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Moving in Place: On *DanceDanceRevolution* and Its Impact

In 1997, the Japanese video game corporation Konami would form a subdivision of their company that would be responsible for the publication of their music-based arcade games—aptly titled the Games & Music Division. Just a year later, on September 26th, 1998, they would then go on to release what many video game enthusiasts consider to be their flagship product: *DanceDanceRevolution* (often shortened to simply “DDR”). DDR’s release would launch the G.M.D. into mainstream arcade culture at breakneck speeds; just a year later, they underwent a name change to “Bemani” (titled after the division’s first release, **be**at**mani**a) and began exporting the game and its sequels to arcades the world over. Its first appearance in North American markets came in March 1999, and by the early to mid-2000s, the game had become a worldwide phenomenon. Sequels with brand new music and unique gameplay elements were released at unprecedented speeds, with the first eight games in the series being released within just over four years, and DDR had received coverage in many major news outlets—BBC, USA Today, and CBS to name a few (Ko). Tournaments were also frequently held in arcades, where players would compete against each other to set scores with the highest accuracy in what were then known as Perfect Attack tournaments, named after the most accurate judgment one can receive in the game. Konami had struck gold with DDR, and for many years they sought to capitalize on its newfound worldwide popularity to the highest degree that they could.

Despite the game's virality at the turn of the century, though, DDR is widely regarded as a game far past its peak in the present day to the Western world. Multiple valid points support this claim; for one, the arcade gaming scene had already been on the decline in America during the time period in which the game was released. It is widely agreed upon that the advent of powerful home gaming consoles like the PlayStation, Xbox, and Wii is to blame for this shift in video game consumption. Instead of venturing out to one's local arcade and spending money on each trip, gamers could instead make a one-time purchase of a console and a few titles and take full control of their personal arcade experience without ever leaving their homes (Fruhlinger). The several console editions of DDR that would be released throughout the 2000s could ultimately not detract from the fact that the game's allure, in large part, was its very presence in the arcade setting. The player, often in front of a crowd of onlookers enthralled by their virtuosity and the game's novelty, becomes a performer (Chien 22)—invigorating themselves and their audience, sparking a desire within them to do the same, practically summoning a line of quarters at the edge of the monitor indicating which members of the audience would play next. DDR, when instead played with a plastic dance mat hooked up to a PlayStation 2 in a space inhabited by nobody but its sole participant, becomes another game entirely. The decline of DDR's popularity in the West can then certainly be measured parallel to that of their arcades.

In the event that arcades active today *do* wish to maintain a working DDR machine, however, it is an extraordinarily challenging and time-consuming process that many arcade owners simply do not wish to invest time and money into. DDR, among a majority of the other Bemani titles, is still actively updated in the corporation's home country of Japan, where arcade culture is very much alive and well (Fruhlinger). In the West, however, only a select few chains of arcades such as Round1 and Dave & Buster's are granted access to the latest DDR software

and hardware, leaving most independently owned arcades with outdated machines lacking online connectivity that have been through, in many cases, over 15 years of use with little to no repair (Knoop). There are indeed exceptions to this trend, such as New Jersey's *8 On The Break* which has housed rhythm games including DDR machines of all different versions for over two decades, but an overwhelming majority of arcades are focused on the installation of newer games that do not require nearly as much maintenance to remain playable.

Even through the game's slow transition from a worldwide social phenomenon to nostalgia fodder, though, its importance to and impact on video gaming as a whole cannot be overstated. In large part, its significance in the realm of video games is due to the strength of its presence beyond it. From the countless number of appearances in pop culture in the years since its release—even if just as a visual gag—to its integration into school curriculums across the United States to enrich students' skills in multiple different fields, it is clear that it has risen above its status as just another arcade rhythm game lost to time. *DanceDanceRevolution* is one of the most important video games to enter the scene in the 21st century, and its impact can still be felt across the globe even after its peak.

One aspect of DDR that set it apart from other arcade games of the time was its practicality as a form of exercise—something that no video game enjoying such a high level of popularity at the time could lay claim to. During the game's peak and even to this day, many fans of the game set out to arcades solely to participate in DDR, and would often spend consecutive hours at a time playing the game on its hardest difficulties. Noticing this trend, Bemani themselves would go on to implement a counter that kept track of how many calories the player burnt across the songs played in a session with the release of *DDR SuperNOVA* in 2006, which was the first to implement their e-amusement service that provided online connectivity

("DanceDanceRevolution SuperNOVA"). That being said, school districts across North America were beginning to notice just how popular the game had become, and some decided to implement the game into the curricula of their physical education courses. The game's effectiveness at engrossing children in gym class was noted by John Timmer in a 2007 Ars Technica article to be twofold; both in that it does not require the honing of a specific skill set like a physical sport such as basketball would, and the format in which the game is presented—a video game—is already appealing to those children from the start. These students that had experience with DDR in a classroom setting noted through surveys that they not only felt their relationship with exercise improve, but their relationship with their self-image as well (Timmer). This sentiment was echoed across the country at Marvin Avenue Elementary School in Los Angeles, California; Helge Ziazie, a teacher at the school, noticed that "'Every morning, before I open the gym at school, there are at least fifty to sixty children already lined up… they say to me, "We want to work out!"'" (Kleinedler) Considering that the aforementioned rise of console gaming was pushing more children than ever at the time to adopt a more sedentary lifestyle, many teachers would cite DDR as an extremely helpful tool in providing students with the engaging, high-energy experience of a video game while also having them strive to keep themselves in good health via the intense physical activity that the game elicits.

DanceDanceRevolution set itself apart from the video games of the early 2000s because of the incorporation of physical activity—where arcade games often solely involved the movement of the fingers, DDR was, by comparison, a full-body workout. However, it is important too to consider that the concept of integrating rhythmic entrainment into video games had only just begun a few years before; many consider Sony's 1997 PlayStation release *PaRappa the Rapper* to be the first true mainstream "rhythm game" (Demers 404). One must

hone a substantial sense of rhythm as well as bodily coordination to succeed in DDR. Considering, then, the importance of rhythm to almost all genres of music, the integration of the game into music-based curricula in educational settings begins to seem feasible. Brent Auerbach, a professor at the University of Massachusetts Amherst, used this very idea for his aural skills class taught in the fall of 2006, wherein sophomore undergraduates enrolled in the class were made to practice their DDR skills using a console edition of the game in a lab on campus to improve their ability to sight-read rhythms (Auerbach, *The Pedagogy*). In addition to the gameplay, students were encouraged to first engage in a "sight-reading" session, wherein they did not actively step on the arrows and instead kept time with the rhythms depicted on the screen by counting along with them. Then, during actual gameplay, students were required to vocalize the rhythms to which they were stepping at the same time to demonstrate proficiency in the rhythms that they had learned previously (Auerbach, *Pedagogical Applications* 7). Throughout the semester, Auerbach noticed four potential benefits that the inclusion of DDR in aural skills or otherwise music-centric courses may have on the students. An improved sense of rhythm and increased proficiency in sight-reading were expected results, but students showed an improvement in the performance of syncopated rhythms as well. The curriculum stated that the students start by playing the songs listed on the easier difficulties, which involve very basic rhythms that match with the simplest beats present in the song. Later in the semester, however, students were made to return to the songs that they had already played and play them on higher difficulties that involve rhythms that are more complicated and do not always follow the beat of the song. Finally, Auerbach noted the useful "practice mode" feature that allows the player to skip to any point in a given stepchart as well as create their own stepcharts to any song included in the game, and suggested that it could be utilized to assist students in practicing rhythms that

they are struggling with (Auerbach, *The Pedagogy*). For a video game to not only enter a school setting and be met with positive acclaim from educators, but to have multiple different practical applications within those settings, are both claims that not many games besides DDR can make. This further solidifies its place beyond the culture of video gaming and as an overarching staple of worldwide pop culture altogether.

DDR's popularity extending far beyond the realm of video games into education was something that, especially at the time, was a very rare occurrence; oft-maligned by parents and teachers alike, it was inconceivable that something viewed as no more than a distraction and a waste of time could have a practical application in an academic setting (Behrenshausen 340). The game's ability to transcend this stereotype owes itself simply to its very nature; the design of the game was a unique one at the time of its release, as well as being easy to acclimate oneself to. This made the game stand out to players immediately upon its release in arcades, and in turn, played a major role in its incredibly quick spread across the globe. Rhythm games were just getting their start in the mainstream around the time of DDR's release—options were very limited predating it, with players only able to choose from the aforementioned *PaRappa the Rapper* and *beatmania*. While these games did contribute heavily to the popularization of the rhythm video game genre, they were still similar to the majority of video games of the time; whether it be in the home or arcade setting, the only movement required of the player is of the fingers to reach the buttons in front of them (Chan 5). DDR, in contrast, set the scene ablaze by requiring full body participation on top of an active mind (Sperlinger 12). No longer were arcade-goers made to stand motionless, moving their hands inches at a time in response to bright visual cues on a cathode-ray tube display. Instead, gamers not only were engaging in a cutting-edge form of cardio-respiratory exercise in addition to responding to visual cues in the

form of the scrolling arrows on-screen, but were also improving their ability to sight-read rhythms as Auerbach's class demonstrated—even with no prior musical training or experience. The machines' designs even sought to involve those who were not actively playing the game, with bright flashing lights decorating their perimeters that illuminate with each successful step often attracting large crowds surrounding the players (Chan 6). With these added visual elements, DDR becomes a spectacle in entertainment unlike any game before or after it in the Bemani franchise; all at once a video game, a dance simulator, and an exercise machine (Behrenshausen 347-348). These intertwined elements of the game attracted three entirely separate crowds, introduced them to one another, and allowed them to form a strong worldwide community. The community did not just involve the performers on the dancing stage, but their audience, too; countless references to DDR and its spinoffs have been made in popular TV shows of the time, such as *The Office* and *Malcolm in the Middle* ("DDR History"). A movie centered around the game itself has also been confirmed by Konami to be in development, wherein "a world on the brink of destruction['s]... only hope is to unite through the universal language of dance" (D'Alessandro). Even to producers of these visual media who likely had never set foot onto a DDR machine, they know full well that the game is immediately recognizable, both to them and to the audience for which they are producing the show—a trait only the most decorated of video games can lay claim to. Although in the majority of these pop-culture references, the game is solely used as an entertaining plot device fitting the time period in which the episode was released, it only further demonstrates that DDR had a profound impact on the Western world far beyond the walls of the arcade.

DDR's physicality not only introduced gamers of the time to an entirely new genre of entertainment, both in terms of the game itself and the wide variety of music it has to offer, but

also to the expansive culture of dance at large. While the gameplay in DDR might not be as accurate of a “dancing simulator” as, say, the popular Ubisoft series *Just Dance*, many different parallels can be drawn in its gameplay to the dancing scene of the time and of times past, which allowed those already invested in dance to enjoy the game just as much as one unfamiliar with dance culture. The debate on whether or not DDR is a true form of dance has been hotly debated for as long as the game has existed; even some of its most dedicated players admit that “it isn’t exactly, you know, a dance class” (Behrenshausen 347). There are, however, plenty of valid arguments that support DDR being constituted as a true form of dance. The game is predicated on following a series of predetermined steps that match the beat of a given song, and with the proposed definition of dance as “the movement of the body in [an] organized and logical manner”, DDR fulfills each requirement to be considered a form of dance (344). Parallels can also be drawn from the game’s instructional nature to “social dance ichnography”, the practice of creating diagrams that depict how a dance’s participant must move their feet in order to complete the move successfully (Demers 404-405). DDR has created its own form of ichnography, with multiple different sequences of steps having been dubbed different names throughout the game’s history. The most popular example of this ichnography, arguably, is the *crossover*. Crossovers are a three-part maneuver: a step on the horizontal axis (left or right) that is followed by a step on the vertical axis (up or down), which in turn is followed by the opposite step on the horizontal axis. To execute this pattern most efficiently—i.e. to avoid *doublestepping*, which is to step on two different arrows consecutively with the same foot—players must cross one leg over the other. If not performed correctly, players may end up orienting themselves in a manner that will not allow for the optimal performance of the steps that follow. One of many “dance moves” that the game has inadvertently invented with its

stepcharts, the crossover is a prime example of DDR's likeness to "traditional" dance culture—in a sense, its unique evolution of the classic "grapevine" dance move.

Equally as integral to dance culture are the participants themselves. Dance has been and continues to be one of the most diverse and varied forms of art and entertainment, with every culture around the world participating in one form or another. Bemani sought to honor this cross-cultural adoration for the art form by, even in the earliest releases, featuring on-screen characters from all different backgrounds in DDR that dance along to the music as the player steps. The inclusion of characters from very many different racial and sexual identities had a profound impact on marketing the game to as wide an audience as possible. Irene Chien writes that "the phenomenological encounter between the human body and digital technology takes sensible shape only through subtending cultural designations of sexual, racial, and national difference that are too often sidelined in critical studies of new media" (24). Where many other arcade games of the time made little to no effort to promote inclusivity and had the only playable characters be of one ethnic identity, DDR's broad character selection ensured that almost anyone who decided to play could enjoy playing as a character that they could connect with. Many of the communities that were formed around the game across the country themselves were of widely varying racial identities—Asian, white, and African-American communities alike found enjoyment in the game for both different and similar reasons (Chan 9). No matter the background of anyone who decided to play the game, they were both supported by the fanbase as well as the game itself in their DDR endeavors—a level of support that closely parallels the scene that Bemani drew inspiration from.

Even through the game's decline throughout the 2010s, *DanceDanceRevolution*'s impact on the video game industry and on pop culture at large is one that is immeasurable—rivaling the

likes of the greats such as Nintendo's *Mario* or Sega's *Sonic*. Reaching beyond the arcade into homes and schools across the globe, it is immediately recognizable, and remembered fondly by those who spent their adolescence living through the years where its popularity was at its peak. This is not to imply that the game has lost its community in the present day, however; in online spaces like Twitter and Discord, players still actively participate in tournaments and share their scores on the few new machines that are maintained in arcades. Many different free programs such as *StepMania* and *OpenITG* have been created by fans of the game that emulate the gameplay on home computers. On top of this, DDR's legacy lives on in its original home through newer arcade releases such as *Pump it Up*, a five-panel rhythm game released by the South Korean company Andamiro that positions its panels in the corners and the center. The release most similar to DDR in the present day, however, is *StepManiaX*, released by the American company Step Evolution. They seek to revitalize the four-panel rhythm game scene by making its software and hardware comparatively more affordable to arcades—with setups costing around $7,000 compared to newer DDR machines costing nearly $20,000. In addition, they include songs that cater more heavily to the music tastes of American teenagers today rather than the bubblegum-pop tracks produced by in-house Konami sound engineers that DDR was known for. *DanceDanceRevolution* was the spark that launched rhythm games into the mainstream almost 25 years ago, and all the releases succeeding it only have it to thank for the tight-knit communities that have formed around them. In the public eye, the game may be firmly stuck in place as a relic of arcade gaming, but in its place it still moves—calling always on those with a passion for music, dance, exercise, or even video games at all to move with it.

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