muscularity, Van Damme's films combined images of his overdeveloped physique with the kinesthetic bodily movement that has been the primary appeal of martial-arts movies and fighting games alike (Anderson 1998).[11]

Another notable connection between *Bloodsport* and *Mortal Kombat* is its allusion to the Black Dragon Society (*Kokuryūkai*) as the supposed founders of the Kumite. The real-life Black Dragon Society was founded in 1901 by Uchida Ryōhei, and despite its demonization as a secret fascist society during the anti-Japanese xenophobia of World War II, its shadowy influence and criminal powers have been vastly overstated. In actuality, Sven Saaler (2014, 126, 128–32, 134, 136, 153) explains that the Kokuryūkai was more of an open political pressure group than a

secret society or criminal organization, reaching its peak in the late 1910s and early 1920s but largely defunct by the rise of Japanese fascism in the 1930s. After World War I, the group promoted the Japanese annexation of Korea and parts of Siberia, and fostered right-wing opposition to Japan's conciliatory relationship with Western imperial powers during the Taishō democracy (1912–26). The Kokuryūkai's early origins also derived in part from Uchida's judo training alongside future members of the group (Adams 1969, 46), including Jigoro Kano, a possible namesake for the *Mortal Kombat* character who is described as belonging to a "Black Dragon Society" criminal organization.

The Japanese group's infamous name was later appropriated by American ex-GIs like Count Dante (née John Keehan), a Chicago-based karate expert who founded the Black Dragon Fighting Society (BDFS) in 1969 as a fraternal organization of martial-arts specialists who held periodic Kumite tournaments. A ruthless self-promoter, Dante's mail-order ads for the 1968 pamphlet *World's Deadliest Fighting Secrets* appeared in Marvel comics like *Master of Kung Fu* and other pulp publications during the early-1970s kung fu craze, promising a free BDFS membership card with every order (Taylor 2018). Although Dux, another member of the BDFS, would claim that the "real-life" Senzo Tanaka (also rumored to have been one of Dux's inventions, much like Randall Brown's supposed Lin Kuei master) was formerly a member of the Kokuryūkai before his emigration, and thus a sort of generational bridge to the later BDFS, much of the fraternity's actual history remains shrouded in self-aggrandizing myths. The underlying point here, though, is how the BDFS and its associated Kumite events—their membership largely peopled by white Americans—trade in the cultural appropriation of Asian martial arts under the orientalist aegis of the Kokuryūkai's disrepute, which was itself more a product of wartime B movies like *Black Dragons* (William Nigh, 1942) than a reflection of the actual Kokuryūkai. In this regard, *Bloodsport*'s own mytho-historical backstory helps shed light on not just more of the mélange of East Asian references thrown into *Mortal Kombat*'s diegesis but also the very process of cultural appropriation involved in doing so, including the one that originally made Van Damme a star.

Playing with Race and Gender

Up to this point, I have described the *Mortal Kombat* games as drawing upon a mishmash of cultural reference points, primarily drawn from China and Hong Kong, albeit filtered through second- or third-hand

derivations like martial-arts films. It seems quite clear from the mise-en-scène (e.g., the ubiquitous dragon symbol, yin-yangs, Buddhist statues, etc.) and music of these games that *Mortal Kombat*'s blender of influences is the orientalist imaginary—a generalized sense of nationless exoticism vaguely located in "the Asiatic" as "forms, spaces, and personages that many players will find similar to Asia but that are never exclusively Asian" (Patterson 2020, 58). As John Tobias himself admits, the game's world derives from "a balance between fantasy—which in this case is represented by [E]astern influences—and reality, which is represented by [W]estern influences" (Mick-Lucifer 2012). The Outworld and its denizens are especially infused by orientalist visuals, as if the Orient itself is a sort of dark and mysterious alternate dimension that shares far more with the supernatural Outworld than the comparatively staid backgrounds seen when the Outworld invades Chicago in *MK3*.

Still, without denying that these American game designers created a blatantly orientalist diegesis, I argue that simply castigating the series as "racist" requires overlooking some important nuance. On one hand, the transnational travel of martial-arts films means they are seldom "pure" national-cultural products to begin with, but rather products of cross-cultural influence. Recall that the 1960s popularity of wuxia films in China and Hong Kong was partly modeled after Japanese chanbara films and that many of the later 1970s kung fu films were deliberately made for export to the United States and elsewhere. Hunt (2003, 13) notes that exported kung fu films are more likely to flirt with (self-)orientalist imagery, in part because they are already the product of pan-Asian influences aiming for broader Asia-Pacific circulation. Much as "Shaolin" continues to circulate in and beyond China as more of a dubious brand name than historical fact (Burton-Rose 2017), *Enter the Dragon* as a U.S.–Hong Kong coproduction exemplifies this tendency toward "self-orientalism" for foreign marketability, opening the likelihood that, in Bowman's (2011, 79) words, "many of the subjects called, hailed, or interpellated into position by 'Asian' martial arts did not (and do not) necessarily know about, care about, or feel any need to distinguish or discriminate between, say, (*Chinese*) 'kung fu' and (*Japanese*) 'Samurai.'" At the same time, though, the immense popularity of *Enter the Dragon* and other East Asian martial-arts films among Black viewers during the 1970s (and beyond)—often rooted in their identification with underdog heroes fighting against cultural imperialists—demonstrates that this transnational exchange is not simply a tension between white versus nonwhite cultures and that some varieties of cultural appropriation can produce more politically ambivalent ends.

On the other hand, American-based mini-majors like Cannon Films (itself founded and run by two Israelis) relied heavily on presales of international distribution rights (especially for home video sales) in order to finance a large production slate of low-to-medium-budget exploitation films like the early Van Damme vehicles (Wasser 2001, 121–25, 176). This meant that many of the white hardbody action stars—including Van Damme, Steven Seagal, and Chuck Norris—whose 1980s popularity partly stemmed from embodying appropriated martial-arts spectacle, also became popular stars in East Asia. (Van Damme's reputation as "the muscles from Brussels" further complicates this picture, since his heavily accented star image is nominally less "American" than most of his generic peers.) Consequently, small Hong Kong producers would begin copying the kickboxing-type films popularized by Van Damme, making their own homegrown variants in an attempt to stay competitive in the transnational market for martial-arts cinema (Yip 2018, 87).

The *Mortal Kombat* series coincidentally predated the late-1990s period when Hollywood itself began importing filmmaking talent from post-reunification Hong Kong, from directors (John Woo and Tsui Hark) to fight choreographers (Yuen Woo-ping), to stars (Jackie Chan and Jet Li). Meanwhile, American-made films like *The Matrix* (Lana and Lilly Wachowski, 1999) and *Kill Bill* (Quentin Tarantino, 2003–2004) were joined by successful wuxia films by Ang Lee (*Crouching Tiger, Hidden Dragon* [2000]) and Zhang Yimou (*Hero* [2002]). As Andrew Schroeder (2004, 52, 55) observes, this flow of talent from "East" to "West" reverses the trajectory that Tsui had attempted years earlier when bringing over American special-effects expertise for *Zu*, with Hollywood now adapting effects like wirework and visual morphs that had been pioneered in Hong Kong. Tsui himself would direct several Hollywood films starring Van Damme during this period, including *Double Team* (1997) and *Knock Off* (1998), but neither is seen as a high point in either's careers. Indeed, in recounting *Mortal Kombat*'s origins as a planned Van Damme tie-in, the *Chicago Tribune* ironically observed, "In the long run, *MK*'s pixel-ized blood sport [has] proved to have greater staying power than Van Damme's recent celluloid offerings" (Hollingsworth 1995). What we find, then, is that martial-arts films have typically constituted a "minor" sector of the transnational film market where staying competitive means quickly exploiting a two-way flow of cross-border inspiration from one (often low-budget) variant to another (M. Morris 2004), creating a sort of international contest for one-upmanship not unlike the battling world warriors of *Street Fighter II* and so many other fighting games.

Much as the opening credits of *Bloodsport* prefigure *SFII* by depicting a training montage of different fighters from around the world preparing for the Kumite, I argue that the characters in *SFII* are more crudely stereotypical than most characters seen in the first few *Mortal Kombat* games, since each *SFII* character is explicitly depicted as representing a different country rather than framed as a combatant within *Mortal Kombat*'s more escapist world of fantastical lore. That is, *Mortal Kombat*'s overall diegesis still evinces a problematically orientalist vibe, but because most of its characters and character-specific arenas are not blatantly framed as caricatures of real-world nations or cultures, the white American designers' broad deployment of orientalism operates somewhat differently from Capcom's more specifically Japanese deployment of stereotype. Nicholas Ware (2016, 161), for example, notes that *SFII*'s Blanka, a Brazilian beast-man, reflects Japanese racism toward "ethnically Japanese Brazilian immigrants coming to Japan during the economic boom years to work factory jobs," whose "Japanese ethnicity gave them easy access to work visas" but whose "Brazilian culture and Portuguese language use . . . threatened the perceived homogeneity of Japanese cultural identity." Rachael Hutchinson (2019, 77–78, 82–83) likewise explains that *SFII* was the product of a period when *Nihonjinron*, an essentialist "theory of the Japanese people," was a cultural buzzword, helping explain the cultural caricatures posited as various "Others," positioned against the normative Japanese male who serves as the default protagonist in most Japanese-made fighting games.

SFII's rather stereotypical characters may seem more difficult to take seriously, however, because the candy-colored sprites themselves are so cartoonish in style, perhaps encouraging us to read their "diverse" cast of reductive cultural representations as more campy than outright offensive (Patterson 2020, 54–55). By contrast, *Mortal Kombat*'s sprites generally rely on the indexicality of real-world actors and are thus more open to casting critiques. Indeed, the portrayal of some Asian characters, such as Sub-Zero and Scorpion, by white actors like Pesina was a questionable choice, but the sprites' low resolution and the actors' full body costuming at least obscures their most racially identifying features (with notable exceptions like Ho-Sung Pak's portrayal of the semi-clothed Liu Kang). Hence, Josh Tsui, a Chinese American employee at Midway, substituted for the unmasked Sub-Zero, revealed in medium close-up in that character's *MKII* ending screens. As noted above, the series' first Black character, Jackson "Jax" Briggs, was originally planned for inclusion in *MKI*, but Midway decided to create Sonya as a female character with the same

Kano-hunting storyline; Jax was instead introduced in *MKII* as a Special Forces major attempting to rescue Sonya from captivity by Shao Kahn. Although Sonya and Kano ironically proved the least-selected characters in *MKI*, Midway's decision to include a sexualized female character (likely inspired by *SFII*'s Chun-Li) over a heavily muscled Black character—effectively treating femaleness and Blackness as superficially interchangeable nods to "diversity"—may have been motivated as a broader appeal to heterosexual male gamers than to the smaller contingent of nonwhite American gamers.

Meanwhile, some early critics of *Mortal Kombat* claimed that the games reinforced stereotypes of nonwhite (and especially East Asian) ethnicities. During his U.S. Senate hearing testimony (C-SPAN 1993) over video game violence (see chapter 3), for example, psychologist Eugene Provenzo claimed that video games depict Asians as violent or evil. However, his own published research (1991, 126) cites only one anecdotal quote, from a fourth-grade boy who "wasn't sure if the Ninja were Chinese or Japanese, but that the Chinese and the Japanese were the enemies because 'just because they are from Japan they might want to do something different from you. And they are dangerous because they might want to fight with you.'"[12] More specifically, Guy Aoki, president of the Media Action Network for Asian Americans (MANAA), argued that games like *SFII* and *MKI* potentially reinforced "existing stereotypes of Asians as martial arts experts," but he admitted that if Asian characters were simply omitted from such games, "then the [Asian] community would feel that the origins of martial arts are belittled and inaccurate." In the same article, *Asianweek* writer May Lam (1994) was less concerned, noting that "players can choose to be an Asian or non-Asian character, thereby not automatically restricting Asian characters to the 'enemy' role," and even Aoki concurred that a multiracial cast of characters could demonstrate that "not only Asians know kung fu." When the first *Mortal Kombat* live-action film (Paul W. S. Anderson, 1995) was released the following year, Aoki (1995) criticized Japanese American actor Cary Hiroyuki-Tagawa for playing the villainous Shang Tsung, arguing that it reinforced the same anti-Japanese xenophobia seen in his earlier *Rising Sun* (Philip Kaufman, 1993) role, but Aoki would grudgingly admit that Liu Kang's (Robin Shou) emergence as the film's "funny, hip-talking" hero helped balance out the film's racial politics. Much as *SFII*'s Blanka reflected Japanese xenophobia against Brazilian immigrants, the resurgence of "Yellow Peril" rhetoric around the rumored Japanese corporate buyout of late-1980s America (which was rhetorically linked to Japan's

1980s success with exporting cars, computers, and video games to the States) was indeed a justifiable concern on Aoki's part. The fact that so many of the *Mortal Kombat* imitator games of 1994–95 (see chapter 4) relied on crude, undeniably racist stereotypes implies that competing designers perceived such broad characterizations as a potentially copyable element of Midway's success.

Still, much as *Bloodsport*'s Frank Dux supposedly earns the right to appropriate Tanaka's knowledge/sword through a perseverance that "transcends" race, many American gamers mistook the *Mortal Kombat* games for a Japanese franchise, based on its overall gameplay quality. This was due to the predominant (if reductive) association between Asians and martial-arts mastery, both on- and offscreen—to the extent that being said to have "Asian hands" is an orientalist compliment among white fighting gamers (Harper 2014, 113–14; Goto-Jones 2016b, 113–14). Indeed, the popular association between Japan and martial-arts fighting games is a notable example of a specific game genre that, unlike many other genres, retains its "cultural odor" when released outside Japan (Iwabuchi 2002, 27). Nevertheless, *Mortal Kombat*'s inclusion of blood and gore marked the games as American products in a different way, to the extent that they were censored (either banned outright or toned down with green "blood" sprites) in Japan, Hong Kong, Singapore, and other East Asian nations (Ng 2008, 220).[13]

Rachael Hutchinson (2007, 287) notes that fighting games that use blatant stereotypes may offend and thereby detract from a game's enjoyment for some minority players. Meanwhile, some white male players might reinforce existing racial or gender prejudices by, say, always choosing white avatars when pitted against nonwhite characters or taking special pleasure in defeating female characters (289–91). Yet, much as I suggested in the previous chapter that players are far more likely to select characters based on respective skill sets (also see Hutchinson 2015) or the desire to see certain finishing moves, and not out of a strong investment in a character's backstory, Hutchinson (2007, 295) compellingly argues that most players are far likelier to hone their skills across a demographically diverse variety of characters over time, with the sheer diversity of playable characters undercutting the potential for racial and gender stereotyping.

Were imbalances built into gameplay through weakening the skills of nonwhite or female characters relative to other combatants, that would indicate bias on the part of game designers, but the fact that *MKII*'s top-tier characters (including Mileena, Jax, Kitana, Liu Kang, and

Kung Lao) are all female or nonwhite (Cureton 1994; Char-Li, Vega, and Guzman 1994, 82) suggests that this was not the case here. Unlike a martial-arts film, where the viewer is given one or more sympathetic protagonists with which to identify, the fighting game continually returns to the Character Select screen, since one is not obliged to remain the same character after each two-player match or after suffering a defeat in one-player mode. Following Hutchinson (2007), then, this means that moral or political alignments between player and avatar are often fragmentary or tenuous at best. Still, a loud contingent of racist gamers led an online backlash against Jax's *Mortal Kombat 11* (NetherRealm Studios, 2019) character ending—wherein the victorious Black character, having gained the magical power to control time itself, travels centuries into the past to prevent transatlantic chattel slavery altogether. Whether accusing the game's creators of injecting Black Lives Matter–era identity politics into the game or deploying the white-supremacist canard that the game promotes "white genocide" (Fahey 2019), this outsize response to a common trope of alternate-history speculative fiction supports Hutchinson's (2007) caveat that racist attitudes brought into the game's reception by a subgroup of angry gamers may be a stronger force than in-game representations themselves.

The social contexts for playing fighting games have never been politically neutral zones, since American coin-op arcades have long been seen as a homosocial "boyzone," where female players were less common or located at different games than many of the adolescent male players— the latter often silently "cruising" each other to ascertain potential play partners with whom to express male homosocial intimacy via the gender-appropriate means of (the avatar's) fists. As Carly A. Kocurek (2015a, 181, 196) observes, present-day (male) players' memories of arcades as male-dominated spaces may be rather selective, with the recently expanding demographic of female gamers and the overall decline of the coin-op market producing a politically regressive nostalgia for the arcade as a gender-segregated space. This regressive nostalgia among a gamer subculture whose cultural reputation for "nerdiness" already compromises their (self-)perceived masculinity helps account for the politically reactionary defense of eroticized female characters, homophobic insults, and the sexual harassment of female game players and designers that is perhaps more common within the fandom of fighting and first-person-shooter games than in less violent genres (Skolnik and Conway 2017, 12–16).[14] Indeed, despite the comparisons that professional e-sports gamers make between themselves and professional athletes training for more tra-

ditional sports, fighting games foreground the sheer disjunction between actual and virtual performances of physical and athletic prowess.

Despite the title of their oft-cited anthology *From Barbie to Mortal Kombat: Gender and Computer Games*, Justine Cassell and Henry Jenkins (1998, 8–9) have very little to say about *Mortal Kombat* itself, apart from briefly citing male gamers' gravitation toward fighting games as emblematic of gendered differences in gameplay, thus positing *Mortal Kombat* as a cultural "bad object." These gendered tastes may be roughly analogous to those also seen among female fans of horror cinema, who predominantly (but not exclusively) dislike more violent and gory subgenres (Cherry 2002), but it is important to note that exceptions will always exist. Among recorded examples that would complicate selective nostalgia about arcades, for instance, consider the nine-year-old girl who wrote to a *Chicago Tribune* advice column asking how she could make new friends, since all of the girls at her school made fun of her for liking video games, "especially *Mortal Kombat II*" (Wendi 1995). Such comments suggest that, even if minimized in the discourse, female *Mortal Kombat* fans have always been present, especially once ports for home consoles allowed the games to travel beyond the traditional boyzones of American arcades. As a more recent example, Lisa Nakamura (2019, 135–36) cites a Black female gamer who professionally competes in *Mortal Kombat* tournaments but often receives both racist and sexist abuse from her online opponents under the guise of "trash talk."

For some critics, the *Mortal Kombat* games became unfettered celebrations of masculinity, with female characters supposedly depicted as castrating dragon ladies (Kinder 1996, 34; Hunt 2003, 121, 132) whose challenge to phallic power aligned them with the "monstrous-feminine" (Creed 1993), not unlike the villainous female roles in some martial-arts films and Japanese "pinky violence" films. Although not as scantily clad as, say, the female combatants in the *Dead or Alive* series (Tecmo [JP], 1996–), I agree that *Mortal Kombat*'s female characters are visually framed for their sex appeal as well as their fighting prowess. Examples include their sexualized Kiss of Death fatalities, Kitana's fan as a coquettish prop-of-femininity-turned-deadly-weapon, or Mileena's *vagina dentata*–inspired *MKII* fatality (leaning in to kiss her defeated opponent but instead sucking them into her sharp-toothed mouth and spitting out a pile of bones). Long-running rumors about "nudalities" for these female characters were yet another product of the arcades as an adolescent male hothouse, growing from the same linkage between sexuality and death already seen in the Kiss of Death fatalities (see fig. 12). As John Tobias admits:

> Our player demographic was primarily a hardcore male audience and
> so the look and design of our female characters pandered to them
> back then just as they do today. I have no problem being apologetic
> for that. The only solace I can offer is that . . . those characters had
> very strong, atypical female archetypes . . . and at the very least could
> kick the hell out of their male counterparts. (Mick-Lucifer 2012)

This more optimistic take gained an unlikely echo of legitimation in
Judge Richard Posner's majority ruling in a 2001 case striking down an
Indianapolis ordinance that would limit minors' access to violent video
games, in which Posner describes *Ultimate Mortal Kombat 3* as, "surpris-
ingly, a feminist violent video game." Even as a female character's "suc-
cess depends on the player's skill," he suggests that "the game is feminist
in depicting a woman as fully capable of holding her own in violent com-
bat with heavily armed men."[15] As noted earlier, game balance is indeed
one important measure of parity between characters of different races
or genders, yet this hardly explains why, by the series' third game, most
of the female characters were increasingly attired like BDSM dommes,
their cleavage prominently displayed in precariously low-cut vinyl outfits.

The wuxia influence on *Mortal Kombat* may be significant here, since
unlike kung fu films, women are often as powerful as men in wuxia films,
although there are plenty of more recent examples of powerful women
in action cinema as well, some of whom are more blatantly sexualized
than others (see Tasker 1993; Schubart 2007). Because female players
are more likely to feel alienated from such hypersexualized characters
(Hutchinson 2015), the use of flesh-and-blood actors to indexically
depict *Mortal Kombat*'s increasingly sexualized female characters only
raises the political stakes of such male-dominated design choices. Even
Elizabeth Malecki, who played Sonya (one of the series' more conserva-
tively attired women) in *MKI*, recalls wanting her character "to be a posi-
tive influence for girls, and especially to both be fit and to be confident
and strong." But when the controversy over the game's violence broke
out in late 1993, she found that no teachers or principals would accept
her offer to visit school classrooms with her positive message (McCarthy
2018). The wider implications of this politically charged moment, espe-
cially as the *Mortal Kombat* games migrated from the boyzone of arcades
into the comparatively mixed-gender space of the family home, is the
subject of the next chapter.

Mortal Kontroversy; or, Dispatches from the Console Wars

[It's] Not blood, [it's the color] red.

—JEAN-LUC GODARD, ON THE VIOLENCE IN
Pierrot le fou (1965)

C'mon, it's red color on your computer screen. How real is that?

—BRAD WEIR, *Mortal Kombat* FAN, AGE 14 (1995)

Anxieties over video game violence stretch back to the golden age of the coin-operated arcade market, with Exidy's *Death Race* (1976)—an unauthorized spin-off of the New World Pictures exploitation movie *Death Race 2000* (Paul Bartel, 1975)—representing perhaps the most notable early case (Kocurek 2015a). However, as Ian Bogost (2015, 47, 49) notes, when games could make more reasonable claims to realism, and therefore inspire similar anxieties as film and television violence, such content's entry into the home became increasingly targeted by moral entrepreneurs. Carly A. Kocurek (2015a, 14) suggests it is important not to flatly dismiss the arguments of "would-be moral reformers," since "to argue that video games are not a legitimate source for serious social concern would be to argue against their cultural significance." The crisis moment that specifically developed around *Mortal Kombat* and several other video games—reaching its height between the former's September 1993 release to home consoles and the United States Congress' July 1994

endorsement of the industry's self-applied ratings system—has been previously chronicled by Steven L. Kent (2001), Blake J. Harris (2014), and others cited in this chapter. Since video of the full Senate hearings on video game violence is readily available in the C-SPAN (1993; 1994) online archives for the benefit of people with a few hours to kill, I will not rehash these hearings at length. Instead I will focus on their major rhetorical threads and how they resonated with voices that have been less explored in the wider debate, such as critics and readers of major gaming magazines.

In particular, I will posit that *Mortal Kombat* became the poster child for video game violence not only because its cinematic qualities corresponded with its huge popularity, but also because the game represented the related "threat" of disreputable arcade content's entry into the private family sphere at a moment when an emerging generation of 16-bit home consoles like the SEGA Genesis (released in 1988–89) and the Super Nintendo Entertainment System (SNES; released in 1990–91) achieved widespread market penetration. The domestic infiltration of photorealistic violence that more closely approximated—but did not wholly reproduce—the audiovisual quality of arcade machines allowed home ports of the first two *Mortal Kombat* games to serve as a referendum on the technological capacities of the newly popular 16-bit consoles. The arcade war between *MKI* and *SFII* thus mapped onto the growing industrial battle between SEGA and Nintendo for dominance of the home market, while reviews of their respective ports weighed in on whether *Mortal Kombat*'s blood and gore was a mere gimmick or an integral part of gameplay quality. Furthermore, psychologists used *Mortal Kombat* in a panoply of media-effects studies that set the stage for later debates over first-person-shooter (FPS) games and other violent genres. Revisiting this controversy from multiple angles therefore reveals a set of anxieties over technological change that continue to have timely resonances to this day.

<center>Arcade Violence Comes Home</center>

The three video games singled out in the December 9, 1993, joint hearings of the U.S. Senate Governmental Affairs Subcommittee on Government Regulation and Information and the Judiciary Subcommittee on Juvenile Justice—*MKI*, *Night Trap*, and *Lethal Enforcers*—had all premiered in October 1992, although only *MKI* and *Lethal Enforcers* began life in the coin-op market, where they generated little controversy. SEGA of America president Tom Kalinske recalls that parents had begun complain-

ing about Genesis game content in March/April of 1992 and that there had been rumblings about supposed "subliminal messages" in SEGA's rapidly edited television commercials (Kunkel 1993c, 35; Harris 2014, 405). But it was the impending Genesis port of *MKI* that led SEGA to create the Videogame Ratings Council (VRC) in May 1993, which would self-apply ratings to SEGA's games and presumably serve as a model for wider industry adoption. Headed by Arthur Pober, former director of the Children's Advertising Review Unit of the Council for Better Business Bureaus, the VRC created parental advisory labels modeled after the Motion Picture Association of America's (MPAA) age-based classifications: GA (General Audiences), MA-13 (Mature Audiences over 13), and MA-17 (Mature Audiences over 17). The MPAA had, in fact, refused Kalinske's initial request to include video games under their existing ratings system, as the movie industry did not want to take oversight of an additional medium outside their purview, and even threatened to sue SEGA for copyright infringement if they self-applied the extant MPAA ratings (Kunkel 1993c, 35; Harris 2014, 404–5, 423, 428–29). As I note below, however, it was the increasingly cinematic qualities of these video games that raised such concerns in the first place—and the fact that, much like the legal status of movies prior to *Burstyn v. Wilson* (1952),[1] video games were not yet considered a form of "protected speech" under the First Amendment and therefore still subject to prior restraint.

It was not until the home console release of *MKI* on September 13, 1993 (dubbed "Mortal Monday" in publicity materials), that major publications began widely reporting on its violent content—with Sub-Zero's Spine Rip and Kano's Heart Rip fatalities earning the most notoriety in such coverage (see Gruson 1993; Cohen 1993; Elmer-Dewitt and Dickerson 1993). Because the blood and uncensored fatalities could be unlocked on SEGA ports only by inputting a not-so-secret "blood code," this created a loophole for the default gameplay to get away with an MA-13 rating, not unlike the arcade cabinets' DIP switch option for family-friendly locales. Nevertheless, on November 16, California's attorney general, Daniel Lungren, held a press conference warning game companies to either clean up their content or face state bans from store shelves (Glionna 1993). The following day, U.S. senators Joseph Lieberman and Herbert Kohl announced their plans to introduce legislation that would force the industry to regulate itself or else face federal intervention within a year's time, spurred into action after the nine-year-old son of Bill Andresen, Lieberman's chief of staff, asked his father to buy him a copy of *MKI* (Kent 2001, 466–69; Harris 2014, 472–75).

SEGA responded by agreeing with Lungren's concerns and promoting its proactive establishment of the VRC as a guidance tool for parents—all talking points that SEGA's vice president of marketing, Bill White, would repeat in his Senate testimony (C-SPAN 1993). But the editors and readers of *Electronic Gaming Monthly* were skeptical whether SEGA had done enough to educate the public about what its ratings meant, even in its own in-house magazine, *SEGA Visions* (Semrad 1994, 6; Wormdahl 1994, 16; "Sega Responds" 1994, 16, 18). Other readers hoped that the new ratings system would allow video games to incorporate more mature content beyond violence, such as sexual themes, but the editors of *Electronic Games* doubted that video games would be able to shake their predominant association with children's entertainment, even alluding to Ralph Bakshi's X-rated animated films (such as *Fritz the Cat* [1972]) as an example of how cartoonish forms and mature content had previously proved an awkward fit in another medium (Powell 1993, 8).

Meanwhile, the irony that *Mortal Kombat* and its kin had not inspired outrage until brought beneath the roof of the family home, and the eyes of parents who didn't frequent arcades, was not lost on some commentators: "Where were Mom and Dad and the Anti-Violence Coalition when Junior was slipping off to the arcade and spending dozens of dollars to rip out someone's spinal cord?" (Carter and Carter 1993c; also see Kunkel 1993d, 46). Some skeptics thought that going after video games was little more than a convenient target to distract from the fact that other government efforts to curb violence, both in the media and on the streets, had largely failed ("Ratings" 1994; Harrington 1994; Kinder 1996, 26).[2] Coming only a few years after the Parents Music Resource Center had convinced the Recording Industry Association of America to include "Parental Advisory" stickers on offending albums, and amid other outcries over the perceived raunchiness of early-1990s pop culture (e.g., *The Simpsons* [FOX, 1989–], *Beavis & Butt-head* [MTV, 1993–97], shock jock Howard Stern, and innumerable rock and hip-hop artists), *Mortal Kombat* and friends were easy objects for parental-cum-political outrage.

Despite (or perhaps because of) the lack of adult supervision associated with such sites, American video arcades have long had a culturally "low" status as disreputable spaces, although these associations extend back to earlier sites of public gaming like pool halls and card rooms, and to sites of coin-operated entertainment like nickelodeons and casinos. According to Michael Ryan Skolnik and Steven Conway (2017, 4–9), these spaces all threatened social norms because they mixed diverse demographics of people, while the meritocracy of skilled gameplay could

subvert many (but not all) existing social hierarchies. In mid-twentieth-century America, coin-operated businesses also had associations of being run by the mob, but by the rise of video game arcades in the recession-era 1970s, fears about economic precarity blamed arcades for enticing young men into wasting their time and money on frivolous leisure activities. Suspicions that arcades would drive youth toward petty crime to fund their video game habits were enjoined by fears that these spaces set apart from adult supervision would encourage child abductions and worse. Consequently, many arcades attempted to positively rebrand themselves as "family fun centers" to draw in a younger and more respectable clientele (Skolnik and Conway 2017, 5–6; Kocurek 2015a, 18, 26, 60, 94, 99, 106). Although the U.S. Supreme Court, in *City of Mesquite v. Aladdin's Castle, Inc.* (1982), would strike down local efforts to restrict youth from entering arcades without adult supervision, arguing that young people's freedom to consume video games was a (purchasable) form of free speech,[3] lingering anxieties about the overall safety of such spaces encouraged arcade games to be ported onto consoles where children could play them under adult supervision, within the safety of the private home (Kocurek 2015a, 32, 113; Newman 2017, 99, 107, 158). Small wonder, then, that Craig Johnson of the Amusement and Music Operators Association was easily the most nonchalant of the industry representatives testifying at the December 1993 Senate hearing. He argued that the coin-op industry had no control over youth access to violent games, so arcade operators should not be held responsible for game designers' bad taste; his only major objection was correcting the senators that *Night Trap* was never available in arcades to begin with (C-SPAN 1993).

Whereas earlier electronic technologies like radio and television had been gradually incorporated into the domestic sphere (long gendered as a more "feminine" space than the "masculine" public sphere) through a focus on leisure as family bonding time (Spigel 1992), Bernadette Flynn (2003, 557–60, 565, 569) observes that most advertisements for home game consoles figured them as masculine "dream machines" whose associations with the boyzones of public play invaded the home to create a "third space" of exciting escapism from the domestic status quo (also see Newman 2017, 77, 80, 87). By the 1990s, earlier fears about video games as a uniquely dangerous medium in their own right had given way to comparisons between video games and other violent media, including media already common in the family home, such as movies and television (McKernan 2013, 317). Nevertheless, a recurring belief held that, unlike the "passively" consumed imagery of film and televi-

sion, video games' interactivity made their violent content particularly harmful to young gamers. In their deeply alarmist Senate testimonies (C-SPAN 1993), for example, psychologist Eugene Provenzo predicted that video games and television would soon converge into a "new type of television" verging on virtual reality, wherein interactive violence would become a ubiquitous part of the family home; while Marilyn Droz of the National Coalition Against Television Violence argued that rather than tallying the number of violent acts *per hour*, as the coalition did with television shows, video games required tallying acts of violence *per minute*.

It was therefore the longtime convention of video game interactivity, combined with a new generation of 16-bit consoles flooding the home market with increasingly arcade-quality graphics, that set the stage for this particular crisis moment. In other words, when the disreputable spaces of arcades threatened to collapse into the home via forms of violent content that had otherwise passed under parents' radar, magical thinking about suspected media effects became that much more likely. One such seeming incitement to imitative violence, which was not already found in arcades, was the SEGA Activator peripheral (1993), an infrared full-body controller allowing the player to stand within an octagonal ring while real-life punches and kicks performed in their living room registered onscreen. Marketed for use with fighting games, the Options menu on the Genesis *MKII* port even lists the Activator as its default setting, though the device's notoriously unresponsive interface meant it was never widely adopted. Worse still for parents concerned about verboten games entering their homes, new initiatives like the SEGA Channel (1994–98) and competing subscription-based services allowed games to be downloaded or played online via a household's cable or phone modem (Harris 2014, 340, 423; Markoff 1994), potentially circumventing parental restrictions (at least until SEGA eventually introduced a ratings-based parental lock).[4]

Much like the 1980s "video nasties" moral panic and resulting censorship laws in Britain (Egan 2007; McKenna 2020), then, the growing adoption of a new home entertainment technology created the illusion that a sudden wave of filth and corruption, once restricted to urban spaces, was sweeping into "safe" family homes, with loudly voiced concerns over taboo content often superseding the underlying concerns over technological accessibility. And yet, despite this predominant focus on content, game designers were not directly called before the Senate subcommittees. Digital Pictures cofounder Tom Zito, for instance, attended the December hearing, but despite speaking up from the gallery to correct

Senator Byron Dorgan's mistaken impression that Zito was in absentia, he was still not called to submit a statement in defense of *Night Trap* (C-SPAN 1993). Because the senators had mistakenly conflated the major console makers with the developers of these third-party games, it was instead SEGA and Nintendo, the distributors of such games into the home, who were called to answer for their supposed sins. Whereas members of the gaming community certainly knew and celebrated designers like *Mortal Kombat*'s John Tobias and Ed Boon as auteurs responsible for the spectacular inclusion of playable violence, the non-gaming senators were ignorant of such distinctions between third-party game creators and first-party console creators.

Cinematic Qualities and Moral Alignments

Before delving into how SEGA's and Nintendo's respective corporate ethos inspired their responses to this controversy, we need to briefly examine the most salient trait that united the three most frequently targeted games. "Gone are the days when video games were just Pac-Man and other quaint characters," Lieberman wrote to other members of Congress. "Advances in technology permit the latest video games to use real actors and actresses to depict murder, mutilation, and disfigurement in an extremely graphic manner. . . . Today's graphic games may seem mild compared to the CD-ROM and virtual reality systems, which will change the market very soon" (Harris 2014, 474). Comparisons between cinema and the new photorealism of digital game violence were a common rhetorical means of arguing that these games were "not your father's *Pac-Man*," although the president of Acclaim Entertainment, which produced the *Mortal Kombat* home ports, downplayed such concerns: "We're certainly not in the realm of creating film-quality realism" (Gruson 1993).

These games were all released during the 1989–95 period that Michele Pierson (2002, 48, 128) has called "the wonder years" of Hollywood special effects, when films like *The Abyss* (James Cameron, 1989), *Terminator 2: Judgment Day* (1991), and *Jurassic Park* (Steven Spielberg, 1993) all combined the plasticity of computer-generated effects with the indexicality of photorealism, dazzling viewers with such new technological advances. While *Mortal Kombat* itself used more antiquated animation techniques (pixilation in combination with hand-drawn effects for the gore and supernatural elements), and would not rely on actual 3D modeling until *MK4*, its graphics rode a fine line between generating wonder

and fear among those on opposite sides of what Gareth Schott (2016, 6) terms the "experience divide." For Schott, this is the significant disparity between people's opinions in whether video games can cause real-world violence; those with the least amount of experience playing video games are far more likely to ascribe harmful media effects to violent games than players who are intimately familiar with such games. I argue that the very uncanniness of *Mortal Kombat*'s pixilated sprites registered as that much more disturbing to moral reformers because pixilation's treatment of live actors as posable objects, and its illusion of movement via dropped frames, create a "dehumanizing" effect that might also complement a game's disturbing or dehumanizing themes (Ivins-Hulley 2013, 281; Perrott 2015, 124). It is no coincidence that violent games with more cartoonish sprites (such as the anime-inspired *SFII*) went barely mentioned during the Senate hearings, but some gamers were dismayed that footage from less violent games and genres was starting to be included in carelessly assembled news coverage of the controversy, seemingly made guilty by association (Raposa 1994, 12).

Although *Mortal Kombat*'s photorealistic sprites have already been discussed in earlier chapters, Konami's rail-shooter *Lethal Enforcers* used more rudimentary pixilation of photographed actors and backgrounds to provide realistic settings and enemies for its *Dirty Harry*–inspired (Don Siegel, 1971) light-gun action. Positioned as a Chicago cop, the player must shoot a seemingly endless series of weapon-toting enemies, and avoid hitting innocent bystanders, across several different shootout scenes: a bank holdup, a car chase, and so on (fig. 15). *Lethal Enforcers* inherited many of its movie-like traits from the coin-op laserdisc game *Mad Dog McCree* (American Laser Games, 1990), a rail-shooter using full-motion video to present the first-person-perspective story of a gunslinger cleaning up an Old West town. But whereas *Mad Dog McCree* has long, non-interactive periods of watching the FMV setup for each brief moment of actual gameplay, *Lethal Enforcers* uses its blocky and relatively unsophisticated animated sprites to create near-constant shooting action, a convention graphically improved upon in later rail-shooters like Atari's *Area 51* (1995). This may be why *Lethal Enforcers* earned an MA-17 rating when released on SEGA CD, while *Mad Dog McCree*'s port earned only an MA-13. The editor of *Electronic Games* also hypothesized that *Mad Dog McCree*'s Old West setting made its violence more palatable than *Lethal Enforcers*' present-day urban settings (Kunkel 1993d, 46).[5]

Much like subsequent controversies over FPS games, critics singled out *Lethal Enforcers* for encouraging gun violence, although the game's

Fig. 15. Simple pixilated sprites, featuring photorealistic images of Asian stereotypes, in the "Chinatown Assault" level of the rail-shooter *Lethal Enforcers*.

rough-edged law enforcement theme is more consistent with *Dirty Harry*'s right-wing gun fetishism and reworking of Old West–style justice in a modern guise. "As was the case with *Kombat*, nobody said a word about the arcade version of the game," but now it is "guaranteed to be the next big hit on Capitol Hill," the *Washington Post* opined (Carter and Carter 1993b). Whereas peripherals like the *Lethal Enforcers* light gun ("The Justifier") were once attached to arcade cabinets, now this life-size plastic "weapon" was advertised for SEGA's home consoles under the tagline "You won't find a toy like this in any Cracker Jack box"—a shameless appeal to children, according to Herbert Kohl (C-SPAN 1993). Yet, I argue that rail-shooters are more properly "cinematic" than FPS games because players cannot actually control the camera movement as it moves along the predetermined "hard rail" like an amusement park ride, much as movie viewers are passively subject to the changes in angle and perspective determined by the director. With forward momentum along the rail permitted only by successfully clearing the screen of enemies, it is little surprise that the player's trigger-happy progression seemed to outweigh any potentially redeeming themes of killing bad guys and making quick judgments to avoid shooting innocent civilians.

The most notorious game of the scandal, however, was *Night Trap*, an "interactive movie" originally developed by Digital Pictures for Hasbro's NEMO (later renamed Control-Vision), an abandoned con-

sole that would have used VHS tapes as cartridges for FMV gameplay. Designed to separate an ordinary VHS cassette's magnetic tape into multiple video tracks through which the player could toggle (as compared to the random-access memory of laserdiscs and later CD-ROMs), this meant that gameplay was very limited beyond toggling between different, parallel-running audiovisual tracks. A spoof of already tongue-in-cheek horror movies such as the *Slumber Party Massacre* series (1982–90), *Night Trap* frames the player as an operative remotely conducting surveillance upon different rooms of a house where young women are endangered by black-clad, humanoid aliens attempting to harvest their blood. The player toggles between different camera feeds and remotely triggers traps to prevent the intruding aliens from catching the women, but because of the technological limitations of linear video, players can make only a few choices and must then passively watch the FMV action play out for long periods. Much like *Mad Dog McCree*'s FMV format, *Night Trap* lacks the constant interactivity of most games and thus made for an unsatisfying hybrid of cinema and video game.

Filmed over three weeks in 1987 on a $1 million budget, *Night Trap* is far more hokey than horrific, but Sony nevertheless purchased the rights to it and three other "interactive movies" when the NEMO was abandoned. The 1991–92 introduction of the SEGA CD peripheral as an add-on to the 16-bit Genesis allowed Sony to finally bring *Night Trap* to market in fall 1992. But the fact that the Genesis base console could not run FMV at full screen, was limited to a 16-color palette vastly inferior to even VHS, and whose CD-ROM peripheral required long loading times, all added up to a title that would have quickly vanished were it not for the controversy ginned up by moralists who clearly had not even played the game (Perron 2008, 129–31; Donovan 2010, 184; Russell 2012, 73–75; Kocurek 2019). During the Senate hearings, for example, Byron Dorgan posited that *Night Trap*'s gameplay has a goal of killing women and should qualify as "child abuse" if minors were allowed to play it, while Marilyn Droz was convinced that the game trains young boys to commit sexual violence (C-SPAN 1993). But even some critics who recognized that the game's goal was to actually *save* the women and *stop* the aliens still complained that it encouraged young men to take chauvinistic pleasure in rescuing scantily clad damsels in distress (Kinder 1996, 34–35). Although *Night Trap* was arguably the most controversial (and most literally cinematic) game of the three targeted titles, in the end it simply did not have *Mortal Kombat*'s wide reach, because it was only available on the relatively unpopular SEGA CD and Panasonic's then-new 3DO

console (1993). Unsurprisingly, then, when major retailers like Toys "R" Us, Kmart, Walmart, and Kay-Bee Toys all removed *Night Trap* from their shelves, *Mortal Kombat* remained on sale, under the excuse that it did not contain a comparable level of violence against "real female images" ("2 Toy" 1993).

Ironically, though, both *Lethal Enforcers* and *Night Trap* have prosocial narratives beneath their lurid spectacles of violence, with stopping crime or other evil as the main gameplay goals. The *Mortal Kombat* games, by contrast, may have Manichean framing narratives about the forces of good fighting against evil figures like Shang Tsung and Shao Kahn, but the fact that one can also choose to play and win the game as an "evil" character means that moral values are less narratively ingrained in gameplay itself. Again, it is possible to win *Mortal Kombat* without performing fatalities—and even the most nominally heroic character, Liu Kang, has a gore-free fatality move in each of the first two games (the screen does not go dark when he performs his Uppercut fatality in *MKI*, suggesting his moral righteousness). Moreover, in *Mortal Kombat vs. DC Universe* (Midway, 2008), the crossover between Midway's amoral universe and DC's morally bound superheroes means that characters like Superman, Batman, and Wonder Woman cannot perform fatalities, but rather "Heroic Brutality" finishing moves that beat the defeated opponent into submission while keeping them alive to face justice. The intersection of these two preexisting story worlds, then, highlights the different moral alignments in each and the fact that the *Mortal Kombat* games permit players the choice to engage in antisocial values but still remain victorious, unlike either *Lethal Enforcers* or *Night Trap.*

Moral reformers may have accused video game designers of cynically peddling violence to children for the sake of industry profits, but many young gamers were far less convinced about *Mortal Kombat*'s potential to harm. While some youth were appalled by the violence, or angry that fighting games threatened to give all video games a bad name, others excused the games as harmless fantasy or as merely a symptom of wider trends in media violence (see "Youth Opinion" 1993; "Violence in Games" 1993, 12; "Video Violence" 1994, 12). John Tobias has since described *Mortal Kombat* as the product of an era when video games themselves were growing up and gaining older players (Hickey 2018, 178), although this metaphor of gaining maturity is undercut by the game's own advertisements, such as one featuring the Raiden and Kano live actors emerging from the *MKI* cabinet's screen to menace two children, beneath the tagline "So Real It Hurts!" The senators who convened the

hearings repeatedly expressed concern that, even with the VRC ratings system, age-inappropriate games might still be advertised to children in magazines and on television, especially if third-party advertisers were not required to prominently display the ratings (C-SPAN 1993).

Meanwhile, some *Mortal Kombat* fans were furious at the government's censorship threats, but their responses did not help their own case. *Electronic Gaming Monthly*'s envelope art contest, for instance, asked readers to illustrate "what would happen if video game characters attended the video game violence hearing," and the resulting submissions of blood-soaked fan art depict *Mortal Kombat* characters gloating over the senators' headless corpses ("EGM!" 1994, 20). Several of the fighting games attempting to cash in on *Mortal Kombat*'s success went a step further, with a photo of Lieberman's head superimposed onto one of the character sprites as a hidden fighter in *BloodStorm* (Incredible Technologies [U.S.], 1994), and *Eternal Champions: Challenge from the Dark Side* (SEGA [U.S.], 1995) including a hidden character named "The Senator," whose special moves include throwing "red tape" and whose finishing moves include impaling his opponent atop the Washington Monument.

Overall, the controversy predictably backfired by heightening sales of all three games, especially in the case of *Night Trap*, whose sales were previously very low due to its lack of engaging gameplay, limited availability on unpopular consoles, and absence of an in-built audience from a coin-op run. As Michel Foucault (1990, 18, 84, 104–5) has demonstrated, widespread public anxieties over supposedly deviant behavior, and attendant efforts to censor or repress offending material, usually incite a boom in public discourse that makes such behavior all the more likely. During the Victorian era, this included hysteria over the supposed "threat" of masturbation, and it is not difficult to see the heavily policed figure of the masturbating child inherited by the similarly nonproductive, onanistic finger-twiddling of the juvenile video gamer. Of course, one doesn't have to be a Foucauldian to understand this logic; one needs only to have been a preteen gamer reacting to adult/parental pronouncements with greater curiosity and desire to engage with taboo materials than if such games had simply been left alone.

Industrial Bloodsport: SEGA vs. Nintendo

Put on the congressional hot seat for disseminating such material into the home, industry leaders SEGA and Nintendo responded to the charges in ways reflecting their own increasing battle for market supremacy. Recall

that *SFII* and *MKI* were already positioned as dueling warriors in the coin-op market even before this rivalry spilled over into the respective contest between 16-bit home consoles, which became open animosity during the December 1993 Senate hearings. *SFII* had been ported to the SNES in summer 1992, quickly becoming a best seller and acclaimed as perhaps the best fighting game yet released on the then-new console. Capcom's licensing deal with Nintendo prevented a SEGA port from appearing until *SFII: Champion Edition* was released for Genesis in September 1993, several weeks after the home console release of *MKI*. This effectively meant that *SFII* became more closely associated with the SNES while *MKI* was more strongly linked to the Genesis, since SEGA's inclusion of blood and gore meant that its ports were closer to the arcade experience than Nintendo's ports. Even when the 1993 coin-op sequels *MKII* and *Super Street Fighter II: The New Challengers* were ported in mid-1994, gaming magazines framed their release as a "war" for "crown[ing] the king of home fighting games" ("Special . . . *Challengers*" 1994, 128; also see Tummynator 1993, 56). "Both *MKII* and *SSFII Turbo* are machines from the same family, but they're two different beasts," read another metaphor. "While *SSFII* can be considered the roadster of fighting games, *MKII* is the muscle car" (Constant 1994, 10). Both franchises remained for many months at or near the top of 1993–94 best-seller charts for home consoles and would receive gaming magazine accolades as among those years' best games.

As Kevin Flanagan (2017, 448–49) observes, technological limitations and third-party development mean that porting from arcade machine to home console is inevitably a process of adaptation and one that adheres to what adaptation studies terms the "fidelity paradigm." For example, a given port's closeness to "arcade-perfect" quality often receives superior reviews, and typically becomes the biggest selling iteration. In the battle between Nintendo and SEGA, however, *Mortal Kombat* tested not only the technical capacities of each 16-bit console but also each company's corporate standards. Rather than following Capcom's strategy of brand loyalty to Nintendo via delayed license, Acclaim, *Mortal Kombat*'s publisher for its home ports, licensed the game to both Nintendo and SEGA for the widely hyped "Mortal Monday" simultaneous release, following a blockbuster release strategy that SEGA had previously used for its Genesis release of *Sonic the Hedgehog 2* (SEGA, 1992). According to Blake J. Harris (2014, 88, 227, 274, 357–58, 447, 469), Acclaim's decision set up the *MKI* release as a head-to-head contest over the technical merits of each console, especially at a time when *Sonic 2*'s success had

already allowed SEGA to pull even with Nintendo's market share. Having beaten Nintendo's own 16-bit system to market by about two years, SEGA had touted the Genesis as a far more advanced system than the 8-bit NES, even as the Genesis' faster processing capabilities were eventually outdone by the SNES' greater graphical capabilities. Much as an earlier proprietary battle between *Mike Tyson's Punch-Out!!* (Nintendo, 1987) for the 8-bit NES versus *James "Buster" Douglas Knockout Boxing* (Taito [JP], 1990) for the 16-bit Genesis had attempted to frame Douglas's real-life defeat of Tyson as what SEGA would soon do to Nintendo, the simultaneous release of *MKI* on both the Genesis and SNES, backed by Acclaim's $10 million advertising budget, would test each 16-bit console's might.

And yet Nintendo had already handicapped itself in this fight, as its company policy since 1985 had been to ensure not only effective gameplay design on its systems (the Nintendo "Seal of Quality" sported on game boxes) but also a family-friendly experience for its core gaming demographic of children. By contrast, SEGA's move into the 16-bit era was promoted via a rebranded corporate image as a more rebellious and technologically advanced company with an older but hipper demographic of teens and young adults. As Harris (2014, 98, 142, 280, 310) notes, SEGA's corporate ethos represented "freedom" as opposed to Nintendo's tight control over its licensees, even if that meant that the quality of games released on SEGA consoles might be more mixed and could contain potentially risqué content. During the December 1993 Senate hearings, for example, Nintendo's senior vice president Howard Lincoln forcefully asserted that games like *Night Trap* "will never appear on a Nintendo system" because children under fourteen remained its core users, whereas SEGA's Bill White noted that the average Genesis user was nineteen years old and that 60 percent of SEGA CD owners were adults—hence the need for a voluntary ratings system that would do for video games what the MPAA ratings system had done for expanding permissible movie content (C-SPAN 1993). SEGA and Digital Pictures even suspected Nintendo of conspiracy to disrupt SEGA's rising market share (Kent 2001, 466–67), to which Perrin Kaplan, Nintendo of America's vice president of marketing and corporate affairs, has since admitted: "We actually leaked *Night Trap* to some press ahead of time. . . . It was basically to get more attention off of us because we wanted to remain as that wholesome company" (Klepek 2016).

Acclaim had subcontracted development of the *MKI* home ports to Probe Software—with the exception of the SNES port being handled by Sculptured Software because of their greater familiarity with the SNES—

and both studios consulted with each other over the challenges of porting a game whose photorealistic sprites rendered its overall size larger than normal for 16-bit cartridges (Kunkel 1993a, 54–55). (Due to their far smaller cartridge capacities, the 8-bit Nintendo Game Boy and SEGA Game Gear ports each lost a playable character.) Because these home consoles had only a fraction of the arcade board's processing power, Probe and Sculptured were given access to the arcade assembly code, converting as much as possible for the 16-bit systems "while creating and optimizing the rest by hand, based on frame-by-frame analysis of the arcade game" (Myers 2018). Based on unfinished demos, advance word from the Winter 1993 Consumer Electronics Show (CES) suggested that the only major qualitative difference between the SNES and Genesis ports would be the lack of blood and gore in Nintendo's versions, while also suggesting that a new controller might have to be developed to properly translate the game's five-button coin-op interface ("*Mortal Kombat*" 1993, *EGM*, 88–89). In the SNES port, the blood sprites would be rendered gray for "sweat" instead of blood (though the Game Boy's monochromatic display made this moot), and its gorier fatalities would be reanimated to less bloody effect. The company's in-house magazine *Nintendo Power* attempted to positively spin these changes as "exclusive extra Finishing Moves"; for instance, instead of Raiden electrocuting his opponent's head until it bursts in a fountain of blood, he now fries their body into a tastefully discrete pile of ash ("*Mortal . . . Dangerous Conflict*" 1993, 18). Sculptured Software—many of whose Utah-based employees were social conservatives who flatly refused to work on the project—would sketch out ideas for these bloodless finishing moves, send them to both Midway and Nintendo for approval, and then develop the animation by primarily adapting from existing sprites (Myers 2018).

With the threat of censorship marking *MKI*'s move into the supposedly "feminine" realm of domesticity, disgruntled (male) fans worried that "without the violence, *MK* will just be another poor *Street Fighter* clone" (Masui 1993, 12). They began writing thousands of letters, unsuccessfully trying to convince Nintendo to reconsider its stance, while *Electronic Gaming Monthly* editor Ed Semrad lambasted Nintendo for "playing God again" by delivering a game that would satisfy no one: still inherently violent in concept, and thus liable to offend parents, but sanitized to an extent that fans clearly knew what they were missing (Semrad 1993, 4). Lincoln indeed conceded in his Senate testimony that the decision to hold firm had come at significant cost (C-SPAN 1993). Although published estimates vary, the Genesis port of *MKI* is said to have outsold

the SNES port by margins ranging from two- or five-to-one, and SEGA subsequently pulled ahead with 55 percent of total market share in home consoles (until later overtaken after the SNES hit *Donkey Kong Country* [Rare, 1994]) (Harris 2014, 472, 522).

All fighting games for SEGA consoles automatically received an MA-13 rating under the VRC, but as noted above, the Genesis and Game Gear ports of *MKI* would have likely received an MA-17 rating were it not for the absence of blood and fatalities in their default modes. Unlike most cheat codes, the Genesis port not-so-subtly teases the existence of the blood code in a pre-title screen alluding to the Shaolin martial-arts tournament's "ethical code," the combatants' shared "code of honor," and finally how "another type of code could be defined as an arbitrary system of symbols or letters . . . a secret code. *Mortal Kombat* adheres to many codes, but does it contain one?" The port's co-publisher Arena Entertainment made the blood code available through their customer service line (much as SNK did with its first two *Samurai Shodown* [1993–94] ports for the Neo●Geo home console), and all of the major gaming magazines published it as well ("*Mortal Kombat*" 1993, *SEGA Visions*, 15, 23; Lee 1995, 14). It became so widely known that entering the blood code (ABACABB) to unlock what was also dubbed "Mode A" became nearly as second nature for Genesis players of my generation as switching on the console itself. One desperate fan who missed out, however, wrote in to *Electronic Games* requesting either the code itself or the price tag for an *MKI* coin-op cabinet (an estimated $1,200–3,000) ("Game Doctor" 1993, 28).

MKI reviews thus framed the underlying differences between SNES and Genesis ports via questions about whether faithfully reproducing the arcade experience was linked to more closely emulating the quality of gameplay (a debate framed by each console's technical capabilities) or the gimmickry of gore (a debate over the cultural value of Midway's original coin-op game). *Electronic Gaming Monthly*'s reviewers, for example, gave higher scores to the Genesis port for being closer to the arcade's overall gameplay ("Review . . . Genesis" 1993, 34), even if the SNES version looked graphically superior. The SNES port, meanwhile, was "an excellent reproduction in both looks and sounds," but "the only thing this game really had going for it was the blood and fatalities," therefore qualitatively paling in comparison to the SNES port of *SFII* ("Review . . . SNES" 1993, 26). Other reviews concurred that the Genesis port was faster and its controls more responsive—even if the need for a six-button controller was a common refrain—while the SNES version

sported more faithfully reproduced character sprites and a richer color palette, albeit one where the color red was conspicuously absent.

Dissenting views suggested that the SNES port's superior audiovisual quality would compensate for the lack of blood and noted that some of the arcade version's combos and other gameplay strategies were missing from the Genesis port—partly due to the ports being rushed to market in time for the much-hyped "Mortal Monday" release date ("Video Game Gallery" 1993, 58–59; Larry 1993, 54–55; "Special . . . *Kombat II*" 1994, *EGM²*, 144). A reader letter to *GamePro*, for instance, argued that *MKI*'s fatalities became boring over time, so the SNES port's audiovisual superiority ultimately made it the better game in the long run (Fielder 1994, 12). Meanwhile, an adjacent letter asks about the strange gray object that Kano holds in his hand (a crude censoring of the extracted heart from the imported animation) when performing his finishing move on the SNES; the editors coyly reply that the reader is "reading more into the image than what's there . . . his closed fist" (Mendez 1994, 12). Reviews thus evinced a tension between reproducing the arcade version's in-round gameplay or its gory, end-of-match spectacles, and although most gamers tended to veer toward the gore (as confirmed by respective sales numbers), many professional reviewers hedged on the side of overall gameplay ("Special . . . *Kombat II*" 1994, *Electronic*, 118).

The recurrent criticism of trying to play *Mortal Kombat* with the standard controllers for each 16-bit console further highlighted the functionality of each system. Some button combinations for special moves and fatalities were slightly different on the *MKII* Genesis port, for instance, since both the High Punch and Low Punch controls were conflated into a single button on the standard three-button controller, and the Genesis port of *MK3* in fact requires a six-button controller to accommodate the added Run button. Meanwhile, third-party developers advertised new controllers aimed at either skilled gamers (e.g., arcade pads with a joystick and six full-size buttons) or novices (e.g., Innovation's *Mortal Kombat II* Kontroller, with preprogrammed special moves "sure to give entry-level players a fighting chance against seasoned veterans") ("Walking" 1994, 62). I would go so far as to suggest that the immense popularity of fighting games during the 16-bit era influenced the number of buttons on standard controllers for the subsequent generation of consoles, since the potential loss of functionality in the translation from arcade to home ports was acutely noticeable with this particular genre.

Part of the hype over *MKII*'s home release concerned how much gore would survive its porting, and even two months before its release, gaming

magazines were still speculating that a blood code would be required for the Genesis port and that fatalities would be altered for the SNES version ("Special . . . *Kombat II*" 1994, *Electronic*, 118).[6] But when, under the cover of a new industry-wide ratings system, Nintendo released an uncensored SNES port of *MKII* in September 1994, the console-superiority debate was largely settled in favor of Nintendo (Harris 2014, 518–19). Hailed as a "near-perfect translation" from the arcade version, in terms of not only audiovisual quality but also the faithful inclusion of blood and gore, the SNES earned higher review scores than the Genesis port. The latter was still acclaimed as probably the best fighting game yet released on SEGA's console, sporting better graphics than *MKI*, but technical limitations still meant a reduced palette of colors and sounds ("Review . . . *Kombat II*" 1994, 32). And in an inadvertent twist, the Genesis port of *MKII* is actually *less gory* than the SNES port, since the Genesis' limited memory capacity meant that its version needed to sacrifice not only some character animation but also some of the gorier sprites. In fatalities where the defeated opponent is blown apart, for instance, there are less elaborate bursts of flesh, bones, and entrails, and these sprites vanish upon hitting the ground instead of remaining where they fall, as in the arcade and SNES versions. As a passing concession to the company's old family-friendly policy, *Nintendo Power* now merely noted that *MKII*'s "Depictions of violence may turn off some players" ("Now Playing" 1994, 110).

The Birth of the ESRB and Other Media Effects

Even if Nintendo had not yet rendered SEGA a comparable pile of bones and entrails, the stakes of the console war were clearly altered by Nintendo's belated policy shift toward allowing more mature game content. During the December 1993 hearings, senators Lieberman, Kohl, and Dorgan had been more sympathetic to Nintendo's internal censorship policy than to SEGA's VRC initiative, with both Joseph Lieberman and Howard Lincoln agreeing that a ratings system could encourage unscrupulous designers to incorporate even more extreme content into their games under the "fig leaf" of corporate responsibility (C-SPAN 1993). Whereas SEGA was convinced to "leave content calls up to the 'good judgment' of game developers" and let the VRC do the rest ("Editorial" 1993, 8), Nintendo preemptively provided third-party developers and licensees with guidelines about ten content-related "Don'ts" in order to avoid wasting their time and money creating a game that would not gain Nintendo's approval (Kunkel 1993e, 38). But chinks in Nintendo's

armor became all too visible when Bill White accused Lincoln of hypocrisy for selling the Nintendo Super Scope light-gun peripheral (which Lieberman said resembled "an assault weapon of some kind") for use with unrated SNES games, including a home port of Midway's *Terminator 2* rail-shooter. The audience burst into incredulous laughter when Lincoln, attempting to contrast the Super Scope with *Lethal Enforcers'* Justifier, referred to the SNES peripheral as simply for "target shooting and whatnot" (C-SPAN 1993).

Following the Senate hearing, SEGA, Nintendo, and other companies began drafting an industry-wide ratings system at the January 1994 CES, but animosity between different companies and industry sectors delayed the process. Because of their tight competition, Nintendo did not want to adopt the existing VRC ratings developed by rival SEGA and initially walked away from the table. The Software Publishers Association also split from the console-based companies over disagreements about how to rate desktop computer games. As a compromise, the industry's emergent lobbying group, the Interactive Digital Software Association (IDSA; renamed the Entertainment Software Association in 2003), announced a new age-based ratings system to be administered by the Electronic Software Rating Board (ESRB). Game designers were now required to submit video, storyboards, or scripts containing a game's most objectionable content, plus a questionnaire asking developers to identify any content falling into potentially problematic categories, which would form the basis of the assigned rating ("Ratings" 1994; Leeds 1994; Kent 2001, 479–80; Harris 2014, 502).[7] The need for an industry-wide system was made more acute by Panasonic's creation of its own in-house rating system for its 3DO console, to say nothing of the rating systems concurrently being developed in Canada, Australia, and Europe—all major markets for SEGA, Nintendo, and other industry leaders ("Editorial" 1994, 8).[8]

In a follow-up Senate hearing on March 4, 1994, Jack Heistand, senior vice president of marketing at major game developer Electronic Arts, spoke on behalf of what would soon become the IDSA, updating the senators on the industry's rapid progress in responding to their one-year timetable. According to Lieberman and Kohl, it was important that neither SEGA nor Nintendo should head the new ratings system out of potential conflicts of interest, whereas a coalition of independent game developers and informed citizens would be more impartial. Due to its steady sales numbers, Lieberman continued to single out *MKI* as a game that should be re-rated according to the new classifications (C-SPAN 1994). In fact, while the home port of *MKI* had moved SEGA to preemp-
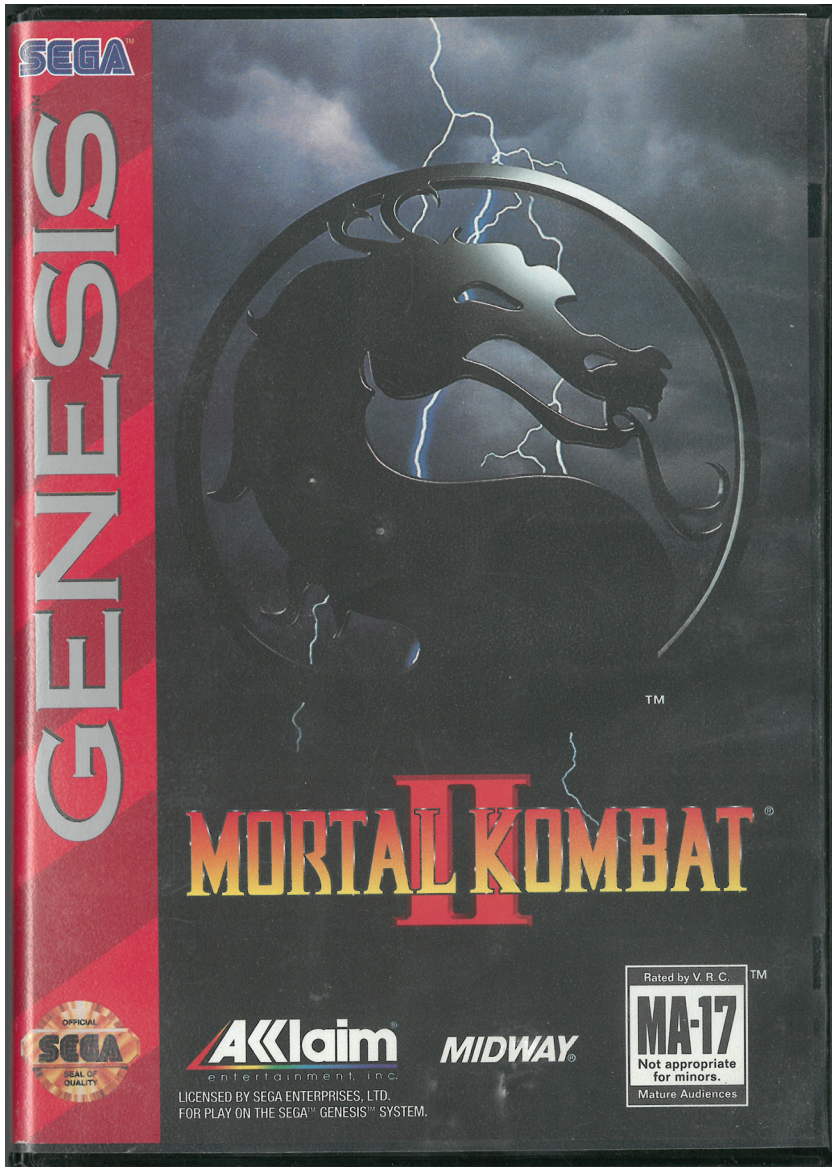
Fig. 16. Front cover of the SEGA Genesis port of *Mortal Kombat II*, one of the final games rated MA-17 by the VRC and released to overlap with the newly implemented ESRB system in September 1994. Author's collection.

tively launch the VRC, Lieberman admitted that the announced September 1994 home release of *MKII* specifically motivated the timetable for the new industry-wide mandate (Harrington 1994).

Unlike the December hearing, representatives from major retailers Toys "R" Us, Walmart, and Babbage's were present at the March hearing to testify that they would not carry unrated games and would enforce age restrictions at point of sale, much as major movie theater chains seldom release unrated films or circumvent the MPAA's recommendations for underage ticket buyers (C-SPAN 1994). Satisfied that commitments from these other points in the distribution chain would increase the proposed rating system's efficacy, Congress endorsed the IDSA's proposal in July 1994 and the ESRB went into full effect that September. Again, it was no coincidence that the ESRB and *MKII*'s home ports premiered the same month; the Genesis port of *MKII*, in fact, would be one of the few (and final) SEGA games awarded an MA-17 rating (fig. 16) by the newly defunct VRC. Yet, even after the ESRB took effect, SEGA briefly introduced a new "mature-oriented label, Deep Water," whose logo of an ominously circling shark would appear on select SEGA products in addition to the ESRB's M rating. The SEGA CD fighting game *Eternal Champions: Challenge from the Dark Side*, which features many elaborate fatalities (including "Cinekills," or fatalities rendered as animated FMV cut-scenes), would be the first title with that short-lived designation ("Press Start" 1995, 50).

Although the ESRB's establishment would temporarily sate threats of government intervention, debates about *Mortal Kombat* remained alive in the pages of psychology and social science journals, with the series' violence seemingly ready-made for use in media-effects studies—and thus setting up serious potential for confirmation bias. Wading through the voluminous media-effects research about video game violence is beyond the scope of this chapter,[9] but I suggest that *Mortal Kombat*'s prominence in such research is due less to its inherent degree of violence than the preceding controversy and the games' unintended utility for conducting such studies in the first place. Despite how the blood code in SEGA's *MKI* port was intended to assuage parental concerns, the fact that the same game could be played with or without blood and gore ironically meant that these two modes could be used as experimental variables (Ballard and Wiest 1996; also see Kirsh 1998). Christopher Ferguson and John Kilburn (2010, 175) also suggest that the politicization of video game violence led to publication bias among social science journals toward printing studies that confirmed existing suspicions.

Among critics of such research, one recurring concern is ambiguity over what sort of gameplay constitutes "violence" in the first place, with everything from *Mortal Kombat* and *DOOM* (id Software [U.S.], 1993) to *Pac-Man* (Namco, 1980) and *Missile Command* (Atari, 1980) having been deemed "violent" games in media-effects studies. This inconsistency means that "violent" content can become so broadly defined as to signify everything and nothing (Schott 2016, 21, 48; Markey and Ferguson 2017, 52–53, 76). Take, for instance, Eugene Provenzo's surety at the December 1993 hearings that research on television violence could be logically extended to video games (C-SPAN 1993), even as his own published work (Provenzo 1991, 89) on video game violence's potential effect on children is far more ambivalent. Compared to the variety of 8-bit NES games cited in his prior study, the more graphic violence of *MKI* and *Night Trap* had seemingly tipped his hand, even as the promise of high-profile television coverage perhaps produced its own "media effects" on his subsequent testimony. Regardless, so many past crisis moments have demonstrated how alarmism of the "Think of the children!" variety tends toward supplanting scientific rigor with emotional urgency, as was also the case here.

Another major problem with media-effects studies is the use of clinical or laboratory settings and protocols that bear little resemblance to actual gameplay contexts. At the risk of sounding flippant, it is not difficult to see how asking children, adolescents, or college students to play video games under the watchful eye of a psychologist—perhaps while hooked up to biometric sensors or with exit surveys looming—would potentially increase players' "aggressive" thoughts! Measured "aggression" is, in fact, often mistakenly attributed to test subjects' *frustration* over the artificiality of experimental protocols, such as being asked to play a game with which one is not already familiar and therefore not particularly skilled (Markey and Ferguson 2017, 66). Likewise, Gareth Schott (2016, 175–76) observes that the forward momentum built into game objectives, such as overcoming progressively difficult obstacles (e.g., AI-controlled opponents), is often mistaken for non-ludic, real-world aggression, despite the fact that the former is positively adaptive to the ludic system while the latter entails a maladaptive breaching of social norms. These biased interpretations help account for why, depending on the individual study, *increased sensitization* to violence (i.e., hostility) and *desensitization* to violence (i.e., lack of empathy) have both been observed—a paradox that had nevertheless left moral reformers with the impression that video game violence could only be harmful either way.

As Amanda Phillips (2018, 138) argues, video games frequently combine whimsical ludic goals with images of death and dying, therefore creating a "mechropolitical" tension between "honoring the seriousness of death and the impulsion to play with and become its master." Although some games thus invite the player and game to work in tandem to make death "fun," even nonviolent games motivate players by providing opportunities for demonstrating their competence, autonomy, and other skills. Using *Mortal Kombat* as one such example, Andrew Przybylski, Richard Ryan, and C. Scott Rigby (2009) describe how the affects that are often mistaken for "aggression" actually reflect a given player's desire for success within a prescribed ludic context, such as successfully defeating opponents, performing fatalities, or other goals that have no real-world value outside the intrinsic value of gameplay for its own sake. They go so far as to suggest that even as violent content can provide a slightly greater sense of immersion during the heat of gameplay, the presence of violent content does not correlate with one's overall enjoyment of a given game and can, in fact, detract from one's enjoyment if such violence outweighs the quality of underlying gameplay.[10] Here we find echoes of the aforementioned critical debates about whether *Mortal Kombat*'s intrinsic gameplay outweighed the sheer spectacle of gore, but I suggest that the failure of so many *Mortal Kombat* clones (described in the following chapter) demonstrates how merely upping the ante on extreme violence failed to compensate players for the frustrations of inferior game design.

Even with a player's defeat, however, we can still find potential complications to media-effects arguments, since Rachael Hutchinson (2007, 295–96) observes that the fighting-game convention of returning to the Character Select screen after a loss works against long-term immersion. The repeated return to oneself as the pre-match, extradiegetic entity responsible for avatar selection creates a sense of aesthetic distance that may certainly run afoul of the latter-day games-as-art discourse by breaking the sensation of deep play. Yet this blatant interruption of in-match intensity also pushes back on claims about the supposedly imitative effects of video game violence, because such aesthetic distance repeatedly breaks the player's transitory linkage with their violent avatar (also see Wenz 2014, 316).

Nevertheless, *Mortal Kombat*'s publicly controversial status had made the series' increasing numbers of fans into alternate figures of anxiety and mockery. For every "Mortal Monday" television commercial featuring a chanting army of (pre)teens spontaneously assembling in the

streets, there were tongue-in-cheek jokes like the May 1994 letter to *Electronic Gaming Monthly* that reproduces many stereotypes about deranged media fandom:

> When the arcade closes and I go home, my mom says I should "fatality" myself because I'm failing in high school. Ha! She doesn't even know that I quit high school so that I could play *Mortal Kombat* more! I weigh 55 pounds and my *Mortal Kombat* buddies say I should eat more but I don't have enough money because I spend it all on *Mortal Kombat*. I figured out this new fatality with Scorpion where he rips out your eyeballs and eats them, shoves his hand up your nose, and pulls out your brain. I have decided that when I'm older, I want to be a policeman so I can do that to people. (Chernicky 1994, 16)

In a more popular vein, a December 1995 episode of *The Simpsons* (Moore 1995) depicts Bart, America's favorite preteen delinquent, caught shoplifting a cartridge of "Bonestorm"—an ultraviolent fighting game whose hulking, six-armed combatants and constant rain of blood and severed hands are obvious nods to *Mortal Kombat* (to say nothing of its titular allusion to the *Mortal Kombat* imitator *BloodStorm* [Incredible Technologies, 1994])—after his mother, Marge, deems it too violent to purchase for him. Playing upon older fears about arcades and video game addiction as supposed causes of petty crime, the episode crystallizes a lineage of anxieties about the corrupting influence of games with seemingly little to offer but extreme gore.

Ultimately, however, fighting games like *Mortal Kombat* would soon be displaced in the national conversation by the rise of FPS games—one of the most notorious of which, id Software's *DOOM*, was released the very day after the December 1993 Senate hearings. In the immediate wake of the 1999 Columbine massacre and other school shootings, earlier concerns about rail-shooters like *Lethal Enforcers* shifted to FPS, whose 3D capacities and fully controllable avatars made them more easily scapegoated as "killing simulators" during a revived series of Senate hearings about video game violence. With video games again an easier political target than the underlying issues of unrestricted gun access and toxic masculinity, high-profile mass shootings obscured the underlying fact that, since 1992, violent crime in the United States has dropped by 42 percent while video game sales have increased 267 percent. According to Patrick Markey and Christopher Ferguson (2017, 99), this decline in real-world violence is less likely due to violent games providing already-violent people with a cathartic release of aggression and more likely

attributable to increased video game usage keeping more young people preoccupied and out of trouble in the first place.

Although such debates would continue, reframed around more recent "sandbox"-style action titles by U.S.-based studio Rockstar Games (e.g., the *Grand Theft Auto* [1997–] series) and others, the U.S. Supreme Court's ruling in *Brown v. Entertainment Merchants Association* (2011) finally extended First Amendment protection to video games.[11] Unlike the 1982 *City of Mesquite v. Aladdin's Castle* ruling, this case focused less on youth access to games than on establishing the underlying game content as a form of protected speech. With the ESRB firmly in place as the industry's voluntary (but de facto required) classification board, even extreme violence would no longer necessarily trigger government intervention. The very cinematic qualities that had made *Mortal Kombat, Night Trap*, and other video games so controversial in the early 1990s now had a ratings system and legal protection akin to that of cinema itself. And yet, even as a plethora of imitator games attempted to challenge *Mortal Kombat*'s crown with even more exaggerated violence and appeals to bad taste, the *Mortal Kombat* franchise itself went in increasingly transmedial directions that were tame enough not to run afoul of the very standards it had previously flouted—as we shall see in the final chapter.

Imitation, Derivation, and Reinvention

With the newly formed ESRB having thrown down the gauntlet for including more violent game content—particularly at a time when 16-bit consoles were reaching wide market penetration and hardware designers were already looking toward the next console generation—it is little surprise that *Mortal Kombat*'s notoriety-cum-success spawned plenty of imitators. At the same time, Midway was in the process of separating itself from this growing competition by riding the series' wave of popularity into other media, even at the expense of alienating some of its most loyal audience by dialing down the gore in various transmedia spin-offs. *Mortal Kombat*'s dragon logo became almost ubiquitous during the "Mortal Moment" of 1992–95, the series' peak period of mainstream success. Yet the threat of brand oversaturation coincided with the technological and generic rise of 3D fighting games, leading to the series' awkward attempts to reinvent itself by either exaggerating or abandoning formal elements that previously allowed it to stand apart from the *SFII* formula. *MKI* and *MKII* had helped popularize the fighting game as one of the breakout genres of the 1990s, but as the genre's overall popularity began to contract by decade's end, the franchise returned to something closer to cult status. This final chapter concludes with a brief look at the most recent *Mortal Kombat* games to date and how their attempts to reboot the series increasingly look back at the series' heyday for inspiration.

The Clone Wars

In previous chapters, I have explained how *Mortal Kombat*'s content drew significant inspiration from low-budget exploitation films, such as

martial-arts movies, but the "Mortal Moment" also recalls the industrial strategies used by exploitation filmmakers in developing short-lived film cycles within or between existing genres. Richard Nowell's (2011) work on the late 1970s/early 1980s slasher film cycle as a brief production spike within the larger horror genre provides a model for thinking about how *Mortal Kombat*–inspired games suddenly swelled the ranks of the fighting genre. Capcom's first *Street Fighter* is an example of what Nowell calls a "pioneer production"—or a game that drew upon previous generic material in such innovative ways that it seemed uniquely different from fighting games that came before—but one that did not make nearly as much market impact in either financial success or overall influence as its sequel. As an attempt to drastically revamp the genre, however, *SFII* represents more of a "speculator production"—or a higher-risk attempt to revisit an existing text by putting a new spin on a game that had proven only a modest success. When *SFII* then became a "trailblazer hit" that spawned various imitators, Midway used *MKI* as a "prospector cash-in," attempting to capitalize on *SFII*'s success by combining certain aspects of its now-proven formula with less proven attempts at product differentiation. When Midway's gamble paid off and *MKI* became the "reinforcing hit" that confirmed the fighting genre's early-1990s viability, a variety of "carpetbagger cash-in" games followed as cynical attempts to imitate its success. This led to the relatively quick boom and exhaustion of a cycle of *Mortal Kombat* clones as *MKI*'s most distinctive traits were emulated to varying effect.

Although most of the carpetbagger cash-in games appeared in 1994–95, exploiting *MKI*'s late 1993 home console release and *MKII*'s coin-op release, one of the first imitators had appeared in arcades only two months after *MKI*'s coin-op premiere. Rushed to market in November 1992 by Chicago-based developer Incredible Technologies and its publisher Strata, *Time Killers* sports cartoonish graphics closer to *SFII*'s aesthetic but attempts to amplify *MKI*'s blood and gore by allowing its time-traveling, weapon-wielding combatants to execute decapitations and dismemberments at almost any time during a round. Because each of the five control buttons corresponds to a different appendage, part of the game's strategy includes the ability to sever an opponent's limbs during in-round action, forcing one's opponent to adjust to the suddenly restricted control interface. Widely panned for its clumsy and unresponsive gameplay, its creative team later attempted to improve upon *Time Killers* with an unofficial sequel, *BloodStorm*, but the gore quotient again did not compensate for players' frustration when abruptly chopped apart

mid-round by an AI opponent. Indeed, Incredible Technologies' founders directly compared their market strategy to trying to cash in on a hit movie, arguing that they were simply following consumer demand by making ultraviolent games, while also disingenuously claiming that kids were more interested in the secret moves and hidden characters than the gore (Lauer 1994). *Time Killers* was belatedly ported to the SEGA Genesis in 1994, but reviewers savaged the gameplay as even worse than the coin-op version, with exaggerated gore as its only distinguishing feature, indirectly lending credence to reviews claiming that *MKI*'s overall gameplay quality outweighed the gimmickry of its fatalities ("Review . . . *Killers*" 1994, 46).[1] Finishing moves were a common denominator in nearly all *Mortal Kombat* clones—from the stage fatalities in *Eternal Champions* (SEGA, 1993) to over two thousand(!) finishing moves rumored for the never-released game *Tattoo Assassins* (Data East, 1994)—and they are arguably the series' most lasting influence on the fighting genre to this day.

The most blatant attempts to imitate *Mortal Kombat*, however, aped its pixilation of live actors as character sprites, but frequently with clunkier animation, even in games made for 32- and 64-bit consoles. Examples include *Survival Arts* (Scarab [JP], 1993), *Blood Warrior* (Atop [JP], 1993), *Kasumi Ninja* (Hand Made Software [U.S.], 1994), *Way of the Warrior* (Naughty Dog [U.S.], 1994), *Shadow: War of Succession* (Tribeca Digital Studios [U.S.], 1994), *Ultra Vortek* (Beyond Games [U.S.], 1995), and *Kung-Fu Master Jackie Chan* (Kaneko [JP], 1995). Whereas the latter game included digitized versions of Chan and other martial-arts actors from his concurrently filmed Golden Harvest movie, *Thunderbolt* (Gordon Chan, 1995), perhaps the most ironic imitator was the game *Street Fighter: The Movie* (Incredible Technologies, 1995). Designed by the same company as *Time Killers* and *BloodStorm*, and distributed by Capcom as a tie-in with the *Street Fighter* live-action film (Steven de Souza, 1994), pixilation's uncanny effect was that much stronger when characters best known from their cartoonish *SFII* sprites were now played by the same live actors from the film adaptation, including its star Jean-Claude Van Damme as Guile.

Even as Van Damme was now digitally rendered in a *Mortal Kombat* competitor, in much the way Midway had originally intended to use Van Damme for their planned *Universal Soldier* tie-in, several of Midway's own *Mortal Kombat* veterans parlayed their cult status into competing games around the time of their aforementioned lawsuits against Midway. Daniel Pesina, for example, posed with a *BloodStorm* cabinet in a July 1994 adver-

tisement (fig. 17)—reading "Daniel Pesina, who played Johnny Cage™ in *Mortal Kombat*™[,] has switched to *BloodStorm*!"—for a gaming magazine contest ("Win" 1994, 96). Although Pesina had already parted ways with Midway before the ad appeared, it was long (incorrectly) rumored that, because Cage's tombstone was visible in *MK3*'s "Graveyard" arena, Cage had been killed off before the events of *MK3* as retribution for Pesina's supposed betrayal (Leone 2018). Pesina was then recruited to play Cage-like fighters for two games that stalled at the prototype phase, Data East's *Tattoo Assassins* and High Voltage Software's (U.S.) *Thea Realm Fighters*. *Thea Realm Fighters* was to also feature *Mortal Kombat* actors Ho-Sung Pak, who served as the game's choreographer, and Katalin Zamiar, who later appeared in the critically savaged *Catfight* (Phantom Card [U.S.], 1996).

Aside from these obvious imitators, *MKI* earned its first parody with Visual Concepts' *ClayFighter*, released on the SNES in November 1993. Featuring character sprites animated from clay models (much like the stop-motion dolls in 1988's *Reikai Doushi*), the game combines the juvenile connotations of Claymation with intentionally silly characters (e.g., a Gumby-like piece of taffy, an evil snowman, an Elvis impersonator) set in a circus-themed diegesis, and its sequels feature "Claytality" finishing moves. *ClayFighter*'s magazine ads also parodied the visual design of *MKI*'s "Mortal Monday" ads by replacing Midway's logo and characters with its own, with Midway's tagline "Prepare Yourself" now defaced with the line "No, Prepare For This!" While not a fully 3D fighting game like SEGA's *Virtua Fighter*, *Ballz 3D* (PF Magic [U.S.], 1994) is another semi-parody that uses character sprites formed from prerendered spheres who fight in 2.5D arenas (in which backgrounds zoom in and out and rotate, but combat itself retains a 2D horizontal linearity) and whose finishing moves render the losing combatant a loose array of balls.

ClayFighter and *Ballz 3D* turn *Mortal Kombat*'s finishing moves into bloodless slapstick between clearly nonhuman opponents, but more cynical *Mortal Kombat* imitators like *Tattoo Assassins*, *Way of the Warrior*, and *Ultra Vortek* verge on self-parody by leaning on adolescent scatological humor (e.g., *Ultra Vortek*'s "Poopality" finishing move, *Tattoo Assassins*' finishing moves involving foodstuffs and flaming flatulence) and more of the broadly offensive ethnic stereotypes found in many fighting and boxing games (see Everett 2009)—though even the *Mortal Kombat* series would not be immune to these tendencies, as can be seen in the characters of Bo' Rai Cho and Nightwolf. Ironically, many of the worst *Mortal Kombat* clones were rushed through development precisely so that the emerging generation of graphically advanced 32-bit consoles like the

Fig. 17. "Daniel Pesina, who starred as Johnny Cage™ in *Mortal Kombat*™ has switched to *BloodStorm*," reads the *EGM²* (July 1994) magazine contest ad for one of the *Mortal Kombat* clone games. Courtesy of Incredible Technologies and EGM Media.

Panasonic 3DO and Atari Jaguar (both introduced in late 1993) would have a foothold in the fighting genre. But technological affordances alone clearly did not result in better-quality games, compounding these consoles' short shelf lives. Although it would soon introduce its own original 3D fighting games, Sony played it safer by merely porting *MK3* in time for the 1995 U.S. launch of the PlayStation, the first new home console to genuinely challenge Nintendo and SEGA's lock on the market. There were initial reports that Sony had purchased the rights to port *MK3* exclusively to the PlayStation for six months, as an opening shot in a new console war, but in the end, it premiered only two weeks ahead of *MK3*'s port for the aging 16-bit consoles, in October 1995 ("Special Feature" 1995, 95; Gore 1995, 16).

Much as gaming magazines had hyped the ongoing battle between the *Street Fighter* and *Mortal Kombat* franchises, industry journalists began speculating on which upcoming coin-op game would dethrone *Mortal Kombat*'s much-buzzed-about centrality in the fighting genre (see LeFebvre 1994, 90; "Special . . . *Rage*" 1994). Two of the most successful were Rare's *Killer Instinct* and Atari's *Primal Rage*, although Midway published both of these arcade games, so they served as less of a direct threat to Midway's business than as inspired examples of product differentiation. Whereas the *kaiju*-inspired *Primal Rage* features stop-motion models of dinosaurs and giant apes (much like the models used for Goro and Kintaro) for its smoothly animated monster fights amid a postapocalyptic milieu, *Killer Instinct* features 32-bit, pre-rendered (non-pixilated) character sprites and an influential "dial-a-combo"–based fighting system instead of *Primal Rage*'s juggle-based system. Both games are very violent and feature fatalities indebted to *Mortal Kombat,* but each also combined graphical advances with either a conceptual hook or an exciting new style of gameplay to stand apart from the crowd of *Mortal Kombat* imitators. Unlike many of the one-off clones that bypassed the coin-op market and went straight to home consoles, *Killer Instinct* and *Primal Rage* parlayed skilled game development into new blood for the fighting genre while proving successful enough to justify their own sequels and merchandising.

According to the International Arcade Museum's Killer List of Videogames (n.d.), coin-op fighting games had grown from eight new releases in 1991, rising to approximately twenty-five titles per year in 1992–93, peaking at thirty-seven new titles per year in 1995–96, and falling back into single digits by the early 2000s. This generic boom corresponded with a similar surge in fighting games directly produced for home con-

soles. Even successful beat-em-up franchises jumped on the one-on-one fighting game bandwagon with games like *Teenage Mutant Ninja Turtles: Tournament Fighters* (Konami, 1993) and *Double Dragon V: The Shadow Falls* (Leland Interactive Media [U.S.], 1994). Meanwhile, *MKI* was ported to SEGA's short-lived, Genesis-upscaling peripherals like SEGA CD and 32X, while both *MKII* and *MK3* were ported to later consoles like the SEGA Saturn and Sony PlayStation. Still, most of these later ports did not significantly improve on earlier 16-bit iterations and were deemed too little, too late—especially when a more innovative variety of fully 3D fighting games was being introduced to take advantage of 32-bit and 64-bit consoles' new capabilities.[2] The same magazine issues promoting new coin-op challengers often featured letters to the editor complaining about either the market oversaturation of increasingly formulaic fighting games or the amount of page space devoted to fighting games (e.g., Lewis 1994, 16). Other readers simply wanted fighting games with gameplay strategies that were different from the ones popularized by *SFII* and *MKI*, such as more realistic close-range combat, without special moves like long-range projectiles (e.g., Kirt S. 1994, 12; Andrew 1995, 20).

Although commercially successful in both its coin-op and home versions, *MK3*'s reviews were more mixed than its immediate predecessor, indicating a growing franchise fatigue among professional reviewers as well. "When *MK2* was released, the improvements made over the original were so vast, you couldn't help notice the difference. *MK3*, however, adds little to the series," said *IGN*'s reviewer (Douglas 1996). *Next Generation* added that the "newer characters . . . don't show the same appeal and strength of design as their predecessors," and, "with the addition of a *Killer Instinct*–type combo system, there is less and less strategy" ("Bloody" 1995, 117; "Finished?" 1995, 185). Whereas *MKII* had been critically praised for its new narrative and characters, in contrast to the "expansion pack" approach (i.e., a handful of new characters and arenas added to the existing game engine) seen in *Super SFII: The New Challengers, MK3* itself represented more of a plateau for Midway's flagship series at a time when its main rival had just released *Street Fighter Alpha* (Capcom, 1995), its first true sequel to the many *SFII* iterations.

Much like Capcom's strategy of releasing new editions to arcades several months apart, Midway released *Ultimate MK3*—featuring the return of fan-favorite characters like Scorpion, Kitana, and Reptile (plus the hidden playable characters Classic Sub-Zero, Mileena, and Ermac)—to the coin-op market in November 1995, as a concession to arcade owners upset by the short duration between *MK3*'s coin-op premiere and its

home console release a mere six months later (Mick-Lucifer 2012). These additional playable characters were also intended to help answer fans' criticism that *MK3*'s initial roster contained too many imbalanced characters, with some characters (e.g., Sub-Zero, Smoke) far stronger than others (e.g., Stryker, Nightwolf), but the new additions bore similar issues. As a compendium of the first three games, *Mortal Kombat Trilogy* appeared exclusively on home consoles one year later, in October 1996, but like *Ultimate MK3*, it essentially replicated *MK3*'s story and engine, with the inclusion of playable boss characters, "classic" versions of original characters and arenas, and a few other minor gameplay tweaks. "We pretty much hit a brick wall with *MK3*," Ed Boon later admitted (Sushi-X and Hain 1997, 82), with the Shang Tsung/Shao Kahn plotline now exhausted and the looming shift to 3D modeling as the genre's apparent future.

Even by the time *MK3* was in preproduction in early 1995, the editors of *Electronic Gaming Monthly* (Grossman and Harris 1995, 111) had developed a wish list for new gameplay variations in Midway's flagship series, many of which would appear in later sequels, such as "a way to sidestep projectiles" (introduced in the 2.5D arenas of *MK4*) and "suicide moves that kill yourself before the other player" (the "Hara-Kiri" moves introduced in *MK: Deception*). *MK3* and its updated editions did, however, adopt the "more realistic combos" and "combo meter" suggested by *Electronic Gaming Monthly*, even as this major new feature also made for buggier gameplay. *MK3*'s dial-a-combo system was clearly inspired by *Killer Instinct*'s success, while *MK Trilogy*'s "Brutality" finishing moves recall *Killer Instinct*'s climactic "Ultra Combos," and *MK Trilogy*'s "Aggressor" meter (allowing one's avatar to temporarily deliver faster and stronger combos when fully charged) was a variation on the "Super" meter from *Super SFII Turbo* (1994). Even as later entries in the *Mortal Kombat* series increasingly absorbed inspiration from the franchise's one-time competitors, then, many desired generic developments—such as the projectile-free combat of the *Tekken* games, or the "fatality moves that can be used during battle" used to elegantly minimalistic effect in *Bushido Blade*— were found in other rising franchises within a new generation of 3D fighting games.

Transmedia Kombat

There is little doubt that the growing backlash against fighting games was also related to the inescapability of *Mortal Kombat*'s transmedia spin-offs during the "Mortal Moment." In the summer of 1993, film producer

Larry Kasanoff, who had previously worked with Midway on their *Terminator 2* arcade game, approached the company with plans to expand *Mortal Kombat* into a multimedia franchise, including live-action films. Midway first balked at the idea that a fighting game could translate to the big screen, but Kasanoff soon convinced them, founding the company Threshold Entertainment to franchise derivative works from the series (Russell 2012, 146–47; Couch 2015). By the time *MK3* was released to arcades in April 1995, over one hundred licensed *Mortal Kombat* products had appeared, many of which had little creative input by the Midway team, who had been preoccupied with finishing the third game. These spin-offs included a novelization, an animated movie, several Malibu Comics series (1994–95), two soundtrack albums, a line of Hasbro action figures, a trading card game, and a line of branded clothing (Crisafulli 1995; Dretzka 1995).

Much as *MKI*'s coin-op premiere lagged a year behind *SFII*, Paul W. S. Anderson's *Mortal Kombat* movie appeared in 1995, a year after the live-action *Street Fighter* movie. Both films were largely written off as juvenile fare, yet critics were generally kinder to them than they had been to *Double Dragon* (James Yukich, 1994), Hollywood's first attempt to adapt a fighting-themed (beat-em-up) game for the big screen. However, *Mortal Kombat* did have far stronger box-office receipts than *Street Fighter*, with New Line Cinema's $20 million production topping the opening-week charts in September 1995 and eventually grossing over $122 million worldwide. It finally proved the big-screen viability of a video game adaptation, a feat that Anderson would later attempt to repeat with the *Resident Evil* (2002–2016) films (Russell 2012, 150–53; Couch 2015).

Although some of its special effects were decidedly old-school—Goro was portrayed by a life-size animatronic figure instead of a miniature model, and Hong Kong–style wirework was used in the fight choreography—its producers claimed that its computer-generated special effects and near-constant martial-arts action would help compensate for its tamed-down violence. While some gamers complained that the PG-13 film was akin to the MA-13 Genesis port without the blood code entered, some parents argued that the sheer amount of largely bloodless fighting merited more than a PG-13 rating (Harrington 1995; Riemenschneider 1995; Smith 1995). Kasanoff defended the film by stating, "If we put in all the blood and gore, it would look like something you've seen 100 times before in *Friday the 13th* or *Nightmare on Elm Street*"—apparently ignoring the fact that New Line's fortunes had been made by the *Elm Street* series (1984–94)—whereas the novelty of CGI allegedly

allowed the filmmakers to "make our finishing moves cooler than gore" (Griest 1995).

Kasanoff and theatrical producer David Fishof doubled down on this strategy with the *Mortal Kombat: Live Tour* (written and directed by Drew MacIver), a theatrical show featuring choreographed fights, techno music, and enough stage effects to hopefully distract kids from the lack of fatalities. First premiering a month after the live-action film, the two-hundred-date tour was postponed an additional month to add more laser effects and to tie in a coupon deal around the October 1995 home console release of *MK3* ("Mortal Kombat Tour" 1995). Kasanoff then followed Anderson's live-action film with the animated television series *Mortal Kombat: Defenders of the Realm* (1996); a live-action sequel, *Mortal Kombat: Annihilation* (John R. Leonetti, 1997); and a live-action television series, *Mortal Kombat: Konquest* (1998–99), but all were released after the "Mortal Moment" had already peaked.

If the remediation of cinematic qualities into *Mortal Kombat*'s photorealistic sprites had once allowed the games to seem especially distinctive, now the forces of remediation were traveling in the opposite direction, from video games to films and other media formats, with so many spin-offs threatening to water down the games' gruesome menace into family-friendly cash-ins. As Danny Simon, the franchise's head of merchandising, humorously stated, these assorted re-adaptations could be "the perfect divorced-father and son activity" (Jefferson 1995). Even during the leadup to *MK3*'s coin-op release, WMS Industries president Neil Nicastro suggested, "If kids want to score big on *Mortal Kombat III*, they'll need to know certain joystick moves. And guess how they'll learn them? They'll have to find those combinations from a variety of sources: from the movie, from the TV ads, from other licensees, from the live-action tour" (Jefferson 1995). Although this plan to require basic gameplay acquisition through buying into ancillary paratexts did not wholly come to pass—especially since gaming magazines and websites publishing the moves would have no doubt thwarted such a cynical attempt to monetize core gameplay principles—*MK3* print ads did tease some of the "Kombat Kodes" that could be entered before two-player matches, thereby incentivizing double the coin drop.

Collectible comic books had already been part of the series' paratextual world-building process since *MKI*, but Threshold Entertainment's merchandising increasingly moved in the direction of transmedial storytelling—or the dispersal of important narrative content to build fictional worlds across different media platforms. Much as Henry Jen-

kins (2006, 97–98) discusses *The Matrix* (1999) as a film whose sequels baffled critics and frustrated viewers who had not closely followed the secondary characters and plotlines introduced across the ancillary paratexts (e.g., animated shorts, video games, comic books, etc.), the "Mortal Moment's" transmedial spread attempted to deepen the overall story world but at the expense of alienating fans primarily interested in the games themselves. Many of Threshold's spin-offs, such as the various animated stories and the *Live Tour,* exemplify Jenkins's warning that poorly done attempts at transmedial storytelling—especially those without significant creative involvement by series creators—will prove largely redundant to the core media experience that created said fans in the first place (98, 107).

The direct-to-video animated movie *Mortal Kombat: The Journey Begins* (1995), for instance, functions as a lead-in to the live-action film released later that year, covering much of the same territory as the *MKI* collectible comic book but also fleshing out additional character backstories, much as the later Malibu Comics series would do for individual characters. Containing both traditional hand-drawn animation and wholly CGI-created sequences, the limited CGI in *The Journey Begins* is notable for prefiguring *MK4*'s 3D-animated aesthetic. Moreover, the kid-friendly *MK: Defenders of the Realm* animated TV series introduces the character of Quan Chi, who would not only become one of the series' major new villains in *MK4* (which had its own collectible comic book, available only to purchasers of an *MK4* home port), but who would also feature heavily in Midway's side-scrolling platform game *Mortal Kombat Mythologies: Sub-Zero* (1997). As I have previously suggested, however, much of a fighting game's appeal derives from the affordances of in-match gameplay, not from a player's deep investment in a given character's backstory. Consequently, as the series shifted toward a needlessly convoluted cosmology full of magical artifacts, warring factions, and other lore, some former fans were reluctant to follow along as the series amplified its diegetic scale in an apparent attempt to compensate for its awkward shift toward a 3D model in *MK4* and its move into other generic directions in spin-off games.

Mark J. P. Wolf (2016, 234) argues that when a game franchise grows significantly larger, it is all the more likely to cross generic boundaries and introduce other varieties of gameplay. This tendency was first demonstrated within the *Mortal Kombat* series by *MK Mythologies*, which, despite being a platform game, the gaming press had originally rumored to be a role-playing game (RPG) ("Gaming Gossip" 1997, 28). This rumor is especially telling because RPGs are more closely associated with

the narrative depth of long quests and sprawling worlds, a quality that *MK Mythologies* indeed introduces as a prequel predating the events of *MKI*. *MK Mythologies* elaborates on the characters of Shinnok, a fallen Elder God who Raiden banished to the Netherrealm thousands of years ago for attempting to gain control of the universe through a magical amulet, and his sorcerer sidekick, Quan Chi, who hires a human proxy to trespass upon the Shaolin Temple, where the amulet resides. These characters would be playable fighters in *MK4*, which depicts how Shinnok has used Shao Kahn's second defeat as an opportunity to break free from the Netherrealm and invade Edenia. In *Mortal Kombat: Deadly Alliance*, the story continues with Quan Chi teaming with Shang Tsung to defeat both Shao Kahn and Liu Kang using magical powers inherited from Onaga, an ancient Outworld king. The two sorcerers turn on each other in *Mortal Kombat: Deception*, but many old foes must reluctantly unite to save the universe from the newly resurrected Onaga, now occupying the "big bad" role previously held by Shao Kahn.[3]

In the games following the original *Mortal Kombat* trilogy, we thus find a series of plotlines—largely conveyed through cut-scenes that would not have been technologically possible in the early games—that overlap from one game to the next, even as the game designers (and fans trying to keep up) struggled to reconcile so many previous character endings into a semi-coherent "hyperdiegesis."[4] As such, the "retconning" of major characters became a predominant feature in the post-1996 games. For example, the revenant Scorpion takes revenge on Sub-Zero (née Bi-Han) at the end of *MKI*'s events for having killed his human form (née Hanzo Hasashi) during the events of the prequel game, *MK Mythologies*, despite Quan Chi having actually framed Sub-Zero by killing Scorpion's Shirai Ryu clan himself. Bi-Han is later reincarnated as the evil spirit Noob Saibot. Meanwhile, Bi-Han's younger brother, Kuai Liang, assumes his murdered brother's nickname during the *MKII* tournament, but by the events of *MK3*, he has gone rogue and left the Lin Kuei clan to avoid being transformed into a cybernetic assassin like Sektor, Cyrax, and Smoke. The younger Sub-Zero gradually evolves into a less ruthless character over the post-1996 sequels, later fighting on behalf of Earthrealm's preservation.

And yet these are just a few of the many character reversals seen during the later games, with some characters previously thought dead (Shao Khan) having survived through the use of doppelgangers, other characters (Liu Kang, Raiden) reversing their moral alignments through magical acts of possession, and so on. In keeping track of these narrative developments, series loyalists have confirmed Jenkins's (2006, 27, 97)

argument that many forms of transmedial storytelling rely on the "collective intelligence" exercised by fan communities who use online discussion boards and wiki-based websites to compile and fact-check the plethora of narrative minutiae elaborated across different spin-off games and generic modes. Nevertheless, even across its many iterations, the franchise has maintained the contours of a shared transmedial world (Tosca and Klastrup 2020, 33–40), including foundational characters (e.g., all of the first game's combatants), plus an overarching *mythos* (the martial-arts tournament as eternal supernatural battle), *topos* (Earthrealm versus Outworld), and *ethos* (good versus evil, though performing fatalities is always free of moral consequences).

Even though former comics artist John Tobias had left the franchise after *MK4* to form his own company, Studio Gigante, fellow *MKI* cocreator John Vogel expanded the series' overall lore into these narratively Byzantine directions that bear an even stronger debt to the torturous machinations of long-running comic book series. *Mortal Kombat: Armageddon* (2006), for instance, offers the completism of *MK Trilogy* by reuniting all previous combatants in a battle royale against each other, albeit largely eschewing the almost impossibly unwieldy task of untangling the narrative justification for how and why they have all returned. The winning fighters must go up against Blaze, a powerful fire entity summoned by the Elder Gods, to finally put an end to all of this nonsense. Nearly all of the series' past characters perish in the ensuing tumult, with Shao Kahn and Raiden emerging as the last standing fighters upon Blaze's defeat. But just before losing to Shao Kahn, Raiden uses a magical amulet to send a message ("He must win!") back in time to himself during the *MKI* tournament, thus allowing his past self to potentially alter the future.

Much as DC Comics' limited series *Crisis on Infinite Earths* (1985–86) attempted to "reset" its sprawling multiverse by destroying all but one newly canonical version of Earth, *Mortal Kombat* thus eliminated many of its narrative tangents via the creation of a new timeline, to be carried on in the "rebooted" series described below. The series' indebtedness to comic books was made even more blatant with Midway's *Mortal Kombat vs. DC Universe* spin-off fighting game, foreshadowing the $33 million acquisition of Midway in 2009 by Warner Bros. Entertainment (who had previously purchased DC Comics in 1989). This game takes advantage of *MK: Armageddon*'s climactic break in narrative continuity to pit Midway's creations against DC's storied superheroes and villains, much as Capcom's less story-driven franchise had done a decade earlier with *Marvel Super Heroes vs. Street Fighter* (1997).

Although Midway's joint release of *MK Mythologies* and *MK4* in 1997 had marked a major reinvention of the series' storyline, several other freestanding spin-offs in other genres—such as the poorly reviewed RPG *Mortal Kombat: Special Forces* (2000) and the beat-em-up *Mortal Kombat: Shaolin Monks* (2005)—added little crucial backstory to specific characters and events from the first four games. The increased memory and processing power of sixth-generation home consoles like the Sony PlayStation 2 and Microsoft Xbox (introduced in 2000 and 2001, respectively), however, meant that side games in other genres increasingly became internalized under the imprimatur of each new fighting sequel—that is, transformed from paratexts into *intratexts* contained on the same disc as the primary fighting game.

Perhaps the best example of this tendency is "Konquest Mode," a single-player RPG mode first included in *MK: Deadly Alliance* as little more than an elaborate training mode, but used to more integrated effect in *MK: Deception*. In the latter game, Konquest Mode introduces the prequel story of Shujinko, a generic young man (in Japanese, *shujinko* literally translates as "protagonist") tracking down various magical relics on behalf of the disguised Onaga as part of the latter's titular ruse to become reincarnated. (In another example of Midway's ongoing competition with Japanese game designers, Shujinko's quest to find all the relics conspicuously apes the RPG-style bonus modes introduced two years earlier in Namco's *Soulcalibur II* [2002], in which the player's series of fights constitutes a hunt for fragments of a mystical sword.) The end of the Konquest Mode RPG coincides with the start of *MK: Deception*'s fight-based narrative, wherein Shujinko has since become an elderly White Lotus monk, a playable character during the battle to stop the Outworld king he had inadvertently set free.

Recalling the hidden *PONG* and *Galaga* games in *MKII* and *MK3*, far less substantial mini-games appear in later sequels as well, such as the nostalgic-but-goofy throwbacks "Chess Kombat" (à la *Battle Chess* [Interplay Productions, 1988]), "Puzzle Kombat" (à la *Tetris* [Alexey Pajitnov, 1984]), and "Motor Kombat" (à la *Mario Kart* [Nintendo, 1992]). Overall, though, as the series turned its attention from the core fighting experience to a plethora of cut-scenes, new gameplay modes, and side stories about characters questing for shards of magical amulets, diversions such as Konquest Mode also suggested that the *Mortal Kombat* franchise was likewise searching for itself after somehow becoming shattered along the way.

Whereas new technological affordances allowed the series' storytelling to be developed far more complexly than as mere bookends to the combat, the world-building that had once distinguished *Mortal Kombat* from other fighting games now threatened to overwhelm its core gameplay. This problem emerged when the series moved away from a 2D fighting system, struggling to adapt to new generic and geometric dimensions with *MK Mythologies* and *MK4*, respectively. These shifts were partly inspired by the rise of more advanced home consoles that cut into the coin-op market, eventually leading Midway to abandon the coin-op market in 2001 and instead concentrate on game development for home consoles (Ali 2019, 180–81). *MK Mythologies* was the first original *Mortal Kombat* game made exclusively for home consoles, while *MK4* was the final entry to originate in arcades. If *MK3*'s postapocalyptic storyline about the Outworld invading the "home" realm of Earth had once echoed parental anxieties about disreputable public spaces invading private homes, now the situation was reversed as home consoles threatened to decimate the American arcade industry.

The U.S. coin-op market began to significantly decline around 1996–97 as the older generation of joystick-based arcade games gave way to coin-op machines with more immersive or embodied gameplay interfaces that could not be so easily reproduced at home, much as 1950s Hollywood had introduced widescreen, stereo sound, and 3D gimmickry to draw viewers away from television and back to theaters (Wolf 2008b, 137). Although newly privileged genres like driving games and light-gun shooters, for example, had long been part of the coin-op scene, these features were not as fully integrated into a home console's core design until the Nintendo Wii (introduced in 2006). For instance, *MK: Armageddon* helped deliver on the SEGA Activator's failed promises when it was adapted for the motion-sensitive Wii controller, allowing special moves to be performed with a simple flick of the wrist. In a promotional video, Ed Boon promised that the Wii controllers would make gameplay "so easy, in fact, that even your grandmother will be throwing spears, teleporting, and performing fatalities" (*IGN* 2011).[5]

Yet this advance hype belied the increasing difficulty of most fighting-game series since the late 1990s, since more sophisticated control schemes and much faster, combo-driven gameplay has weeded out many of the more casual players who once might have been drawn into arcades

by earlier games' gory gimmicks (Begy 2012, 213). As more layers of offensive strategy to be mastered, *MK4* added a special move allowing each character to pull out and retain a weapon as an alternate fighting mode, while *MK: Deadly Alliance* also gave each character two unarmed fighting styles that could be toggled between during matches. The mid-2000s rise of home consoles designed for online connectivity additionally encouraged tournament-style competitive play (*MK: Deception* was the series' first game specifically developed to prioritize networked play), another major factor in the fighting genre's growing specialization, helping spawn the contemporary culture of fighting-game e-sports tournaments.

In a significant stylistic shift, *MK Mythologies* was the series' last game to use photorealistic pixilation of live actors for its character sprites, whereas *MK4* and later sequels use true motion capture of live actors whose physical movements are imported as models for 3D "skeletons" onto which skins for each character are texture-mapped (Sushi-X and Hain 1997, 82; also see Therrien 2008, 245).[6] Unlike pixilation, then, this form of motion capture simply represents a digital-age update of rotoscoping (fig. 18)—and therefore falls short of the indexicality of photographic stills—even as such emulated human movements can nevertheless evoke a different sort of "uncanny valley" effect (deWinter 2016, 181). Similar motion-capture techniques became increasingly used in commercial Hollywood movies like *Star Wars—Episode I: The Phantom Menace* (George Lucas, 1999), *Final Fantasy: The Spirits Within* (Hironobu Sakaguchi, 2001), and *The Lord of the Rings: The Fellowship of the Ring* (Peter Jackson, 2001) for modeling computer-generated characters (Russell 2012, 262–63). And yet *Mortal Kombat*'s shift away from pixilation actually robbed the games of many of the cinematic qualities that had first distinguished the series from its competitors.

Released in 1993 and 1994, respectively, the Japanese-designed *Virtua Fighter* and *Tekken* had already been pioneers in 3D fighting games by using polygonal character sprites that may have appeared quite blocky in their surface texture but which nevertheless possessed a smooth and remarkably realistic range of bodily movements. By the time *MK4* made the belated shift to polygonal characters in 1997, however, the series' move away from its signature photorealism instead made *MK4*'s sprites look that much more primitive and unrealistic, despite running on Midway's brand-new Zeus game engine. Subsequent sequels would show marked graphical improvements—especially in conjunction with newer-generation consoles—but without ever capturing quite the same degree of photographic indexicality as the pixilated sprites used in the original trilogy.

Fig. 18. *Mortal Kombat 4* eschews pixilated sprites for polygonal character textures, solely modeled on live actors' movements instead of photographed images.

More blatant was the fact that *MK4* was not a true 3D fighting game like *Virtua Fighter* or *Tekken*—in which "ring out" wins are made possible by knocking one's opponent outside a square or circular arena (Harper 2014, 12)—but rather another 2.5D game consisting largely of horizontal gameplay, augmented by the ability to merely sidestep into an adjacent plane and small shifts in camera angle to suggest more 3D spatiality than gameplay actually allowed. Midway had previously tested this function with their coin-op fighting game *War Gods* (1996), which retained *MK3*'s basic button configuration but replaced the unpopular Run button with a "3D" button for the sidestepping function. Although *War Gods* was effectively a trial run for *MK4*, and was released the same year as Capcom's similarly middling 2.5D *Street Fighter EX* (1996), Midway nevertheless committed to 3D with *MK4*, while Capcom's competing 1997 release, *Street Fighter III: New Generation*, backpedaled into retaining a more familiar 2D aesthetic that further made *MK4*'s design look poorly realized by comparison. Steven Poole (2000, 83) notes that camera shifts in 3D games may seem superficially more "cinematic" in style, but they are typically constrained to maximizing the visibility of relevant gameplay action. Especially successful 3D fighting series like the *Tekken*, *Soulcalibur*, and *Dead or Alive* games embrace their 3D gameplay by privi-

leging close-quarters combat, which also emphasizes the use of juggling combos. Because close-quarters combat keeps the two combatants in physical proximity to each other, camera rotations and angle changes still keep the action tightly framed and do not end up privileging one player's perspective over another. The *Mortal Kombat* and *Street Fighter* series, by contrast, rely more heavily on covering arena space through the distanced use of projectiles, so rotations in single-camera coverage (which, in fighting games, are typically not controllable by the players themselves) of spatially distant avatars may unduly skew the overall perspective toward one player's visual advantage in two-player mode.

The *Mortal Kombat* series would evolve toward more authentic 3D gameplay in subsequent games; *MK: Deception*'s "death traps," for instance, allow one's avatar to perform an automatic, mid-round fatality by knocking their opponent into a lethal zone of the arena, thus combining the 3D fighting game's "ring outs" with the series' existing stage fatalities. Yet I argue that the overall shift to 3D motivated the series to (over)compensate for its loss of photorealism by amplifying its other once-distinctive traits, such as the aforementioned narrative world-building, the plethora of Easter eggs (e.g., *MK: Deadly Alliance*'s "Krypt" feature), and the series' signature finishing moves. Post-*SFII* sequels had exaggerated that series' anime-inspired sprites with more exaggerated "Super" special moves that bring additional spectacle to in-round gameplay, while *Mortal Kombat*'s later sequels extend its fatalities into the equivalent of elaborately gory cut-scenes. If there had once been a qualitative debate over the earlier games' fatalities as gimmicky and repetitious detractors from in-round gameplay, these later sequels demonstrate that such complaints hold more water when fatalities are taken to an extreme. In the original trilogy, fatalities are rarely longer than five seconds in duration (and often much shorter), so despite their potential repetitiveness, the quick turnover between matches makes them seem more closely integrated into in-round gameplay than the cut-scene-style fatalities made possible by technological advancements.

By the release of *Mortal Kombat X* (NetherRealm Studios, 2015) to eighth-generation consoles like the Sony PlayStation 4 and Microsoft Xbox One (both introduced in 2013), each fatality plays out like a multi-camera horror movie scene lasting about twenty seconds each. Rather than the older fatalities' ability to give the players a quick "exclamation point" between matches, now the fatalities feel far more segmented away from gameplay itself (and indeed, while striking at first, more quickly become boring via their repetition). These cut-scene-style fatalities may

evince more "cinematic" shifts in camera perspective and spectacles of slow-motion dismemberment, but they also recall the drawbacks of 1990s-era "interactive movies" like *Night Trap*: a ceding of interactive gameplay to lengthy scenes of passive viewing. Further, the ever-more-carnivalesque tone of these extended fatalities—*MKX*'s Cassie Cage, for instance, shoots a gushing pistol wound in her opponent's head, sticks a piece of chewed bubblegum in the hole, and watches the blood burst the resulting bubble—detracts from the later games' own invitations to take their hyperdiegetic narrative convolutions so seriously.

Because new technologies allowed the series to double down on the outrageousness of its fatalities at a time when the American coin-op market was in decline, it also makes sense that Midway would commit its development efforts toward home console games if its increasingly gory games would not likely translate well into overseas coin-op markets due to the different cultural attitudes about graphic violence. Capcom, for example, has remained a leader in the international coin-op market with mostly bloodless games like *Street Fighter IV* (2008) and *Street Fighter V: Arcade Edition* (2018) because Japanese fighting gamers prefer the arcade as a still-thriving subcultural space, whereas competitive play in virtual online spaces has increasingly usurped the North American arcade for accessing "arcade-perfect" home ports of games like *SFIV* and *SFV* (Harper 2014, 113–14; Goto-Jones 2016b, 114–15; Skolnik and Conway 2017, 10–12). By contrast, Midway closed its arcade division altogether in 2001, and the company itself filed for bankruptcy in early 2009. Upon its subsequent purchase by Warner Bros., the *Mortal Kombat* franchise was also freed from its long-term licensing deal with Threshold Entertainment, although Larry Kasanoff's company unsuccessfully sued to retain the right to produce derivative works, especially at a time when the live-action web series *Mortal Kombat: Legacy* (2011) was still in development (Boothroyd 2012, 410; Ali 2019, 196).[7] With Midway's former Chicago studio (now owned by Warner Bros. Interactive Entertainment) rebranded NetherRealm Studios in April 2010 and helmed by Ed Boon, the franchise was finally free to reinvent itself.

Rebooting the Past

As William Proctor (2012) argues, a "reboot" differs from a mere sequel (a further and often repetitive iteration in a linear chain of texts) or remake (a narratively self-contained text displaying fealty to an original) in the sense that it not only attempts to correct the errors of a failed or

stalled franchise, but it also aspires to generate a new series of sequels of its own. In this regard, we can see NetherRealm Studios' eponymous *Mortal Kombat* of 2011—which fans have dubbed "*Mortal Kombat 9*" for the sake of clarity—as a course correction that returns to 2.5D gameplay, while also serving as a quasi-remake of the original trilogy by nostalgically revisiting (and, in the process, "retconning") the original games' narrative events.

With the series' last fully 3D entry to date, *MK: Armageddon*, having killed off almost all of its principal characters during the titular free-for-all, Raiden's message to himself travels back in time to the tournament on Shang Tsung's island (*MKI*)—now featuring many of the combatants introduced in the sequels—where Liu Kang is again victorious. During the subsequent Outworld tournament (*MKII*), Kung Lao dies at Shao Kahn's hands, having not been the hero retroactively prophesied to defeat the forces of evil, while Quan Chi resurrects Sindel, opening the dimensional gates for the Outworld's invasion of Earthrealm (*MK3*). During the ensuing battle, most of the other heroes are killed, and Raiden accidentally kills Liu Kang while trying to prevent him from besting Shao Kahn and hence inadvertently repeating the old timeline toward Armageddon. Having realized that Shao Kahn is actually the one who "must win" the tournament, and thereby earn the Elder Gods' punishment for attempting to invade Earthrealm without having achieved ten consecutive tournament wins, Raiden throws his own fight with Shao Kahn. At this point, the Elder Gods finally intervene, granting Raiden their collective powers to ultimately destroy Shao Kahn.

Although the game's "Arcade Mode" (an increasingly anachronistic designation) still allows players to ascend the vertical "ladders" of opponents in classic style, *MK9* unfolds its retconned telling of the original trilogy through a sixteen-chapter, single-player "Story Mode" that consists of long narrative cut-scenes interrupted by comparatively brief, playable fights. Each chapter is focalized through a different character's perspective, thus providing more narratively justified reasons for each character's inclusion—even to the extent of fatalities and brutalities being unperformable in Story Mode in order to preserve the narrative continuity of keeping essential characters alive until their respective chapters. While the sheer imbalance of cut-scene versus gameplay time in Story Mode (and the fact that the game imposes each avatar upon the player in narratively consecutive order) means that players are less likely to revisit that mode once its three-and-a-half-hour duration is played through, Story Mode still requires players to effectively master

the control schemes of each of the major playable avatars while retroactively integrating a larger roster of characters into the overall diegesis in a more organic way than grafting them on in medias res (à la *MK4* and *MK Mythologies*).

Eschewing the previous games' Konquest Mode and dropping most of the superfluous mini-games, *MK9* represents a partial return to the series' roots as a side-by-side fighting game, albeit with the graphically advanced trappings of seventh-generation consoles like the Xbox 360 and PlayStation 3 (introduced in 2005 and 2006, respectively) at its disposal. Photorealistic pixilation of live actors has not returned, but NetherRealm's use of Epic Games' Unreal Engine 3 (2005) allows for superior surface rendering and far more lifelike emulation of its motion-captured actors compared to the series' 3D games. Indeed, characters in the series' most recent games are still clearly the products of CGI but now more closely resemble the CGI animation that dominates the concurrent flood of (nominally) live-action superhero movies. Character sprites and arena backgrounds retain a 3D aesthetic, while gameplay itself has returned to a horizontal plane, augmented only by small 2.5D shifts in camera perspective to emphasize especially dramatic moves. And in another callback to the series' 1990s heyday, *MK9* was effectively banned in Australia after the Australian Classification Board refused to assign a rating due to the game's "realistically rendered and very detailed" fatalities, and the (then) lack of an R18+ rating for video games comparable to the existing R18+ film classification (Ramadge and Connelly 2011).[8]

In the process of dropping most of the other generic paths into which previous *Mortal Kombat* games had expanded, the control interface for the core fighting experience was also revamped with *MK9*. The High Punch/Kick and Low Punch/Kick buttons became limb-based Front Punch/Kick and Back Punch/Kick buttons (à la *Time Killers*), emphasizing the game's return to a horizontal plane, while longer, preprogrammed dial-a-combos were largely removed, and juggle-based combos again privilege the player's own creativity in chaining together disparate attacks. Unlike the deliberate secrecy surrounding the early games, however, the button combinations for performing special moves and fatalities are now readily accessible in the Pause screen, whether as a concession to the "spoiling" abilities of the now-ubiquitous internet or as an encouragement to the latter-day fighting genre's competitive network of dedicated gamers (instead of more casual coin-droppers drawn in by surprise features).

Much like the tripartite "Super" meter used in Capcom's *Street Fighter*

Fig. 19. The game camera zooms in for a mid-round close-up of internal damage from Kung Lao's hat in an "X-ray move" in *Mortal Kombat X*.

EX, MK9 also features a tripartite meter that gradually charges up during in-round attacks. When the first segment of the meter is charged, the player can perform enhanced special moves; the second segment allows the player to perform a "combo breaker" counterattack upon their opponent; and the third segment unleashes "X-ray attacks." These latter moves bear the closest resemblance to the high-damage dial-a-combos of earlier games, since they play out as brief but devastating combos that cannot be interrupted once initiated. Akin to abbreviated five-second versions of the game's elaborate cut-scene-style fatalities, gameplay is momentarily suspended as the camera rotates and zooms in to various details of the receiving fighter's body—the camera's speed ramping down to slow motion to emphasize interior-body close-ups of bones cracking in grotesque fashion—over the course of several strong blows (fig. 19). Much as combatants immediately spring back from other types of in-round attacks that would realistically kill an actual person, horizontal gameplay resumes as usual following the graphically cinematic spectacle of an X-ray attack, therefore representing a means of successfully integrating fatality-like gore into the flow of gameplay itself, as opposed to the overly extended epilogues of the game's actual end-of-match fatalities.[9] With interstitial narrative content now primarily split off into Story Mode and brief spectacles of graphic violence better integrated into in-round gameplay strategy via X-ray moves, *MK9* balanced the later *Mortal*

Kombat series' most excessive tendencies and was critically heralded as a return to form for the franchise (e.g., Reiner 2011; Walton 2011; Elston 2011), though, much like the series' early games, many reviewers still expressed a preference for Capcom's most recent *Street Fighter* entries.

Following the paratextual use of comics for adding narrative context around earlier games, DC Comics released the *Mortal Kombat X* comic book series in January 2015 as a semi-prequel to the events of the *MKX* game scheduled to be released three months later. (DC and Nether-Realm Studios had previously used this marketing strategy with their comic series *Injustice: Gods Among Us* [2013–16], a lead-in to the eponymous 2013 fighting game featuring the DC Universe superheroes and villains, as if the narrative-universe crossover of the earlier *MK vs. DC Universe* game had since split apart again.[10]) In *MKX*'s Story Mode, the narrative events of *MK4* play out in condensed form, with Shinnok and Quan Chi escaping the Netherrealm to wage war on the other realms, but Johnny Cage defeats Shinnok by trapping him in a magical amulet. With the events of *MK: Deadly Alliance* through *MK: Armageddon* now rendered non-canonical via the altered timeline, the story flashes forward twenty years to the offspring of Johnny Cage, Jax, Kung Lao, and other heroes being trained as the new generation of Earthrealm defenders, while a new generation of Outworld warriors recovers the amulet and releases Shinnok. After a series of battles between the warring forces, Cassie Cage defeats Shinnok, and Raiden becomes corrupted in the process of absorbing Shinnok's power.

Following this cliff-hanger, *Mortal Kombat 11* (2019) introduces Shinnok's time-bending mother, Kronika, whose further machinations to the series timeline attempt to counter Shinnok's unexpected defeat. Using a magical hourglass, she erases present-day Raiden from existence by opening a time-space rift during the events of the *MKII* Outworld tournament, causing younger versions of the combatants to enter the present day and confront their future selves. The remainder of the game's Story Mode finds these various past and future versions of major characters forming new alliances and facing off to manipulate their own fates. Raiden eventually fuses himself with both the past and present versions of Liu Kang to form a heroic new fire god powerful enough to defeat Kronika. With Kronika now destroyed and the hourglass at their command, Liu Kang's fire god status has elevated him to the new protector of Earthrealm, while the morally redeemed Raiden assumes a mortal form.

For my purposes, however, *MK11*'s conceit of past and present versions of *Mortal Kombat*'s characters encountering each other, surprised

to see how much of themselves has changed over the series' grand narrative, evokes the same sense of surprise that an *MKII* player in 1993 (myself included) might experience, if given a glimpse into how the franchise has evolved over the intervening quarter century. No longer orchestrated by game designers in their early twenties, *MK11*'s attempt to reconcile these disparate character arcs through the combatants' own dawning awareness of their lifespans marks the belated maturity of a series that often rode a fine line between juvenile thrills and "mature" levels of violence. Indeed, much as the games have experienced a viable reboot, so too has the series' associated franchisability, such as Simon McQuoid's eponymous *Mortal Kombat* live-action film, released to theaters and HBO Max in April 2021. As the first *Mortal Kombat* film to gleefully depict gory, R-rated fatalities (rendered via CGI remarkably similar to the cut-scene-like fatalities in the rebooted games), this cinematic reboot implicitly acknowledges that the series' main audience has aged into adulthood, no longer consisting of a predominantly (pre)teen demographic in need of "protection" from violent imagery.

Meanwhile, *Mortal Kombat* fans have continued to keep the series' history alive in other ways, by attending conventions like Kombat Kon (held annually in the Chicagoland area), developing cosplay designs to embody game characters, and creating a plethora of fan art. Perhaps the most notable examples of this tendency, however, are the fan-made playable mods powered by *M.U.G.E.N* (Elecbyte, 1999), a freeware 2D fighting-game engine that allows fan artists to modify existing sprites and sound effects from the official franchise, import their own original backgrounds and sound files, and program new moves and gameplay modes (Chris D. 2019). In many of these mods, characters introduced in the later 3D sequels are "retconned" into 2D gameplay inspired by the original trilogy, effectively rewriting the later series back into the franchise's golden age in an unlicensed, freely shared twist on the very processes of rebooting concurrently undertaken by NetherRealm Studios. Whether creating lovingly upgraded versions of the original 2D trilogy, goofy parodies of finishing moves, or unofficial sequels and franchise crossovers, these processes allow today's fans the creativity that *Mortal Kombat* aficionados of my generation, drawing out our stick-figure diagrams of new characters and gameplay moves, could have only dreamed.

As one of the most successful game franchises of all time reaches its three-decade mark in 2022, there is little doubt that *Mortal Kombat*'s story will continue on for the foreseeable future with this new generation of characters, games, and gamers alike. In the wake of the First Amendment

protections extended to video games in *Brown v. Entertainment Merchants Association*—decided the same year as the series' reboot—new entries are doubtful to ever stoke as much controversy as seen during the "Mortal Moment," not least because the series has since become an established part of the cultural landscape. Writing in the majority opinion, even arch-conservative U.S. Supreme Court Justice Antonin Scalia remarked, "Reading Dante is unquestionably more cultured and intellectually edifying than playing *Mortal Kombat*. But these cultural and intellectual differences are not constitutional ones."[11]

The macabre creations of Dante's netherrealm and NetherRealm Studios are, of course, more than centuries apart in their respective aims and taste valuations, yet their grotesque images have each left a lasting impact in their own way. Mixed reactions to the series' many spin-offs, imitators, and sequels have complicated any clear verdict on whether Grand Guignol gimmickry alone sits at the heart of *Mortal Kombat*'s popularity, but Midway's blend of generic inspirations clearly struck something in the mid-1990s cultural imagination. Reflecting a moment when the aesthetics of cinema and video games converged around photorealistic images of interactive violence that were no longer constrained to the public spaces of arcades, the *Mortal Kombat* games mark an important precedent in the popularization of fighting games both as a genre and as a node for social anxieties. The series' shadowy and increasingly multilayered story world may have hinted at secret features that parents and moral entrepreneurs feared would corrupt impressionable youth, but the resulting controversy actually testified to a very different story: that of an industry under increased public scrutiny as the influence of video games expanded into a wider array of media platforms. As a transitional moment within its own genre, within larger cultural conversations about its medium, and in the history of transmedia practices, *Mortal Kombat* has well earned its status as a landmark video game.

Notes

INTRODUCTION

1. Wherever relevant or not immediately apparent from context, I have cited the home country of game studios upon their first mention, using the familiar abbreviations JP (Japan), U.S. (United States), and U.K. (United Kingdom). I have also used the North American names for game consoles, such as SEGA "Genesis" instead of SEGA "MegaDrive."

2. See Bogost 2015; Sharp 2015; and Parker 2018.

3. My discussion here is rooted primarily in the U.S. context, given how arcades in East Asia tend to have a more socially "wholesome" image (see Ashcraft and Snow 2008), helped in part by the relative absence of gore in most Japanese games—a cultural difference that the *Mortal Kombat* series exploited as a means of product differentiation.

CHAPTER 1

1. Note that the generic terms "fighting" and "beat-em-up" are still sometimes used interchangeably, especially in British game criticism. For the sake of clarity, however, I will distinguish between these two varieties of hand-to-hand combat games.

2. Also see *Data East USA, Inc. v. Epyx, Inc.* 862 F.2d 204, 9 U.S.P.Q.2d (BNA) 1322 (9th Cir. 1988).

3. To overcome such imbalances in two-player competition, the second player to select their avatar might deliberately "counter-pick" a character whose own weaknesses will help rebalance the upcoming match (Harper 2014, 61). To help with this issue, *Mortal Kombat II* also introduced a "Random Select" function, which allows players to defer to serendipity instead of counter-strategize—a very popular option among arcade players already skilled enough to use any character ("Special . . . *Kombat II*" 1994, *Electronic*, 114).

4. According to programmer Ed Boon, *MKI* was affected by similar imbalances, with Sub-Zero's moves considerably stronger than the other characters (LaMancha 1994, 35).

5. See "*Fighter's History*" 1994, 120; "Letter of the Month" 1994, 14; and *Capcom U.S.A., Inc. v. Data East Corp.*, 1994 WL 1751482 (N.D. Cal. Mar. 16, 1994).

6. On the cognitive/embodied experience of "force transfer" in hand-to-hand combat games, also see Gregersen 2016, 53–70.

7. Although not entirely identical, also see the character tier provided in Cureton 1994, 69.

8. Franchise crossover games would, however, be created by each company separately (see chapter 4), using licensing deals with the major American comics firms, including *X-Men vs. Street Fighter* (Capcom, 1996) and *Mortal Kombat vs. DC Universe* (Midway, 2008).

9. Le Théâtre du Grand-Guignol (1897–1962) was a Parisian theater specializing in realistic depictions of graphic violence and gore—often presented in a morbidly tongue-in-cheek tone—and has been credited as an influence on gory horror films, especially via the generic influence of Herschell Gordon Lewis.

10. Capcom would later introduce Akuma, a hidden playable character in *Super Street Fighter II Turbo* (1994), unlockable via a combination of carefully timed button presses on the Character Select screen—as if both acknowledging the earlier Sheng Long mishap and taking inspiration from Midway's own introduction of secret characters.

11. The purple-attired character Rain would originate in a similar manner as a Prince-themed in-joke by Ed Boon, briefly seen during a flash of demo gameplay in the "attract mode" of *Ultimate Mortal Kombat 3* (Midway, 1995), and was later made a playable character in subsequent games.

12. Also see the respective pages for the *Mortal Kombat* games on the Cutting Room Floor website (n.d.). Other major Easter eggs, such as Boon's separate diagnostic menus for the first three coin-op games, would not be discovered until as late as 2015.

13. For *MKII*, Tobias initially wished to digitize real-life kickboxer Kathy Long as a character, but this idea was dropped due to time constraints (Quan 1994b, 29).

14. Wrestling games are already generically closer in spirit to fighting games than boxing games, since they typically rely on theatrical personas with signature moves, health meters to mark character strength, and so on. In its incorporation of foreign objects to be used as optional weapons, such as pool cues and crates, *Pit-Fighter* more closely resembles a wrestling game than a fighting game in many respects.

15. See *Ahn, et al. v. Midway Manufacturing Company, et al.*, 965 F. Supp 1134 (N.D. Ill. 1997); and *Pesina v. Midway Manufacturing Company, et al.*, 948 F. Supp. 40 (N.D. Ill. 1996).

16. *Ahn, et al. v. Midway, et al.*

CHAPTER 2

1. Tobias had originally planned for *Total Carnage* to feature a backstory "involv[ing] the world being invaded by ghouls from a dimension called Outworld,"

but the game's cocreator, Mark Turmell, vetoed the inclusion of unnecessary themes and storylines (Ali 2019, 62).

2. As one of the first 3D fighting games (and a *Mortal Kombat* competitor), *Tekken* (Bandai Namco [JP], 1994–) provided a fitting "extra dimension" to its gameplay by developing the increasingly complex story of the Mishima family across its many popular sequels. The *Tekken* series, then, is a prominent exception to the fighting game's oft-criticized lack of narrative depth, much as it also represents an attempt to reassert Japanese dominance over the mid-1990s coin-op market.

3. On the grindhouse market, see Church 2015, and for a sample of such double bills circa 1974–75, see Cope 1975. Also see Prashad 2001 and Bowman 2021 on this period.

4. Note that the pinyin term *gong fu* roughly translates as "hard work/practice over time" and can refer to any gradually acquired skill, not specifically martial arts, whereas *wushu* actually translates as "martial art." By the 1960s–70s, however, these meanings were effectively reversed once wushu was reconceived as a noncombative gymnastic sport and "kung fu" became internationally associated with empty-handed martial artistry. In this chapter, I use the latter-day associations of these two terms for the sake of consistency with common usage.

5. Given the basis of the lawsuits that some of these original actors would later file against Midway, it is perhaps no surprise that today they claim a considerable amount of creative input, even if not enough to legally qualify them as joint authors. On the issue of authorship, it is also notable that Japanese character names and cultural allusions (such as the blind swordsman Kenshi as a Zatoichi trope) would significantly increase in the *Mortal Kombat* games made after Tobias left Midway in 1999.

6. According to Daniel Pesina, additional inspiration for Johnny Cage and Jax respectively came from Marvel's characters Iron Fist and Power Man, whose own comics series ran concurrently with *Master of Kung Fu* (Myers 2018).

7. The documentary *Bruce Lee: A Warrior's Journey* (John Little, 2000) reconstructs as much of Lee's vision for *Game of Death* as possible from the extant footage.

8. Konami's controversial rail-shooter *Lethal Enforcers*, discussed in the following chapter, would include a level set in Chicago's Chinatown, featuring stereotypically attired Chinese villains (see fig. 15).

9. On such diasporic video stores, see Hilderbrand 2009, 27–32.

10. Dux's story was later called into question in Johnson 1988. This has led to several ensuing decades of counterarguments over the veracity of Dux's account, though my primary interest here is in how *Bloodsport* dramatized the story as a Van Damme vehicle. According to Dux's original account, for example, despite fighting until knockouts, there were no deaths at the actual Kumite, nor were betting spectators allowed.

11. On hardbody films, also see Jeffords 1993; Tasker 1993; and Ayers 2008.

12. Notably, Provenzo's research does not specify the exact game being described here, but it is likely either *Ninja Gaiden* (Tecmo, 1988), *Double Dragon*, or *Teenage Mutant Ninja Turtles* (Konami, 1989) for the 8-bit Nintendo Entertainment System—all of them, ironically, Japanese productions—and not one of the *Mortal Kombat* games.

13. On the tradition of "alternative blood" to evade censorship, also see Kocurek 2015b. This form of localization could operate in the opposite direction, however,

with the Japanese-designed *Bushido Blade* featuring a splash of red blood upon fatal sword strikes in the American version, in place of the yellow flash in the original Japanese version.

14. This same toxic masculinity often overlaps with the aforementioned white supremacism expressed by a contingent of gamers fearing that their bubble of ludic escapism is being threatened by racial/sexual minorities (see Nakamura 2019).

15. *American Amusement Machine Association v. Kendrick*, 244 F.3d 572 (7th Cir. 2001).

CHAPTER 3

1. *Joseph Burstyn, Inc. v. Wilson*, 343 U.S. 495 (1952). Film distributor Joseph Burstyn legally challenged the New York State Board of Regents' 1951 ban of Roberto Rossellini's film *The Miracle* (1948), which had been accused of sacrilege. The U.S. Supreme Court's "*Miracle* decision" in Burstyn's favor, which struck down the ban, also reversed an earlier 1915 ruling that had declared motion pictures unprotected by the First Amendment.

2. Coin-op gamers of the early 1990s will recall, however, the Federal Bureau of Investigation's insertion of antidrug messages ("Winners Don't Use Drugs") into the attract mode for many games, apparently convinced that idle youth were as likely to reach for a crack pipe as a joystick.

3. *City of Mesquite v. Aladdin's Castle, Inc.*, 455 U.S. 283 (102 S.Ct. 1070, 71 L.Ed.2d 152) (1982).

4. During the same period, Midway/Williams developed the Williams Action Video Entertainment Network (or "WaveNet"), an attempt to remotely network arcade machines for competitive play via an ISDN connection. Although installation costs for these ISDN connections might have put off some arcade owners, Williams hoped that their widespread adoption would revolutionize the coin-op industry's business model by allowing companies like Williams to remotely disseminate new software and updates for free, in exchange for a share of each arcade's revenue on those games. In April 1996, Williams began field-testing WaveNet on ten *Ultimate Mortal Kombat 3* cabinets in the Chicago area, but this early experiment with networked gaming was short-lived, and its ambitious revenue-sharing model did not come to pass (Webb 1996, 18).

5. Its sequel, *Lethal Enforcers II: Gun Fighters* (Konami, 1994), in fact, uses an Old West setting instead.

6. The Options menu on the SNES prototype even included a selection between "Bloody" and "Bloodless" game modes, but it is unclear if this was to be a standard menu option or unlockable only with a code.

7. The ESRB ratings include E (Everyone), T (Teen), M (Mature 17+), and AO (Adults Only 18+).

8. For example, *MKI* was banned and confiscated in Germany in 1994 under a Federal Department for Media Harmful to Young Persons law against content that glorifies or trivializes violence.

9. For overviews of these debates, see Sicart 2009; Egenfeldt-Nielsen, Smith, and Tosca 2013, 255–79; Schott 2016; Markey and Ferguson 2017.

10. However, they do allow that players with preexisting dispositions toward aggression were more intrigued by violent game content for its own sake, even if that violent content still did not correlate with their overall enjoyment of the games themselves.

11. *Brown v. Entertainment Merchants Association*, 564 U.S. 786 (2011).

CHAPTER 4

1. *Time Killers* was considered so bad that it inspired its own parody game, *Timeslaughter* (Bloodlust Software [U.S.], 1996); whereas reviews of Naughty Dog's almost self-parodic *Way of the Warrior* noted how the Panasonic 3DO's "beautiful" CD-based graphics did not compensate for horrible gameplay since, even with its "humor value," the game "isn't even good by accident!" ("Review . . . *Warrior*" 1994, 38).

2. Emulated versions of the original *Mortal Kombat* trilogy would be further repackaged on *Midway Arcade Treasures* compilations (2004–2005) for the Sony PlayStation 2 and Microsoft Xbox, in addition to serving as unlockable hidden games within the later sequels, as if having acquired the historical status of the *PONG* and *Galaga* games hidden in the original trilogy.

3. This compiled story information derives from several sources: Santoro et al. 2018; Mortal Kombat Wiki (n.d.); and Jasper 2017.

4. A hyperdiegesis is "a vast and detailed narrative space, only a fraction of which is ever directly seen or encountered within the text" (Hills 2002, 104).

5. Although the number of grandmothers who embraced *MK: Armageddon* is doubtful, Boon's rhetoric is consistent with the Wii's reputation as a game console adapted by "casual" gamers of many ages, as explained in Juul 2009.

6. "Mokap," a hidden character in *MK: Deadly Alliance*, wears a motion-capture suit covered with reflective balls, alluding to this now-common cinematic process.

7. Also see *In re MIDWAY GAMES INC., et al., Debtors. Threshold Entertainment, Inc., Plaintiff, v. Midway Games Inc., et al.*, Bankruptcy No. 09-10465, Adversary No. 09-51081 (446 B.R. 148 [2011]).

8. An R18+ rating for video games would be introduced by the release of *Mortal Kombat X* four years later, allowing the uncensored sequel to be sold to adults.

9. *Mortal Kombat 11* (2019) replaces X-ray attacks with high-damage "Fatal Blow" attacks, enabled once a character's health drops below the 30 percent mark, thus allowing a losing player to potentially turn the tables on their opponent. Meanwhile, *MK11* splits the tripartite meter into separate offensive and defensive meters, giving players more strategic in-round options for how to use accumulated energy toward enhanced moves.

10. A playable Scorpion, however, would be available to *Injustice* players as a premium download, much as NetherRealm's *Injustice 2* (2017) features Sub-Zero and Raiden as downloadable characters. Likewise, NetherRealm introduced a mobile game for iOS and Android devices in conjunction with *MKX*, based in purchasing and collecting a virtual card deck of fighters and their corresponding powers, which incentivizes in-game microtransactions by also unlocking content on the home console version.

11. *Brown v. Entertainment Merchants Association*, 564 U.S. 786 (2011).

Glossary

Arena: The bounded physical space where one-on-one combat occurs in a fighting game. Arenas in 2D fighting games (also referred to as "backgrounds") are horizontal planes bounded by hard edges, while 3D fighting games typically feature square or circular spaces and the ability to knock one's opponent outside the ring edge for an automatic round win.

Attract mode: A series of preview screens (e.g., main titles, sample gameplay footage) through which a coin-operated arcade game cycles when not currently in use by a player.

Audit menu: A special menu accessible only by a coin-operated arcade machine's owner/operator, used to perform system updates and to assess a given machine's overall gameplay statistics.

Avatar: A playable character serving as the player's diegetic surrogate, such as the combatant chosen from a Character Select screen in a fighting game.

Beat-em-up: Also called "brawlers," this subgenre of action games features one or more playable characters who must engage in hand-to-hand melee combat against many (largely indistinguishable) enemy fighters at once while proceeding through a given level.

Boss: One or more extra-strong enemies who must be overcome near the end of a game (or at the end of a discrete unit of gameplay, such as a level). In many fighting games, bosses are *non-playable characters* (NPCs), reachable only in single-player mode at the end of a tournament-like series of fights.

Combo: A series of offensive blows landed on an opponent in very quick succession. In fighting games, combos may be performed via "juggling" (or knocking one's opponent into the air and landing additional blows as they fall) or via preprogrammed combo moves specific to each character (also dubbed "chain combos" or "dial-a-combos").

Cut-scene: A non-interactive, cinematic sequence of narrative information or gameplay instruction interspersed between periods of interactive gameplay. Also see *full-motion video* (FMV).

Diegesis: The story world within the text, including the characters, settings, "in-world" sounds, and overall visual environment (or *mise-en-scène*). By contrast, *extra-diegetic* (or *non-diegetic*) elements are experienced only by the viewer/player, such as onscreen captions/meters, menu screens, soundtrack music, etc. Also see *transmedia.*

"Easter egg": An unlockable or visually obscured gameplay feature, message, sound, or in-joke encoded by game designers to reward knowledgeable players.

Exploitation film: A broad cinematic mode of genre films that compensate for their (often) low budgets or independent origins by prioritizing viscerally impactful spectacle and sensationalistic or timely subject matter.

Fighting game: A genre in which gameplay consists of a series of one-on-one, multi-round matches (measured via a per-round health meter) of hand-to-hand combat between distinctly different characters, each often possessing both *standard* and *special moves.* Single-player mode (or "arcade mode") is often figured as a tournament with a Manichean framing narrative, while most fighting games also include a two-player competitive mode.

Finishing move: A visually spectacular *special move,* typically executable only at the end of a match, in which the winning combatant may kill, humiliate, or punish the loser.

First-person shooter (FPS): A genre of 3D shooting games in which the player's point of view maps onto the weapon-toting avatar's point of view as the player freely navigates a maze-like level full of shootable enemies.

Full-motion video (FMV): A nonplayable sequence of prerecorded video or prerendered animation, often used in *cut-scenes.*

Game balance: An aspect of game design referring to the relative fairness of the gameplay abilities provided to a player. "Asymmetric" or unbalanced game design may leave one player at a significant disad-

vantage to the power of AI-controlled opponents (in single-player mode) or human-controlled opponents (in two-player competitive mode).

Home console: A video game machine designed for home use, with the visual interface provided via connection to a separate television set or computer monitor. Home consoles typically use games that are modularly insertable into the base machine via chip-based cartridges or CD/Blu-ray discs.

Indexicality: A semiotic term referring to signs in which the signifier is directly caused or created by the signified. Unlike *iconic* signs, in which there is a mere resemblance between signifier and signified, *indexical* signs bear a literal trace of what they represent. For example, a footprint, photograph, or lingering smell all bear an indexical relationship to the physical thing that imprinted them.

Kung fu: A colloquial term, popularized since the early 1970s, used to broadly describe a variety of close-range, empty-handed combat styles originating in East Asia and especially China. Not to be conflated with the pinyin term *gong fu*, or "hard work/practice over time."

Media effects: A field of behaviorist social science research exploring how media consumption influences individual psychology or social behavior.

Meter: An onscreen indicator of character strength/power, ranging from the standard (e.g., a health bar) to the specialized (e.g., a "charge" meter for performing *special moves*).

Motion capture: A technique for recording a live actor's physical movements and rendering it as lifelike movement within another medium, such as a film or game. Also see *pixilation*; *rotoscoping*.

Orientalism: Edward Said's term for a broadly reductive body of Euro-American beliefs about the so-called Orient. Supposedly rooted in scientific knowledge, but actually based in cultural stereotypes, orientalism has historically been generated through, and used to help justify, the "Western" world's colonialist encounters with "the East."

"Palette swap": A character *sprite* modeled on an existing sprite but visually differentiated via another color palette; often used to save memory space.

Paratext: A type of ancillary text that "surrounds" the main text while also shaping the main text's reception. Paratexts may include spin-offs, merchandise, promotional materials, packaging, reviews, etc. Also see *transmedia*.

Peripheral: An ancillary device connectable to the controller or cartridge slot of a *home console*, intended to enhance gameplay or upscale the base console's technological capacities.

Pixilation: A *motion-capture* technique in which photographed still frames of live actors are rendered as lifelike movement via stop-motion animation.

Platform game: A subgenre of action games in which the player's *avatar* must navigate a series of suspended platforms and obstacles within a given level.

Port: A translation of an existing game onto another platform, such as from an arcade machine to a *home console*.

Projectile: A type of *special move* emitted from one's avatar and covering the spatial distance to one's opponent. Often used as an offensive attack, but some projectiles may be used to stun.

Rail-shooter: A genre of shooting game in which the game camera moves incrementally along a preprogrammed "hard rail" for as long as the player remains successful at clearing the screen of numerous threats. The player typically uses a "light gun" (a weapon-shaped device that shoots infrared light at the screen) as their controller but does not control camera movements.

Reboot: Derived from computing lingo, a "reboot" is a text that attempts to restart an existing franchise. Unlike the fealty to an original text associated with the "remake," the reboot attempts to correct perceived shortcomings of previous sequels or spin-offs in a franchise.

Role-playing game (RPG): A game genre in which the player gradually develops their character's knowledge and inventoried skills/items via lengthy quests and explorations of sprawling, often fantastical story worlds.

Rotoscoping: A *motion-capture* technique in which a record of live actors' physical movements is manually or digitally traced over to create lifelike animation.

Special move: A more advanced type of attack or fighting technique requiring the player's knowledge of specific combinations of joystick moves or button presses. Special moves are often unique to a particular character, may do more damage than *standard moves*, and are sometimes executable only when an onscreen *meter* is charged up.

Sprite: A two-dimensional bitmap animation used in video games to produce moving objects set against stationary backgrounds.

Standard move: A basic attack used in a fighting game via simple joystick controls and button presses, with no specialized knowledge required.

Transmedia: A form of franchise storytelling that unfolds across a variety of media platforms, playing to the strengths of each platform and incentivizing multiple paratextual purchases to keep track of the vastly expanding story world.

Wushu: A gymnastic sport combining elements of Chinese martial artistry and Chinese opera acrobatics, consolidated and sanctioned by the Chinese government during the twentieth century.

Wuxia: The genre of Chinese chivalric swordplay fiction featuring itinerant, sword-wielding heroes with superhuman abilities in fantastical stories set during China's premodern past.

Mortal Kombat Ludography

Mortal Kombat (Midway, 1992)
　　Genre: Fighting
　　First release: Arcade

Mortal Kombat II (Midway, 1993)
　　Genre: Fighting
　　First release: Arcade

Mortal Kombat 3 (Midway, 1995)
　　Genre: Fighting
　　First release: Arcade

Ultimate Mortal Kombat 3 (Midway, 1995)
　　Genre: Fighting
　　First release: Arcade
　　Alternately titled ports: *Mortal Kombat Advance* (Nintendo Game Boy
　　Advance, 2001), *Ultimate Mortal Kombat* (Nintendo DS, 2007)

Mortal Kombat Trilogy (Midway, 1996)
　　Genre: Fighting
　　First release: Sony PlayStation, Nintendo 64

Mortal Kombat Mythologies: Sub-Zero (Midway, 1997)
　　Genre: Platform
　　First release: Sony PlayStation, Nintendo 64

Mortal Kombat 4 (Midway, 1997)
    Genre: Fighting
    First release: Arcade
    Alternately titled port: *Mortal Kombat Gold* (SEGA Dreamcast, 1999)

Mortal Kombat: Special Forces (Midway, 2000)
    Genre: RPG
    First release: Sony PlayStation

Mortal Kombat: Deadly Alliance (Midway, 2002)
    Genre: Fighting
    First release: Nintendo GameCube, Sony PlayStation 2, Microsoft Xbox
    Alternately titled port: *Mortal Kombat: Tournament Edition* (Nintendo Game
    Boy Advance, 2003)

Mortal Kombat: Deception (Midway, 2004)
    Genre: Fighting; RPG
    First release: Sony PlayStation 2, Microsoft Xbox
    Alternately titled port: *Mortal Kombat: Unchained* (PlayStation Portable,
    2006)

Mortal Kombat: Shaolin Monks (Midway, 2005)
    Genre: Beat-em-up
    First release: Sony PlayStation 2, Microsoft Xbox

Mortal Kombat: Armageddon (Midway, 2006)
    Genre: Fighting; RPG
    First release: Sony PlayStation 2, Microsoft Xbox, Nintendo Wii

Mortal Kombat vs. DC Universe (Midway, 2008)
    Genre: Fighting
    First release: Sony PlayStation 3, Microsoft Xbox 360

Mortal Kombat (NetherRealm Studios, 2011)
    Genre: Fighting
    First release: Sony PlayStation 3, Microsoft Xbox 360
    Alternately titled/expanded version: *Mortal Kombat: Komplete Edition*
    (2012–13)

Mortal Kombat X (NetherRealm Studios, 2015)
    Genre: Fighting
    First release: PC, Sony PlayStation 4, Microsoft Xbox One
    Alternately titled/expanded version: *Mortal Kombat XL* (2016)

Mortal Kombat Mobile (NetherRealm Studios, 2015)
    Genre: Digital collectible card game; Fighting
    First release: iOS, Android

Mortal Kombat 11 (NetherRealm Studios, 2019)
    Genre: Fighting
    First release: PC, Sony PlayStation 4, Microsoft Xbox One, Nintendo Switch
    Alternately titled/expanded version: *Mortal Kombat 11: Aftermath* (2020)

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