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UNIVERSIDAD CATÓLICA
DE MURCIA

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ESCUELA INTERNACIONAL DE DOCTORADO

Programa de Doctorado en Ciencias del deporte

Mass choreography in modern Olympic ceremonies. The
emergence of a choreographic line between the period 1984 and
2016

Autora:

Isabella Alessandra Scursatone

Directores/as:

Dr. Sebastián Gómez Lozano

Dra. María Eugenia García Sottile

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AUTORIZACIÓN DEL DIRECTOR DE LA TESIS PARA SU PRESENTACIÓN

El Dr. D. Sebastián Ramón Gómez Lozano y la Dra. Da. María Eugenia García Sottile como Directores⁽¹⁾ de la Tesis Doctoral titulada “Mass choreography in modern Olympic ceremonies. The emergence of a choreographic line between the period 1984 and 2016” realizada por Da. Isabella Scursatone en el Programa de Doctorado en Ciencias del Deporte en la línea de investigación del Análisis del hecho coreográfico y performativo en el contexto del Grupo de Investigación en Artes Escénicas - **autorizan su presentación a trámite** dado que reúne las condiciones necesarias para su defensa.

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ABSTRACT

There are countless large-scale sporting events that have introduced inaugural ceremonies, but among them the Olympic event continues to retain its uniqueness. Although the Olympic ceremonies have retained and implemented their protocol aspect, the artistic component has played a fundamental role in the characterisation of the event over the years. Although the ceremonies have been marked by different changes over the years, the participation of a multitude of performers, with the organisation of mass choreographies, has been a constant and well-defined part of the Olympic programme since the 1970s.

The profession of mass choreographer increasingly took shape from the late 1980s onwards in relation to the new stage and choreographic requirements of the world of major sporting events at that time. His ability to plan and organise hundreds of people requires unique skills, such as calculating and ordering times and spaces and outlining the work through appropriate choreographic notation. Although the Olympic ceremonies arouse a great deal of media interest and several authors have studied their historical, protocol, cultural and national identity-building dimensions, there are still few *sport history studies* and *performance studies* that explore the designs of mass choreography and the choreographers that relate to these.

The starting point of this thesis is to identify the existence of this choreographic genre within the Olympic ceremonies, to learn about the main interrelationships within the event and to recognise the nature of the changes that have taken place. In the process of developing this thesis, the specific aim has been to explore the extent to which reciprocal influences exist between mass choreographers who have developed skills in the creative, organisational and methodological spheres. To this end, the period under particular study begins with Los Angeles 1984 and ends with Rio 2016. The observational area is that of the Olympic Games organised in Europe and America in those years. It is the intention to closely examine the relationship between the works of Judy Chabola, former assistant choreographer in Los Angeles 1984, Doug Jack and Bryn Walters, authors of multiple mass choreographies between the late 1990s and 2016. The intention is to identify their influence on each other, if any, and to assess the

extent to which Chabola helped determine a choreographic style and what methodological legacy she left behind.

The nature of the research demanded the identification and exploration of studies from across a range of disciplinary areas such as *sport history*, *dance studies* and *technical- combinatorial sports studies*. The official documents of the International Olympic Committee were examined, as well as all academic research on the subject of ceremonies and related disciplinary topics.

A great and fundamental contribution to this research came from the information obtained from the main protagonists involved. Their material, videographic, photographic and paper-based, provided exclusive and substantial material.

The methodology with which the work was conducted is that of the timeline. Semi-structured interviews were conducted with the main practitioners involved, such as Doug Jack, Steve Boyd, Matthias Schnabel, Bryn Walters, Marco Balich e Ric Birch. The research made use of an observational methodology to study the technical characteristics of the choreographies of the choreographers examined. Specifically, a case study was structured, comparing two choreographies by Doug Jack from the winter ceremony of Turin 2006, and one choreography by Bryn Walters from the summer closing ceremony of Rio 2016. For this purpose, an analysis protocol was created through a model highlighting the use of space, movement techniques, formations, teamwork characteristics, but also the use of video projections and the characteristics of the transmitted image.

Chapter II is dedicated to a historical background, which covers the period from the first Olympic ceremonies of the modern era up, to the beginning of the 1980s. Its purpose is to identify some main stages, to explore the emergence of the artistic component, and most especially to trace the introduction of mass choreography. It has been noted that mass gymnastic performances, from the outset, were side-by-side to the Olympic ceremonies, although not in all editions. In the controversial 1936 Berlin Olympic Games, mass movements were used to stage a massive spectacle, but this took place in the evening and outside the official ceremony; it was not until the 1972 Munich event that this choreographic genre was witnessed within a ceremony and alongside the Olympic protocol. The use of the great mass has its zenith in the 1980 Moscow ceremonies with the

presence of hundreds of gymnasts and dancers, that took place during the Cold War period, a historical event that will also characterise the 1984 ceremonies.

Chapter III enters specifically into the analysis of the choreographic genre examined. Given the complexity of the subject, classifications have been proposed regarding the purpose and technical content of these choreographies. Prior to a look at the figure of the choreographer in general and an examination of the work of Judy Chabola, Doug Jack and Bryn Walters, the origins of this choreographic genre were investigated, in particular its European and American roots.

Chapters IV, V and VI analyse in detail the Olympic ceremonies in which these choreographers took part, starting with the 1984 Los Angeles edition, which marks a milestone in terms of the development of technologies and the definitive shift of the ceremonies towards spectacularisation. These were the years of great changes, especially in the development of choreographic technique, which is analysed in depth in section 4.3, again thanks to the information and documents provided by the choreographers. Choreographic notation developed from the simple use of pen and paper to produce charts to a reliance on *Adobe Illustrator* for the same purpose, starting in Atlanta 1996. The characteristic of this software, which was initially created for image processing, allowed it to be adapted to the needs of the choreographer. Over the years, knowledge was shared and implemented and a set of documents using *Power Point*, *Excel* and *Adobe Illustrator* was created by this generation of choreographers, giving rise to the current, unique choreographic notation protocol. The stylistic change that can be seen in these years has also been influenced by the use of technology as well as the historical period.

The case study, through the examination of three choreographies, aims to compare the two choreographers, Doug Jack and Bryn Walters and their works. The aim is to take a close look at the technical contents and choreographic styles, points of contact and differences between the two practitioners. The fact that choreographies created ten years apart were chosen also made it possible to observe the technical and artistic changes that occurred between the two historical periods, 2006 and 2016.

From the analysis of the data collected thanks to the historical journey, from the observation of the Olympic ceremonies examined and from the in-depth

study of the history of the professionals involved, it was possible to reach conclusions.

The use of the mass has always been present within the ceremonies, since the 1970s, but it is from the 1984 Los Angeles edition that it is possible to identify a new style of mass choreography that moves away from the previous gymnastic exercises. At the same time, the figure of the mass professional began to emerge thanks to choreographer Judy Chabola, who developed a methodology derived from her experience with American drill teams and marching bands.

The analysis of the data shows that the professional relationships between the choreographers involved were manifold. Chabola conducted many ceremonies with Doug Jack and he in turn with Bryn Walters. Each of them, the oral testimonies report, inherited the 'know how' from previous experiences. Their relationship led them towards a continuous search for new organisational possibilities and a continuous reorganisation of their working methods. Although the case study analysis between the two choreographers examined reveals different styles, the method used by both appears to continue in line with Judy Chabola's legacy. In the choreography of Rio, a change is certainly evident, which was supported by a renewed approach to choreographic writing: the result of the choreographers' years of experience, and the support now available to them from renewed technological tools. It is possible to demonstrate and ultimately argue that a style has indeed been established, and that this style has left an imprint, which marks an era.

The line of study drawn has been able to highlight the behind the scenes work of those mass choreographers who have created a kind of continuity between the past and the present of the Olympic ceremonies. Through the work of the three choreographers and the professionals related to them, this choreographic line led to the birth and development of an artistic community.

Their work has led to the development of a community, linked by a mutual ability to create artistic productions with high levels of emotional involvement that have given rise to artistic performances typical of the visual arts, without losing the human aspect that mass choreographies represent. In fact, the anthropological aspect related to these choreographies characterised the works of all three choreographers in their long artistic career, another factor that demonstrates Judy Chabola's legacy. The presence of volunteer performers has

provided opportunities to create new choreographic styles, which move away from the patterns of mass gymnastic performances of the past, in favour of artistic solutions with the use of important stage costumes, props, lighting and video projections. The creations *The Great Skier* in Turin 2006, or *The Art of Burle Marx* in 2016 can be described as true works of visual art. Furthermore, the use of video projections has in recent years enriched the visual component and the definition of the image to be transmitted.

It is believed that in the complex system of mass choreography, which is the result of a great team effort, the use of technology may have contributed to the introduction of new styles, but the study shows that the human presence is still the fundamental aspect.

RIASSUNTO

Sono innumerevoli gli eventi sportivi su larga scala che hanno introdotto al loro interno cerimonie inaugurali, ma tra questi l'evento Olimpico continua a mantenere la sua unicità. Benché le cerimonie Olimpiche abbiano conservato e implementato il loro aspetto protocollare, la componente artistica ha giocato negli anni un ruolo fondamentale nella caratterizzazione dell'evento. Sebbene le cerimonie siano state segnate da differenti cambiamenti, la partecipazione di una moltitudine di performer, con l'organizzazione di coreografie di massa, rappresenta una costante a partire dagli anni '70. La professione del coreografo di massa si è andata sempre più a delineare a partire dalla fine degli anni Ottanta in relazione alle nuove esigenze sceniche e coreografiche del mondo dei grandi eventi sportivi di quel momento storico. Le sue capacità di pianificare e organizzare centinaia di persone richiedono esclusive competenze, come calcolare e ordinare tempi e spazi e delineare il lavoro attraverso una notazione coreografica adeguata. Sebbene le cerimonie olimpiche suscitino un grande interesse mediatico e diversi autori ne hanno studiato le dimensioni storiche, protocollari, culturali e di costruzione dell'identità nazionale, pochi sono ancora gli studi sulle performance che approfondiscono la figura del coreografo di massa e delle coreografie correlate a esso.

Obiettivo di partenza di questo percorso è individuare l'entrata di questo genere coreografico all'interno delle cerimonie Olimpiche, per conoscere le principali interrelazioni con l'evento e riconoscere la natura e i cambiamenti avvenuti. Nel processo di sviluppo di questa tesi, l'obiettivo specifico è stato quello di esplorare la misura in cui esistono influenze reciproche tra i coreografi di massa che hanno sviluppato competenze in ambito creativo, organizzativo e metodologico nel periodo compreso tra Los Angeles 1984 e Rio 2016. L'area è quella dei Giochi Olimpici organizzati in Europa e in America in quegli anni. Si è voluto evidenziare il rapporto tra le opere di Judy Chabola, già assistente coreografa a Los Angeles 1984, Doug Jack e Bryn Walters, autori di molteplici coreografie di massa tra la fine degli anni '90 e il 2016. È intenzione individuare la loro eventuale influenza reciproca, e quanto Chabola abbia contribuito a determinare uno stile coreografico e quale patrimonio metodologico abbia lasciato in eredità.

Data la caratteristica di questa ricerca, sono stati individuati studi su aree disciplinari come *sport history*, *dance studies* e *technical-combinatorial sports studies*. Sono stati presi in esame i documenti ufficiali del comitato Olimpico Internazionale come tutte le ricerche scientifiche relative alla tematica delle cerimonie e alle tematiche disciplinari correlate. In particolare, gli studi sulle cerimonie si soffermano prevalentemente sull'aspetto culturale, politico, comunicativo e talvolta estetico. Un grande e fondamentale contributo ai fini di questa ricerca è derivato dalle informazioni ottenute dai principali protagonisti coinvolti. Il loro materiale, videografico, fotografico e cartaceo ha fornito un apporto sostanziale.

La metodologia con la quale è stato condotto il lavoro è quella della linea del tempo. Sono state somministrate delle interviste semi strutturate ai principali professionisti coinvolti, quali Doug Jack, Steve Boyd, Matthias Schnabel, Bryn Walters, Marco Balich e Ric Birch. Per lo studio delle caratteristiche tecniche delle coreografie dei coreografi presi in esame, è stato fatto uso della metodologia osservazionale. Nello specifico è stato strutturato un caso studio, mettendo al confronto due coreografie di Doug Jack della cerimonia invernale di Torino 2006, e una coreografia di Bryn Walters della cerimonia di chiusura estiva di Rio 2016. Per tale finalità è stato creato un protocollo di analisi attraverso un modello che evidenziasse l'uso dello spazio, le tecniche di movimento, le formazioni, le

caratteristiche del lavoro di squadra, ma anche l'uso delle video proiezioni e le caratteristiche dell'immagine trasmessa.

Il capitolo II è dedicato a un *historical background* che parte dalle prime cerimonie Olimpiche dell'era moderna, fino all'inizio degli anni '80 ai fini di ripercorrere le principali tappe ed evidenziare l'ingresso della componente artistica, e in particolar modo delle coreografie di massa, all'interno di esse. Si è rilevato che le esibizioni ginniche di massa sono state da subito affiancate alle cerimonie Olimpiche, anche se non in tutte le edizioni. Nei controversi Giochi Olimpici di Berlino 1936 le movimentazioni di massa sono state ampiamente utilizzate, ma per realizzare uno spettacolo che fu presentato la sera prima della cerimonia ufficiale; bisognerà attendere l'edizione di Monaco 1972 per vedere questo genere coreografico come parte integrante dello spettacolo Olimpico. L'uso della grande massa raggiunge il suo apice nelle cerimonie di Mosca 1980 con la presenza di centinaia di ginnasti e danzatori, avvenute nel periodo della guerra fredda, evento storico che caratterizzerà anche le cerimonie del 1984.

Il capitolo III entra nello specifico nell'analisi del genere coreografico preso in esame. Data la complessità dell'argomento, sono state proposte delle classificazioni riguardo le finalità e i contenuti tecnici delle coreografie di massa. Prima di giungere ad approfondire la figura del coreografo in generale e dei coreografi Judy Chabola, Doug Jack e Bryn Walters presi in esame, sono state indagate le origini di questo genere coreografico, e in particolare della radice europea e di quella americana.

I capitoli IV, V e VI analizzano in dettaglio le cerimonie Olimpiche alle quali tali coreografi hanno preso parte, partendo dall'edizione di Los Angeles 1984, la quale segna una tappa per quello che concerne lo sviluppo delle tecnologie e lo spostamento definitivo delle cerimonie verso la spettacolarizzazione. Questi sono gli anni dei grandi cambiamenti, in particolar modo dello sviluppo della tecnica coreografica, che vede nel paragrafo 4.3 una approfondita analisi, sempre grazie alle informazioni e ai documenti forniti dei coreografi. La notazione coreografica è infatti passata dal fare uso di carta e penna per scrivere le coreografie producendo le *charts*, ad affidarsi per il medesimo scopo ad *Adobe Illustrator*, a partire da Atlanta 1996. La caratteristica di questo software, nato per le elaborazioni di immagini, ha permesso la adattabilità alle esigenze del coreografo. Negli anni vengono implementate le conoscenze, e viene creato da questa

generazione di coreografi di massa un insieme di documenti, con l'uso di *Power Point*, *Excel* e *Adobe Illustrator*, che hanno fatto nascere l'attuale protocollo di notazione coreografica, unico nel suo genere. Il cambiamento stilistico che è possibile riscontrare in questi anni è stato influenzato anche dall'uso delle tecnologie, oltre che dal periodo storico.

Lo studio del caso, attraverso l'esame di tre coreografie, vuole mettere a confronto i due coreografi, Doug Jack e Bryn Walters e i loro lavori. Si vuole osservare con attenzione i contenuti tecnici e gli stili coreografici, i punti di contatto e le diversità tra i due professionisti. Il fatto che siano state scelte coreografie realizzate a distanza di dieci anni le une dalle altre ha reso possibile, inoltre, osservare i cambiamenti tecnici e artistici avvenuti tra i due periodi storici, il 2006 e il 2016.

Dall'analisi dei dati raccolti grazie al percorso storico, dall'osservazione delle cerimonie Olimpiche prese in esame e dall'approfondimento della storia dei professionisti coinvolti, è stato possibile giungere a delle conclusioni.

L'uso della massa è presente all'interno delle cerimonie dagli anni '70, ma è a partire dall'edizione di Los Angeles 1984 che è possibile individuare un nuovo stile di coreografie di massa che si allontanano dalle esercitazioni ginniche precedenti. Dallo stesso momento storico inizia a delinearsi la figura del professionista della massa grazie alla coreografa Judy Chabola, che mette a punto una metodologia che deriva dalla sua esperienza con i *drill teams* e le *marching band* americane.

Si evidenzia che le relazioni professionali intercorse tra i coreografi coinvolti sono state molteplici. Chabola ha condotto molte cerimonie con Doug Jack e lui a sua volta con Bryn Walters. Ognuno di loro, riferiscono le testimonianze orali, ha ereditato il "sapere come fare" a livello tecnico e organizzativo dalle esperienze precedenti. La relazione tra loro li ha condotti verso una continua ricerca di nuove possibilità organizzative e una continua riorganizzazione dei loro metodi di lavoro. Sebbene dall'analisi del caso studio tra i due coreografi presi in esame, si siano riscontrati stili diversi, il metodo utilizzato da entrambi appare proseguire in linea con l'eredità di Judy Chabola. È possibile affermare, anche conseguentemente alle testimonianze orali, che nella coreografia di Rio 2016 è certamente evidente il cambiamento, sostenuto da una rinnovata scrittura coreografica, e supportato dai rinnovati strumenti tecnologici. È possibile

dimostrare e infine sostenere che si è effettivamente affermato uno stile, e che tale stile ha lasciato un'impronta segnando un'epoca.

Il complesso lavoro di ricostruzione è stato in grado di evidenziare il lavoro sommerso dei coreografi di massa presi in esame, che ha creato una sorta di continuità tra il passato e il presente delle cerimonie Olimpiche. Attraversando il lavoro dei tre coreografi e dei professionisti a loro correlati, questa linea coreografica ha portato alla nascita e allo sviluppo di una comunità artistica. Essi hanno condiviso la comune capacità di creare produzioni artistiche con alti livelli di coinvolgimento emotivo. L'aspetto umano correlato a queste coreografie ha difatti caratterizzato i lavori di tutti e tre i coreografi nel loro lungo percorso artistico, altro fattore che dimostra l'eredità di Judy Chabola. La presenza di performers volontari ha dato opportunità di creare nuovi stili coreografici, che si allontanano dagli schemi delle esibizioni tecniche ginniche di massa del passato, in favore di soluzioni artistiche con l'uso di importanti costumi di scena, di attrezzi di scena, di luci e di video proiezioni. Le creazioni *The Great Skier* in Torino 2006 o *The Art of Burle Marx* nel 2016 possono essere definite vere e proprie opere di arti visive. L'uso delle videoproiezioni ha arricchito negli ultimi anni la componente visiva e la definizione dell'immagine da trasmettere.

Si ritiene che nel sistema complesso delle coreografie di massa, che è il risultato di un grande sforzo di squadra, l'uso delle tecnologie possa avere contribuito a introdurre nuovi stili, ma dallo studio emerge quanto la presenza umana ne rappresenti tuttora l'aspetto fondamentale e il valore aggiunto.

KEY WORDS

Olympic Ceremonies, Mass Choreography, Performance studies, Choreographic notation, Mass Choreographer.

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“Che strani i sogni, vero? Non ci sono sogni che valgono per tutti, ma i sognatori invece si assomigliano tutti, anche se vivono condizioni così diverse tra loro hanno questa cosa che li rende come fratelli e sorelle, questo stare in equilibrio precario tra la realtà e quello che la realtà può diventare.” Bebe Vio

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ABBREVIATIONS USED

CNO, National Olympic Committees

FOP, Field of play

IOC, International Olympic Committee

NOCs, National Olympic Committees

OCOG, Organising Committee for the Olympic Games

OCC, Olympic Closing Ceremony

OOC, Olympic Opening Ceremony

OG, Olympic Games

PCC, Paralympic Closing Ceremony

POC, Paralympic Opening Ceremony

PPT, the file extension of presentations created with PowerPoint.

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I – INTRODUCTION



I - INTRODUCTION

The artistic programme within the Olympic ceremonies is currently regarded by the International Olympic Committee (IOC) as one of the main elements, together with the protocol segments, of the opening and closing ceremonies of the Olympic Games.

For several years now, the major large-scale sporting events have also introduced ceremonies marking the opening of the event. The Olympic format, protocol aside, is undoubtedly the main reference. Choreographed movements of large masses are present in all performances in outdoor settings. Examples include: the Mediterranean Games, the Universiade, the Pan-American Games and the Commonwealth Games.

Despite the widespread use of sports ceremonies in stadiums, Olympic ceremonies (OC) have continued to retain their importance and uniqueness over the years. In speaking of ceremonies, Carrard argues that they encapsulate great values such as the global message of Olympism, the representation of nations and the value of physical activity for young people (1996). OCs also differ from other major sports ceremonies as a consequence of their ritual nature, which is a must for the Olympic movement (Carrard, 1996).

The great responsibility that the Organising Committee for the Olympic Games (OCOG) takes on, when it wins the Games, is not only to organise an event of international scope, but also to succeed in the feat of creating innovation and tradition within it. The novelty must amaze, and the spectacle must communicate to an international audience, not with a verbal language, but with one made up of images and symbols that must reach the widest range of people. As MacAloon points out, it is very important for the organization to find the right professionals. The OCOG must ensure that producers are hired who have experience in the field as well as being down-to-earth and close to the artists' world (MacAloon, 1996).

Mass movements as a choreographic element within the artistic programme have been related to the Olympic ceremonies since their first editions, although it

would be many years before they became an integral part of them. The use of large numbers of artists and performers, necessary to reach distant audiences, has played an increasingly imposing role in the choreographic development of the event, especially since the 1970s. The transformation took place in relation to the historical period, the development of technologies and working methods. In fact, the introduction of satellite TV in those years transformed the OCs from a local show to an international event. New communication techniques helped the ceremonies to become a mass spectacle for one of the largest audiences in the world and to move away from the mere protocol event they represented (Llinés, 1996).

The consequent growth in the importance of the artistic component in the history of OCs also came about thanks to the great names of choreographers, already known in the dance world, who over the years took care of certain segments, or entire ceremonies. Examples can be found as early as Mary Wigman and Rudolf von Laban, in 1936, and later in the work of Philippe Decouflé, Dimitris Papaioannou and Akram Khan, as well as with theatre companies such as the Finzi Pasca company and Momix, to name but a few. Thanks to them, it has been possible to give authorship to certain artistic moments that have gone down in history, such as the choreography *La Méditerranée, mer olympique*, when the Catalan theatre company *La Fura dels Baus* used the music of Ryuichi Sakamoto to help stage the myth of Hercules.

Much more complex, however, is the identification of the choreographers specialised in organising the mass. The work of these choreographers, in synergy with the technicians in charge of the sets, costumes, props, music, and video projections, is a submerged work, even if of fundamental importance for the staging of an OC. It is therefore very difficult for the non-specialised public to become aware of the authorship of the design, organisational and artistic structure of the mass choreography of an Olympic ceremony, as this is the result of a complex and articulated system.

Over the years, the organisation of an OC has engendered unique logistical and choreographic requirements. Numerous professionals have brought their talents and acquired skills from one ceremony to the next. This kind of continuity is evidenced by the presence of producers or directors of ceremonies at successive editions. Examples are: the Australian, Ric Birch, the South American, Peter

Minchall, Kenny Ortega of the USA, the United Kingdom based Steve Boyd and the Italian, Marco Balich. This succession occurred particularly in the editions that took place in Europe and America. The same companies from the entertainment industry, with multiple experiences in the field of large events, have repeatedly been present, bringing with them the best professionals of the day. They have also been present at ceremonies of large-scale sporting events, such as international football, the Commonwealth Games, the Mediterranean Games, the Special Olympics and the Universiade, to name but a few.

Among these, the Olympic arena is certainly a privileged context. The OCs have always encapsulated the excellence and artistic trends of every historical moment.

Among all the professionals who have specialised in this field are mass choreographers. They have developed skills in organisational, managerial, and methodological aspects of working in large, open spaces. Relevant names can be identified in Judy Chabola (1952-1999), Doug Jack (1960-) and Bryn Walters (1966-). They have been present since Los Angeles 1984 and have given their signature to many mass movements since Barcelona '92, each of them in their own time and editions, up to the Rio 2016 ceremonies. Thanks to their continuous presence and collaboration with other experienced choreographers, they have staged some of the most significant and symbolic mass choreographies, such as the *HOLA* of Barcelona '92, *The Great Skier* of Turin 2006 and *The Art of Burle Marx* of Rio 2016.

In order to better grasp and understand the subject matter under consideration, this research begins by highlighting the history of mass choreography within the Olympic ceremonies of the modern era, looking at how it has come down to the present day. The historical reconstruction starts with the first ceremonies in 1896. In section 2.1, Historical Background, the main changes in the use of the artistic component that the ceremonies underwent until the 1980s will be examined. In Chapters IV, V and VI, the historical period starting from the 1984 Los Angeles ceremonies will be dealt with in more detail and will include official documentation, videos and direct testimony, with the intention of highlighting the correlations between Judy Chabola, Doug Jack and Bryn Walters.

The technical analysis of three choreographies, by Doug Jack and Bryn Walters, in particular, intends to create the basis on which to derive useful data for a conclusion.

1.1. STATUS OF THE ISSUE

There is now a substantial literature on the subject of the Olympic Games (Rowe, 2012). The themes covered include political and socio-cultural issues, questions of gender, national identity, commercialisation, power and urban conflicts. Each new Olympic edition makes a fresh contribution towards these diverse areas of study.

Olympic ceremonies attract great media interest and several authors who have studied their historical, protocol, cultural and national, identity-building dimensions have focused on them, e.g. MacAloon, 1984; MacAloon, 1996; Alkemeyer & Richartz, 1993; Tomlison, 1996; Llinés, Schantz & Papa, 1996; Garcia, 2008; Traganou, 2010; Tomlinson & Young, 2006; White, 2006.

The analysis of the choreographic arrangements of the opening events - Olympic Opening Ceremonies (OOC) and closing events - Olympic Closure Ceremonies (OCC) of the Olympic Games (OG) is beginning to arouse particular interest, especially with regard to the communication of Olympic values and principles, the incorporation of cultural and traditional elements in the choreographies and the development of technologies (Boccia, 2012; Silva, Pereira & Tricárico, 2021).

However, there are still only a few studies on choreographic issues related to Olympic ceremonies and even fewer on mass choreographies and the choreographers who created them. It is difficult in practice to find information on choreographers, their works and their artistic careers. It is even more difficult to access material on the design, writing and staging of their mass movements. Much of the content is the intellectual property of the choreographers, or belongs to their personal archives, or to the organising committees.

The application of *dance studies* and choreographic analysis to mass choreography is still at an early stage and there is much scope for experimentation, in-depth studies and specific research.

The relationship of dance to the Olympic ceremonies has been addressed by a number of authors, including Hanley and Ramirez (Hanley, 1984; Hanley, 2006; Ramirez, 2018). The American researcher carries out a historical overview of the role of dance in the ceremonies with particular attention to the Berlin 1936 event, while Ramirez proposes, in addition to this historical reconstruction work, the relationship with the image and the analysis of some choreographies; the same investigation, although with different objectives and methodologies, is carried out in the study by da Silva, Pereira & Tricárico (2021). However, such studies pay no particular attention to mass choreographies and their technical characteristics.

This is, therefore, a little-explored field that needs an interdisciplinary approach that looks in depth at the *sport history*, *dance studies* and *technical-combinatorial sports studies*.

1.2. RESEARCH QUESTIONS/OBJECTIVES

In the process of developing this thesis, the aim of the research was to explore the extent to which there are mutual, or reciprocal influences amongst, mass choreographers who have developed skills in the organisational, managerial and methodological spheres specific to the techniques of working in a large outdoor setting. The material selected includes Los Angeles 1984, Rio 2016 and in particular Judy Chabola (1952-1999), Doug Jack (1960-) and Bryn Walters (1966-).

The analysis begins with a consideration of when and how mass choreography entered the Olympic ceremonies. What have been the main changes in this choreographic genre over the 30-year period from Los Angeles 1984 to Rio 2016 and what is its legacy?

The specific objective is to consider the generation of choreographers who have contributed to the creation of the main, mass choreographies of the Olympic ceremonies held from Los Angeles 1984 to Rio 2016 in Europe and America and to look closely at the relationship between the works of Judy Chabola, Doug Jack and Bryn Walters. How did Judy Chabola, former assistant choreographer in Los Angeles 1984, help determine a choreographic style? Did Chabola leave a methodological legacy?

Methodological developments and in particular, developments in the approach to choreographic notation have facilitated an ever-increasing

complexity of realization. The nature of the relationship between the works of these choreographers, as well as their relationship to these developments, will therefore be analysed and explored.

1.3. DELIMITATION OF THE OBJECT OF STUDY

In this research, the time span from the Los Angeles '84 ceremony to the Rio 2016 ceremony will be considered. Thanks to a series of technological innovations for the transmission of images, the starting point represents the symbol of a change in style that will give rise to subsequent transformations.

The period covered is broad, but the intention is to analyse in particular those editions that hosted the specific generation of choreographers under study. The ceremonies that follow the line established by the American choreographer Judy Chabola, who appeared at the OC in Los Angeles 1984, will therefore be taken into consideration. The aim is thus to identify the main exponents of the artistic community related to Chabola, and to observe what kind of legacy, in terms of style, organisation and method, they brought with them to the editions in which they subsequently participated.

The line of study stops at Rio 2016 since, to date, it was the last OC in which choreographies with large numbers of people were presented, and in which Bryn Walters was present. The pandemic, with the postponement of the Tokyo 2020 ceremony by a year, and a significant use of technology have brought about changes in the use of large numbers within the last Olympic ceremonies.

1.4. SOURCES AND METHODOLOGY

Analysing the history of ceremonies and their characteristics requires the use of concepts and methods from different disciplinary areas such as performance studies, *dance studies*, sports history and visual culture. It is precisely the interdisciplinary nature of such an enquiry that makes the choreographies of the Olympic ceremonies such a privileged object of analysis.

The main scientific search engines enabled the identification of articles on topics related to the study of the Olympic ceremonies. Contributions from authors dealing with cultural, sociological, and historical aspects were identified.

Of particular note is author Beatriz Garcia, who specialised in observing the cultural programmes that characterised the Olympic Games, and author Alan Tomlinson, a keen observer of the commercial and political aspects of this event. The development processes of the protocol elements have been an important point of research for some authors. Among them, Leonardo Boccia observes the transformation of the protocol, aesthetic and communicative aspect brought about by the use of technologies. Qing's study provides a comparative analysis of national broadcasters' commentaries on the Beijing Olympics (Qing et al., 2010).

A major contribution concerning the development and transformation of the Olympic ceremonies was found in the actas from the first international symposium on Olympic opening and closing ceremonies held in Barcelona and Lausanne in autumn 1995: *Olympic Ceremonies. Historical Continuity and Cultural Exchange* di Miquel de Moragas, John MacAloon and Montserrat Llinés (1996)¹. This source of information formed the basis of the path taken to reorganise the main stages of the event's transformation. Within this collection are the contributions of leading ceremony experts, producers and historians, who trace the history and different aspects of ceremonies in the modern era.

The 2018 Javier Ramírez Serrano articles *Chorégraphies aux cérémonies olympiques en tant que film de danse*, and *Danza, investigación y educación: danza e ideología (s)* entitled *La danza en las ceremonias de inauguración de los Juegos Olímpicos. Orígenes moderno* offers a perspective on the use of images and the link with the technologies that have enabled them to be transmitted to international audiences.

Miquel de Moragas Spà, former director of the Barcelona Olympic Studies Centre, has produced many works related to the development of the media in relation to the ceremonies and the socio-economic impact they have caused. Of relevance was his text: *Television in the Olympics* di Miquel de Moragas, Nancy K. Rivenburgh and James F. Larson searchable through the online archive. The

¹ <https://library.olympics.com/Default/doc/SYRACUSE/72877/olympic-ceremonies-historical-continuity-and-cultural-exchange-international-symposium-on-olympic-ce>

author Fernández Peña, approaches the Olympic Games approaches the Olympic Games by analysing their spectacular aspect, embracing the concepts of television production, and the communication and dissemination through new technologies of the Olympic brand (Peña, 2016).

A useful contribution to the historical reconstruction of the origins of the Olympic ceremonies was also found in the article by Wichian Lattipongpun: *The origins of the Olympic Games' opening and closing ceremonies: artistic creativity and communication* (2010). There is a self-published book by Myles A. Garcia: *Secrets of the Olympic Ceremonies* (2014). Although reference sources are often lacking, Garcia, also thanks to his direct testimony, deals with multiple aspects of the Olympic ceremonies, which are interesting to find insights and information that cannot be found in other sources.

Browsing through the IOC's online library made it possible to analyse official documents, such as the *Olympic Charter* and all the information sheets related to the ceremonies. The latest edition of valid documents, such as the *Ioc Protocol Guide*, the *Technical Manual on Protocol & Protocol Guide* and the *Guide for the media on the opening and closing ceremonies*, documents renewed several times over the years, has been carried out thanks to the library in Lausanne. The *media guides*, i.e. documents compiled by the organising committees (OCOG) to facilitate understanding of the ceremony, are almost all available in the Olympic Studies centre's online Olympic library. The Lausanne online library also has a compilation of articles published on the subject, as well as a list of the titles of the main, popular texts that have been written about the Olympic Games. Other references can be found at the online library of the Barcelona Olympic Studies Centre and the Los Angeles '84 Foundation.

In the area of the artistic component, one important reference was the article by the American researcher Elisabeth Hanley. Her contribution, *The role of dance in the ancient and modern Olympics* (1986), one of the few academic studies on this topic, correlates and determines the stages of the connection between dance and the Olympic ceremonies. In *The role of the Dance in the 1936 Berlin Olympic Games. Why Competition Became Festival and Art Became Politics*, she deals specifically with the uniqueness of the 1936 Berlin ceremony (2006). In addition, a research on ceremonies was conducted by Sylvain Bouchet in 2010: *Symbolique, mise en scène et dramaturgie des cérémonies des Jeux Olympiques*. Bouchet dedicates his doctoral

thesis to the ritual aspect, principles and symbolism of the Olympic ceremonies, and their dramaturgy. A large space is reserved for the figure of Pierre de Coubertin and his taste for staging his project on Olympism. The following texts have been useful to explore the subject related to the disciplinary field of dance history and dance studies: *Laban for actors and dancers* (2012) by Jean Newlove, *I discorsi della danza* (2011) by Susanne Franco and Marina Nordera and *La danza 2.0: paesaggi coreografici del nuovo millennio* (2018) by Alessandro Pontremoli. Given the nature of the research, and the lack of hard copy information, great importance was attached to the photographic and videographic material, which was used extensively. The videographic material was found on the You Tube channel, on the IOC's YouTube Olympic channel and in Internet archives. Other material was found on the official websites of the main choreographers examined on the portals of the dance companies, and of the organising agencies such as BalichWonderStudio. The photographic material was found in the official archives of the IOC, in international archives, as well as in the personal archives of the choreographers.

In researching the concept of mass, it was useful to read the text by Elias Canetti: *Massa e Potere* (2017). Concepts have been identified here that have led to a better understanding of the phenomenon 'mass' and give it a definition in a broader concept. With regard to the concept of the mass at a choreographic level, Mexican researcher Claudia Carbajal conducted a study focusing on the history of mass entertainment in Mexico from 1924 to 1940, analysing the choreographies and giving her own definition to this choreographic phenomenon.

Information on mass choreography within ceremonies, with respect to their content and design, and specifically on the professionals involved, has been difficult to obtain. Indeed, few studies have been identified with respect to an observation of the artistic component in ceremonies. It was therefore necessary to search for stories and narratives concerning the period under examination, in addition to the official documents of the organising committees, from the testimonies of the main professionals involved.

Of course, the caveats by Fiona Skillen and Carole Osborne (2015) with regards to the potential fallibility of human memory are a concern for Academic historians. However, oral history, the two researchers continue, has nevertheless

proved fruitful for those seeking to educate those social groups that have hitherto been largely 'hidden' from sports history (Skillen & Osborne, 2015).

With regard to historical reconstruction in this research, the contribution of oral testimonies was indeed of fundamental importance.

For the methodology, one of the historiographical resources used is that of the Timeline.

The analysis of facts through the documentation found allowed for a systematic observation of the succession of events over the years. Following this line made it possible to place the main stages on which to dwell in order to examine the transformation of the Olympic Opening Ceremonies (OOC). Within these, the interest in the choreographic component and in particular mass choreography helped to define further moments to observe. The search for a historical and professional concatenation between the main mass choreographers from the 1990s to 2016 led to the structuring of a mapping, an organisational chart formed by their presence and participation in the events under study.

Semi-structured interviews were therefore conducted and sent by e-mail to the choreographers Doug Jack and Bryn Walters, the leading expert of ceremonies Steve Boyd, the video designer and art director Matthias Schnabel and the two directors and producers of ceremonies Marco Balich and Ric Birch. The interviews were used as a starting point to open the dialogue with interested professionals and were followed by repeated contacts. Thanks to the network created an exchange of information with the choreographers continued throughout the duration of the study, even through less formal means such as messages on the main social networks. This favoured spontaneity and continuity of information. They provided personal information and documentation related to their history and to the planning and writing of the choreographies.

The interviews were structured by general questions, proposed to all interviewees, based on more theoretical demands, such as the definition of mass choreographies, the search for their origins and their connection to the Olympic ceremonies. Each choreographer was then asked a series of more specific questions regarding their personal experience and their relationship with other choreographers. Questions were asked about the methodology used and developed over the years and some of the design and development processes of

the work. The point of view of the professionals was substantial in understanding the relationship between choreographies and the development of technologies, media and the rules dictated by the IOC. Tracing an interconnection between the professionals and their mutual influence, one of the main objectives of this study, was possible thanks to the testimony of the professionals interviewed.

In Chapter VII a case analysis was carried out. With a view to realising a different point of observation, in which the technical contents could highlight the works of the choreographers examined, tools were defined to carry out the choreographic analysis of the three mass choreographies, one by Doug Jack and two by Bryn Walters.

From a methodological point of view, there are many researches that have developed observational methodologies of movement, both from a sporting point of view and with regard to dance. These studies can be subdivided into some that use only the human observer to carry out the analysis, and others that flank this with dedicated software that can help recognise the factors required by the research.

In the field of sport, the evolution of performance techniques has given rise to the need, on the part of technicians in the sector, for both individual and team sports, to analyse individual movements, as well as group performances, in great detail. New technological means, due to their adaptability and universality, have created both specific software for a particular sport and other softwares that can be defined as more types (Madonna & Russo, 2018).

Tracking systems involve a great deal of operator intervention and are limited to restricted areas or require the wearing of tracking devices.

In the field of dance, there are many studies dealing with image capture, tracking space used, and there are several papers defining the guidelines that a generic database exploration system should follow.

Movement analysis without the use of computerised tracking systems is based on observational methodology: it is necessary to define what needs to be observed and how to carry out the observation in relation to one's objective. In this case, software can become an ally. It could be a way to collect data and transform observation into quantitative data. This type of analysis could thus be a

combination of qualitative and quantitative analysis, thus termed a mixed method.

In the specific case of this thesis, the nature of the data is the moving image. The figure of the operator therefore becomes crucial, since there is no software geared to this purpose. In order to carry out a careful analysis, the observer must have experience in the field, have an eye trained to trace the required moments and should know how to distinguish the types of mass organisations with regards to technical form and content.

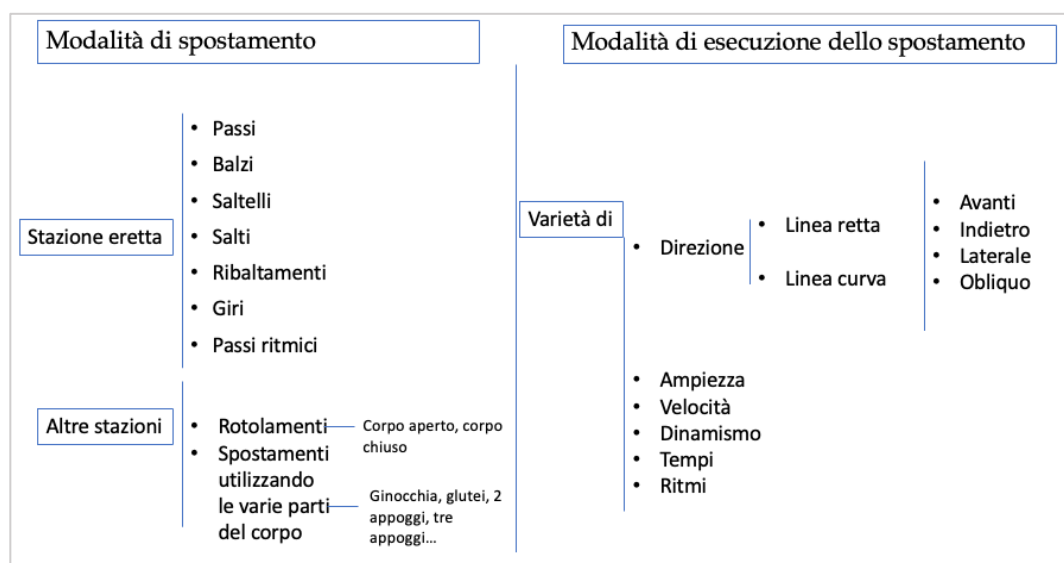
The starting point was therefore the creation of an Excel document, functionally organised according to the needs of the case study. Each choreographic frame considered has in its column its own commentary space corresponding to each of the descriptors that, as will be seen later, were selected.

Creating an observational protocol for a mass choreography requires research into several areas, this type of choreography being, as repeatedly specified, a separate category. Mass movement is a type of organisation of bodies in space for the analysis of which it is necessary to find concepts that belong to collective choreographic organisations. An example of this can be found in the technical-compositional sports that have over the years developed performance and artistic techniques that include choreographic concepts also borrowed from dance. At the same time, the need for the jury's assessment to classify sports gestures qualitatively has created a codification of both individual and team motor gestures in these sports.

Amongst such sports, Rhythmic gymnastics has a long tradition in collective specialities and there are many appertaining studies and texts. Variety and the search for motor combinations are related to the tradition of this sport, to the basic didactics, but also to the evolution of the artistic component required by the scoring code. In the composition of team exercises, in fact, the score code of the current International Gymnastics Federation requires variety in formations and links to performance types such as synchrony, choral execution, canon and contrast (FIG, 2022). In order to find references of language and modes of ensemble work, useful for the creation of the observational protocol, it was deemed appropriate to refer to some of the current leading exponents of the sport in Italy.

According to Maria Rosa Rosato and Amalia Tinto, the modalities of working together can be classified as synchrony, contrast and succession of movement, but also ligaments, over, under and around passages are to be taken into account as moments of interaction (1996). The movement modes are summarised by the authors themselves in the following table:

Figure 1. Body-space, mode of displacement and mode of execution of displacement (Rosato & Tinto, 1996, p. 9).



Having found similarities between the teamwork of Rhythmic Gymnastics and the organisation of the mass in Olympic choreographies, some reflections were made, even after examining most of the choreographies in the last ceremonies. What needs to be observed is the use of space, how the organisation of groups or subgroups of performers takes place and the technique of body movement. By comparing several choreographies with the same parameters, observations can be made as to which changes have taken place and which points of commonality between the choreographies analysed can define a style or technical continuity between the choreographers.

As a result of the research and depending on the desired results, the following descriptors were therefore identified:

- Use of space: where performers are placed on stage;

- Body space: pairs, triplets and small groups, formations;
- Individual movements: steps, running, jumps, spin, dance steps;
- Group movement: synchrony, succession, canon, contrast;
- Line-ups: rows, circles, geometric shapes, sinuous shapes;
- Image: what kind of image appears;
- Video shooting: what kind of framing is done;
- Video projection: if they are present and how.

There was also a perceived need to derive some data concerning the framing, the point of view and the images created. According to Peña, in fact, the realisation of a ceremony is a combination of shots of concrete actions with general plans as it is increasingly implied that the performance is for the home audience (2006). It is the intention here to make an observation of the images transmitted for the purpose of understanding how the choreography itself is communicated. It is therefore not the aim to carry out an analysis on the development of broadcasting and media technologies. For these issues we refer to the studies by the authors Peña, Hernández and Ramirez. With regard to viewpoints, researcher Ramirez divides these into two types: audiovisual footage, whose viewpoints are impossible even for the audience present, and scenic footage, whose frames are captured from a practicable position for a spectator (2018). In the observation parameter of the video shooting point of view, the terms used encompass both categories and to be simplified are defined as follows: close-up, medium plane, general plane and aerial view. An observation grid was also created for lighting and video projection considerations.

With regard to the piece of music related to the choreographies examined, some information was gathered from the media guides and a personal commentary was made regarding the characteristics of the piece and its relationship to the choreography.

After having identified the descriptors, the grid was organised as per the example in Tables 1 and 2 below. All descriptors were placed on the top row and the choreographic frames on the left column, indicating exactly the minutes and seconds of the beginning and end of each choreographic segment analysed. The spaces have been used to write the descriptions of the choreographic parts examined.

Table 1. Personal processing of the observation of a mass choreography, part 1.

Title of the Choreography						
Timing	Use of space	Body space	Individual movements	Group movements	Line-ups	Image
Frame 1						
Frame 2						
Frame 3						
Frame 4						
Frame 5						
Frame 6						

Table 2. Personal processing of the observation of a mass choreography, part 2.

Title of the Choreography		
Timing	Video shooting	Video Mapping
Frame 1		
Frame 2		
Frame 3		
Frame 4		
Frame 5		
Frame 6		

Therefore, the official videos transmitted by the IOC were observed, the official OCOG documents such as the Media Guides, which contained the basic elements of the choreography project, were consulted. These materials were complemented, when present, by unedited back-stage video contributions as well as oral testimonies from some of the choreographers involved.

The video analysis for each choreography identified several moments, several scenes, determined by changes in framing or the presence of different images and formations in the field. These moments were defined by their timing, i.e. by marking the exact start and end minutes of the frame under observation. Each scene was divided and analysed through the use of the observational parameters described above. The choice of descriptors was decisive in order to carry out a precise observation. Thus, the characteristics were identified and a protocol prepared to carry out the general and specific description of each, individual choreography.

The starting point for this protocol and the addition of the analysis sheet with descriptors created the complete protocol, which was structured as follows:

1. Description of the context and the choreography project;
2. Information sheet with credits;
3. Choreographic analysis with descriptors (tab. part 1 and part 2);
4. Choreographic description with technical and dramaturgical commentary;
5. Observations and reflections.

The analysis carried out by means of these tools made it possible to have a clear picture of the choreographic processes and characteristics of each work and enabled an accurate comparison of the choreographies examined.

II – THE OLYMPIC CEREMONIES

II - THE OLYMPIC CEREMONIES

In the document produced by the IOC, whose title is *The opening ceremony of the Games of the Olympiad*, the ceremonies are described in the historical introduction as follows:

The modern Olympic Games encompass more than just the drama and excitement of a sporting competition. Thanks to the vision of their founder, Pierre de Coubertin, and the creative efforts of various host organisers, the ceremonial aspects of the Olympic Games have served to set them apart from other international sports competitions. The protocol and splendour of the Olympic ceremonies, which go hand-in-hand with the celebration of the Games as everyone knows them today, make this event a unique and unforgettable festival. Although there was an Opening Ceremony at the Games of the I Olympiad Athens 1896, it bore only the slightest resemblance to today's ceremonies. In fact, some of the elements of Olympic protocol that have become a part of today's traditions were only gradually established over time through a series of adaptations to the ceremonies of early editions of the Games (IOC, 2022c).

The IOC in the Factsheet points out that the ceremonial aspects of the Olympic Games have served to distinguish them from other international sports competitions, but also that the ceremonies as we know them today are far removed from the original ones (IOC, 2022c). Indeed, the Olympic Ceremonies (OC) have undergone considerable transformations over the years, spanning more than a century of history and being influenced by the context and national identity of the host country. Today, they represent an enormous project, a showcase to the world on which many expectations are placed by the international television audience, as they have become the most important cultural and creative event of the Games (Roca, 1996). Due to their particularity, the current structures of the opening and closing ceremonies of the Olympic Games allow for a significant cultural presentation by the host country (Moragas, Rivensburg, & Garcia, 1995). Linda Tenenbaum defines an OC as a unique

phenomenon represented by a miscellany of theatre, concert, sport, circus, parade and military spectacle, capable of offering a sample of all these to both international and local audiences in a few hours (2020).

The grandeur of the event also manifests itself through its numbers. Producer Marco Balich states that the spectacle of a ceremony reaches 2.7 million people against the 1.5 million of the World Cup final, which contains the largest casting, between 10 and 20 thousand volunteers, and is one of the most expensive events in the world, between 60 and 250 million euros (Pariante, 2022). The increase in the number of participating countries and the increase in the number of disciplines present is further testimony to the importance that the Olympic Games (OG), and consequently this event, have assumed over the years. The first OG in the modern era took place in Athens in 1896, with the participation of 241 athletes from 14 nations and 43 competitions in 9 sports (IOC, 2022b; Goldblatt & Acton, 2012; Horne & Whannel, 2020). With each successive edition, the numbers increased, culminating in the last summer edition in Tokyo in 2021, which was attended by 11420 athletes from 206 nations and during which 339 events in 46 sports were contested (IOC, 2023). Likewise, the athletes' parade testifies to the growth of the event. The IOC reports that the number of delegations attending the ceremonies has grown from 22 in 1908 to 206 in Tokyo 2020 (IOC, 2022c).

In the IOC's vision, the opening ceremony reflects the tradition and humanistic principles of Olympism, capturing the flavour and culture of the host nation, as well as preserving continuity between Games (IOC, 2010).

2.1. DE COUBERTIN AND THE CEREMONIES

Pierre de Coubertin (1863-1937), promoter of the modern Olympic Games, envisioned the ceremonies as the hallmark of a sporting event that was more than just an athletic spectacle. He, wanted to use the Games above all to educate, stimulating a religious feeling and adopting the cultural forms of antiquity for the Olympic ceremonial (Alkmeyer & Richartz, 1993). To do this, he wanted to replace the gods of the ancient Greek games with modern idols, translating the social programme into images and emotions (Alkemeyer & Richartz, 1993). Coubertin thus immediately gave importance to the protocol aspect and its pedagogical nature, which had to be projected in the form of a ritual and its

staging (Carrard, 1996). Alkemeyer reports that the ceremonial, according to the Baron, was also to distinguish the OG from any other international competition, as if to create what he called his modern 'muscle religion' (1993).

The history of Olympism, according to Bouchet, is indeed deeply linked to religion, and the religious legacy was the inspiration for the staging of the opening and closing ceremonies that Pierre de Coubertin arranged for the first OG in Athens in 1896 (2010). François Carrard in his contribution to the Barcelona-Lausanne in 1995, states that every ceremony comprises a double aspect: the form and the religious (Carrard, 2016). Form is the main element of any ceremony and includes an impeccable observance of predefined structures, recognisable to those who witness it. Participation in the Olympic ritual, with its solemnity, contributes to the creation of the kind of universally recognised religion that gives rise to a message of conviction, which must not convey doubts and questioning (Carrard, 2016).

The place that Olympic ceremonies occupy today is also the result of the interpretation of the social and pedagogical reform of the late 19th century, but also of the special importance he wanted to give to the presence of the arts (Serrano, 2018). Throughout his life, in fact, Pierre de Coubertin tried to reconcile his two passions, sport and art (Bouchet, 2010). The construction of this union produced many projects in the field of both the conception of the sporting event and the design of the Olympic ceremonies. When it came to focusing on the 'formal planning' of the Olympic Games, Coubertin was interested in the aesthetic and ritual context of the celebration, imagining a complete 'work of art', showing less interest in the actual competitions that he saw as entrusted to the various sports federations (Alkemeyer & Richartz, 1993).

Coubertin, even before being the restorer of the modern Olympic Games, was a pedagogue, a role that gave him international recognition (2015). Through his countless travels, he came into contact with the experts of the movement of the time and the Olympic idea reached Coubertin from many directions. His trip to the United States in 1889, when a great deal of interest in Parisian circles was directed overseas, confirmed his interest in physical education and sport. America gave Coubertin the first evidence of the mass popularity of spectator sports. When it came to defining the 'Olympic idea', Coubertin deliberately formulated general statements that the various groups and social systems could accept and

with which they could identify. According to Mankowska he thus did not only aspire to restore the ancient form of the games, but he wanted to revive the principles of this event with the conviction that they would provide an educational stimulus to his country and the whole of humanity (M2010). This project was also to take place outside of the sporting competitions, and bring with it the concepts of universality, balance, harmony and artistic sense inspired by the Greek philosophy to which the ancient Olympic ideology tended (Lattipongpun, 2010). He believed that the interrelation between sport and art, according to the Greek concept of eurythmy, should reach both athletes and spectators (Ramirez, 2018). His concept of harmony was influenced by John Ruskin (1819-1900) but also by figures such as Richard Wagner (1813-1883), and the pedagogue and composer Émile Jaques-Dalcroze (1865-1950).

Coubertin's reputation as a renewer was earned for having succeeded in making his dream of the revival of the Olympic Games a reality, rather than for having dreamt the idea of the revival itself (The Olympic idea, 2006). He convened the members of the IOC in Paris in May 1906 for a 'Consultative Conference on Arts and Letters'. The 1906 conference included a section on the organisation of sports events but, as Bouchet states, the link between sports performances and the staging of the opening and closing ceremonies of the Olympic Games was not immediately apparent (2010). Following the meeting, Coubertin matured ideas on how to realise a celebration of the modern Olympics that could combine Art and Sport and that had the task of generating an atmosphere of celebration similar to that of the ancient Games, including the fine arts as part of the modern Games (Hanley, 1986). Coubertin manifested, on that occasion, the need to reunite a long-separated 'couple', muscle and mind, by giving a lecture entitled 'The Great Marriage'. Here, the Baron called for reflection on what measure to use to bring the Arts and Humanities into the celebration of the modern Olympics (Hiroshi, 2009). Thus, the creation of five competitions was proposed, to be awarded every four years, with unpublished works directly inspired by the idea of sport. This gave rise to the *Pentathlon of the Muses*, an organisation of artistic competitions in the fields of architecture, sculpture, painting, literature and music (Hiroshi, 2009). The inclusion of the five artistic competitions in the Olympic Games will be of fundamental importance for their future and will have a strong impact on the members of the IOC and each of the

Organising Committees of the Olympic Games (Hiroshi, 2009). Coubertin, even when four Olympic Games had already taken place, continued to argue that ceremonies with appropriate ritual should be the distinguishing element of the Olympic Games from all other sporting events called World Games (Alkemeier & Richartz, 1993). The Baron's determination was based on the fact that he wanted to revive the ancient principles of this event, with the conviction that they would provide an educational stimulus to his country and to humanity as a whole (Mankowska, 2010).

The art competitions evolved during the editions held from Stockholm 1912 to London 1948, after which the IOC decided to exclude them from the Olympic programme. From the Helsinki Olympic Games in 1952, art and cultural programmes were included, but no longer awarded Olympic medals (Hiroshi, 2009).

2.2. CEREMONIES FROM RITUAL TO MASS SPECTACLE

Ceremonies in their transformation have been influenced by factors of a different nature, and some significant stages, which will be analysed later, are the product of adaptations to the historical moment and technological developments. With the advent of new communication techniques, as Goldberg states, ceremonies were transformed from an event with rigid rituals and essential organisation into a great mass spectacle attracting one of the largest audiences in the world (1997). The communicative power that such events have therefore acquired over the years has been one of the most significant factors in their transformation. Garcia (2008) argues that according to John MacAloon, what is presented in an Olympic ceremony must reach a universal audience in a simultaneous context and must be easily transmitted and interpreted through the media. As such, the event according to him must strive to be "internationally sensitive to very different cultures and to avoid offending highly diverse and highly politicised social and cultural groups" (cited in Garcia, 2008, p. 366).

François Carrard, director general of the IOC during the Lausanne Symposium, identifies the existence of some models of interpretation of ceremonies (Carrard, 1996). The first he believes belongs to Coubertin himself and his well-known pedagogical approach. In addition to this, he identifies the point

of view of Liselotte Diem (1906-1992) wife of Carl Diem (1882-1962) organizer of the 1936 Berlin Olympic Games. Carrard reports that Liselotte Diem's point of view was that attention on the event was ensured by ceremonial acts that increased its importance by giving this dignity and solemnity. The latest model of interpretation of the ceremonies belongs to the American researcher Professor John MacAloon who recognizes the Olympic ceremonies as a rite of passage and separation between ordinary life and the special life of the competition period. This author considers the Olympic Games as a journey away from daily life and routine from which athletes and the public come back changed, more or less radically. The ritual of the Olympic ceremonies, in his view, is composed of national symbols and the symbols of the international community. The parade of the athletes with their emblems and costumes mark the first phase of the rite, the Olympic flag entering the stadium, the anthem and the torch enhance the central moment of the ceremony, while the third phase consists of the music and dance show (Carrard, 1996).

Feng-mei Li states that the high visibility of ceremonies is now widely used to validate national identity and to express the prestige and affirmation of the host country globally (2013). He also asserts that, due to the continuous interaction and competition, some organising countries overexploit their own country's culture, however, risking weakening and distorting the value of the event and even endangering the Olympic spirit (Li, 2013). According to Beatriz García, these large events, due to a strict time concentration and a total dependence on television needs, have turned their ceremonies into gigantic spectacles in which the surprise factor seems much more relevant than the meaning and coherence of the cultural discourse presented (Garcia, 2011). Despite the fact that the organising committees believe that hosting the Games is an opportunity to improve their image abroad, this aspect is less relevant than is supposed. However, being in the eyes of the world has proved to be a compelling motivation for cities and countries to undertake such a demanding and costly undertaking as hosting the Olympic Games (Moragas et al., 1995).

The cultural values of such an event, Moragas observes in his 1992 text *Culture, symbols and Olympic Games*, are the consequence of a system of interaction between the influential institutions of the host city, a body that sums up its political and cultural personality (cited in Garcia, 2008, p. 362). However, it will

be the task of the international media, Moragas continues, to convey this constructed image to the world in a manner that is both representative in the eyes of the local community and easy for foreigners to understand. Garcia reflects on the fact that an over-commercialisation of values could, however, lead to an impoverished representation of local culture, which is not always identified in its entirety as it is stripped of those elements that are unattractive and less 'visible' to the media (Garcia, 2008).

The opening and closing ceremonies are live shows and, at the same time, major television products. This can lead to a different perception of the event. Part of the production process involves changes by the broadcasters to the international signal of the host channel. Thus, according to Miquel de Moragas, the same Olympic ceremony can be transformed into different ceremonies depending on the country in which it is broadcast (1995). This can occur as a result of structural, verbal and visual changes made by international broadcasters. In fact, the international signal is constructed solely from the images and sounds of the live broadcast and broadcasters have to add verbal narration or add graphics produced by themselves, which causes the organisation to lose control of the content (Moragas, 1995). Communication revenues from sponsorship, the sale of television rights and the licensing of Olympic symbols are currently the main capital of the Games organisation.

Currently, artistic creativity and the commercialisation of the event are fully integrated into the OCs. As a consequence of this analysis, it is possible to understand the complexity and interdisciplinary nature of the contents within the Olympic ceremonies and to better understand their evolution, it is necessary to perform a historical reconstruction.

2.3. HISTORICAL BACKGROUND

The creation of a timeline is intended to highlight the introduction and development of the use of performing arts in general and mass movements in in OCs. in particular. The presence of the artistic programme within them is currently enshrined in the official documents of the IOC, which, as will be discussed in more detail later on, emphasise its presence on a par with the other protocol elements.

Referring to the studies on the subject carried out by Elisabeth Hanley and Javier Ramírez Serrano, it is pointed out that in their research, and in the titles of their works, the term dance is used as a reference to all forms of artistic performance that use the body as an instrument of language. Although dance has always existed and been an integral part of celebrations and rituals in all cultures, in agreement with Hanley it is possible to say that this is not the only form of bodily expression (1986). In the writing of this paper, the term dance has been used only to talk about certain specific body techniques. A need for terms that can embrace more styles of the performing arts as an artistic component or specifically mass movements has been identified. As the thesis progresses, more accurate and more specific terminologies will be introduced to create classifications and categories if necessary. The focus of the historical path will be placed on those choreographic movements that, within the OCs, used the body as the main medium of communication, and that created moments of spectacle and solemn celebration. As previously pointed out, there is little comprehensive official documentation on this subject, especially for the first decades, for which we have to refer to the narrative aspect and to a lesser extent to images and video documentation. The aim is to create the historical basis on which to introduce the international scene of the choreographers examined.

2.3.1. First rituals

With dance having immemorial origins, and movement being part of man's nature, the artistic component has never been entirely absent when it comes to pre- and post-Games rituals. In the first edition the athletes were mainly European, but Coubertin aspired to increase the number of participating countries. In Athens 1896, the organisers staged an initial opening ceremony, inspired by past celebrations of the ancient Olympic Games (Hanley, 1986). This ceremony was short and simple but was recognised as the archetype of this type of event. It featured some elements that, with subsequent editions, became essential parts of the Olympic ceremonial (Llinés, 1996). The Olympic anthem was played and sung for the first time but there was not yet a formal athletes' parade, which had to wait until the 1908 edition to become a periodic protocol element. Plans were already in place to create a spectacle. The host committee planned to stage folkloric dances and spectacular dances with local costumes, the

participation of traditional bands, as well as performances with themes from liberated and occupied Greece. The committee believed that if there was adequate lighting with electric lights even inside the Panathinaikos Stadium, the festivities could be held in the evening, thus providing a greater impression for the spectators (Georgiadis, 1996). This programme, however, did not come to fruition in its entirety, and even the full evening performance had to wait decades, until the Sydney 2000 edition. Of the first ceremony in Athens, the few photographic records attest to an essential ceremony and a very discreet entrance of the athletes into the stadium (Llinés, 1996).

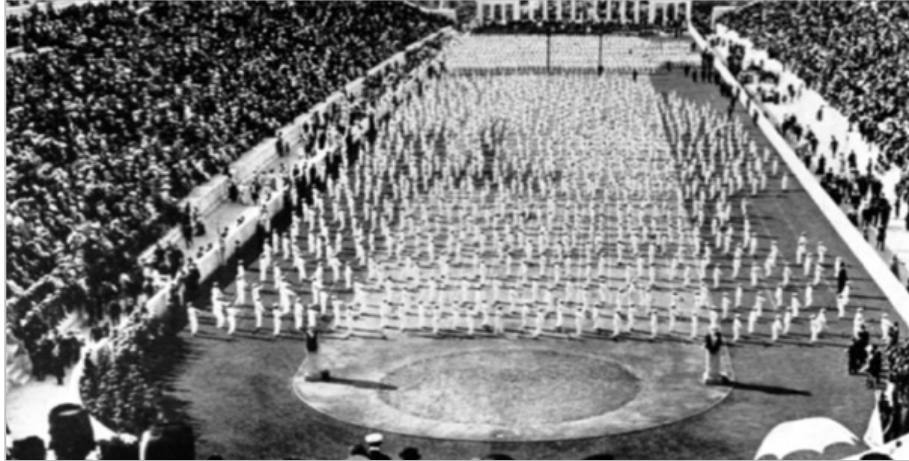
With respect to the two ceremonies that followed, Paris 1900 and St. Louis 1904, there are no records of OOC and OCC. The Paris Games were a series of sporting competitions within the World's Fair and in St. Louis there was an entrance parade for the athletes as a ritual (Llinés, 1996).

2.3.2. Atene 1906

In 1906, the Greek Olympic Committee organised an edition of the Games in Athens, 10 years after the first, but this was never officially recognised by the IOC. Norbert Müller (1996) states that these Games could have marked the end of the Olympic Movement had it not been for their success. Special guests, such as the royal family, were present for the opening ceremony of the Pan-Hellenic Games, and it was this occasion that proposed a real parade of athletes performed in alphabetical order and with the host nation at the end of it (Georgiadis, 1996).

The ceremony began with the laying of a laurel wreath at the statue of Averoff (the man who had financed the new marble cladding of the stadium). After the entrance of the royal family, Georgiadis said that the Panathinaikon stadium was filled with thousands of students dressed in white and blue who performed a mass gymnastics choreography (1996). This was such a significant edition that a key role in the 1906 opening ceremony was played by the gymnastics performance of Greek, German, Swedish and Danish teams. For the first time, therefore, collective gymnastics became part of the ceremonies even if not yet officially.

Figure 2. Mass Choreography, Ceremony Athens 1906 (Alamy.it).



2.3.3. The athletes' parade as a mass presence

The 1908 London Games was the first Olympic Games opening ceremony with a formal parade of athletes and a parade of nations, which took its cue from the 1906 Panhellenic Games in Athens (Llinés, 1996). The athletes' parade is the occasion in which the nations present themselves to the public and is one of the longest protocol moments of an Olympic ceremony. The orderly entry of the athletes into the field marks the first mass presence inside a stadium. It takes on a spectacular value as it is organised with precise spaces and rhythms. In the London stadium there were 40,000 spectators. Müller states that the ceremonies in London were overall well organised, as were the ideas of the organisers who introduced the raising of the flag of the country of the champion who had achieved victory. The organisation of the protocol, given its precise staging, was taken as an example for subsequent Olympic Games (Müller, 2016). In this edition, Llinés states that there was for the first time an official closure that took place during the presentation of medals and diplomas. The same protocol occurred in the next edition, the Stockholm Games in 1912 (Llinés, 1996).

Figure 3. 1908 Summer Olympics in London: Display of the British women's gymnastics team (Illustration in the "Fourth Olympiad 1908 London Official Report" published by the British Olympic Association in 1909" in Wikipedia, n.d.).



Figure 4. Stoccolma, 1912. Women's gymnastics exhibitions in the Stadium. A frame of the official video. <https://olympics.com/en/video/stockholm-1912-general-review>

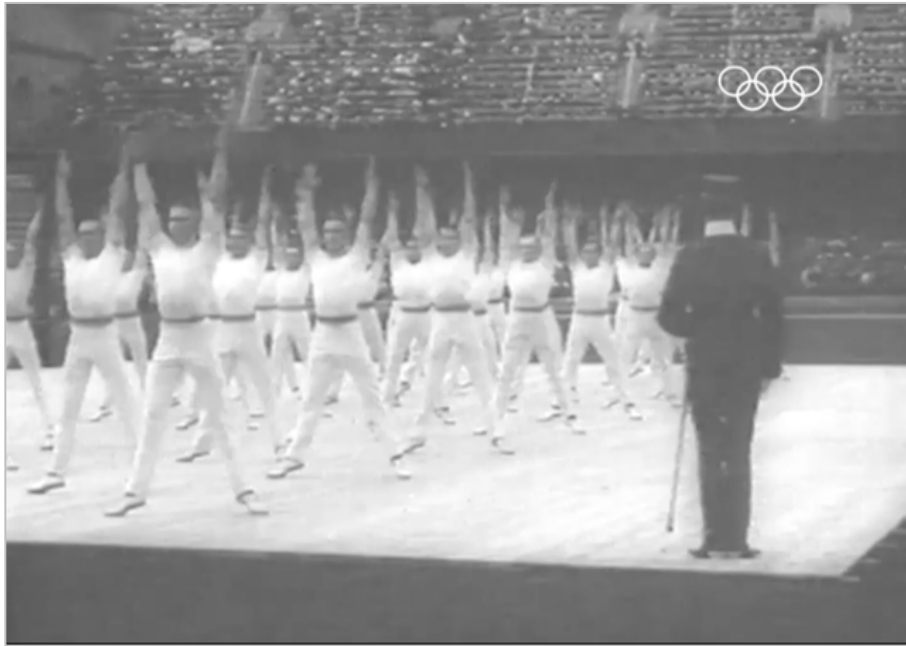


The fifth Olympic Games in Stockholm in 1912 according to Müller (1996) reflected Coubertin's ideas, assisted by the participation of the Swedish people who had a deep culture for tradition and sport. In addition to their 100-year-old gymnastic culture, they had knowledge in numerous other modern sports and had an organising committee that operated with new types of management (Müller, 1996).

The art competitions began during the 1912 edition and continued until London 1948, after which the IOC decided to exclude them from the Olympic programme.

With regard to protocol aspects, the Stockholm Games did not deviate from those held previously in London and made no new contributions to the ceremonies (Llinés, 1966) apart from, as Müller (1996) states, during the athletes' parade when Sweden, the host country, entered last. The displays of gymnastic exercises that featured in Athens in 1906 were also seen in this edition. Although they were not yet included in the ceremonies, gymnastics performances remained a constant until 1952 (Buschmann & Lennartz, 1996). Müller (1996) states that the opening ceremony in Stockholm was also a great example for the subsequent editions in terms of the final approach to protocol.

Figure 5. Stocolma, 1912. Men's gymnastics exhibitions in the Stadium. A frame of the official video. <https://olympics.com/en/video/stockholm-1912-general-review>.



The 1916 Games were not held because of World War I, which caused the first cancellation of the event in modern times.

2.3.4. The protocol development

In the following two decades, the ceremonies underwent important protocol evolutions that marked the transition to a structure more similar to that of today. (Llinés, 1996). The Antwerp Ceremonies in 1920 introduced the three fundamental protocol pillars: the flag with the five circles on a white background was used for the first time in both the opening and closing ceremonies, the athletes' oath was introduced, and the symbol of peace represented by the flight of doves was introduced (Llinés, 1996).

During these years, the artistic component made little progress. It was not an official part of either the opening or closing ceremonies, nor of the five artistic competitions, which were removed from the Olympic programme in 1948. It did

not appear in Paris in 1924, nor in the first Winter Olympic Games held in Chamonix in the same year (Hanley, 1986).

During the 1928 Games in Amsterdam, however, the artistic competitions expanded to include not only the five areas mentioned above, but also theatre, drawings, reliefs and medals, as well as a special exhibition of painting, sculpture and architecture, demonstrating an increased interest in the arts in general (Hanley, 1986). In 1932, opening and closing ceremonies were planned in Los Angeles and Lake Placid, but again without the use of the arts component or, as Hanley (1986) specifies, dance.

The 1936 Olympic Games will go down in history as an extremely controversial event due to their political overtones, as they were used as a tool for Nazi propaganda. The performing arts were of great importance and were strongly influenced by the desire to propagandise the Nazi political message, as was everything that was part of the ceremonial. The dissemination of images was boosted by the use of television, with the first closed-circuit broadcast, and the introduction of film documentation with the film *Olympia* directed by Leni Riefenstahl.

A novelty introduced at this Olympiad was that Carl Diem, secretary general of the organising committee, had his idea of starting the torch from Olympia accepted. During the opening ceremony, after the raising of the Olympic flag, the torch entered the Stadium (Llinés, 1996).

The growing importance of dance in the society of those years also influenced the organisers of the Berlin Olympic Games. The Germans had the ambition to add dance as an art form to the artistic competitions but, as Hanley (2006) reports, the IOC did not grant such permission.

Therefore, well-known choreographers and dancers of the time, such as Rudolf von Laban, Mary Wigman and Harald Kreutzberg, were brought in to take part in the realisation of side events of the Olympic programme. Laban was directly appointed to direct the triennial celebration of German dance at the *Dietrich-Eckart Freilichtbühne* open-air theatre (Hanley, 2006). The choreographer trained thousands of dancers and produced an innovative show. Reich Propaganda Minister Josef Goebbels, who was present at the rehearsals, forbade the staging of this show, believing it to be poorly choreographed and had nothing

to do with Germans (Hanley, 2006). Laban was in fact not aligned with Nazi ideology, so much so that he was forced to emigrate just over a year later. In his historical review, Hanley (1986) relates that Laban transformed his rejected project into another, entitled *International Dance Competitions on the Occasion of the 11th Olympiad Berlin, 1936*. This programme saw the participation of 14 countries, and although the organisers had advocated Martha Graham's participation, the dancer did not represent the United States of America for this event.

However, another artistic event was the 'Pageant of Youth', a spectacle that made great use of the masses and was staged by the general secretary of the organising committee Carl Diem (Hanley, 1986). As Hanley reports from the verbatim words of Richard Mandell in *The Nazi Olympics*:

Row after row of boy and girl gymnasts, planted on the brilliantly illuminated sward, swayed and stretched like animated tulips. The science and precision of movements which, of course, owed a great deal to the German experience with festivals of the 'Turnerschaften', were softened by flowing draperies. Then the best ballet dancers in Germany executed perfect maneuvers to German classical music (Hanley, 1986, p. 220).

The grandeur of the spectacle presented the night before the ceremony and the power of its images represented the apex of the instrumentalisation of mass gymnastic events as a demonstration of power and control by the dictatorial regime.

2.3.5. First steps of the artistic component in ceremonies

After a series of editions of the Games that did not bring any particular novelty in terms of the artistic component, a first example of innovation is to be found in the enhancement of the protocol segment connected with the arrival of the Olympic torch, when the artistic component was still an external element of the ceremonies. After the introduction of this element in Berlin 1936, performances were organised for Tokyo 1964 and Mexico City 1968. Hanley (1986) highlights the significant display of ancient and modern ritual dances for Mexico City when 500 dancers staged the New Fire Festival under the pyramids of Teotihuacan.

Something in those years had already started to change as in the OCC of the Olympic Winter Games in Oslo in 1952, there was a dance performance by two ice skaters followed by firework displays. Following the example of the previous winter ceremony, there was also an ice pair dance programme at the OCC in Grenoble in 1968 (Hanley, 1986).

2.3.6. Mass choreography enters the ceremonies

Munich 1972 marks a significant change. Mass movements with an artistic purpose became firmly established within the Olympic ceremonies. After the athletes had entered the field, 3,200 schoolchildren from the city of Munich performed on the athletics track that had been left free, wearing yellow and blue dresses and holding a bow of flowers, creating a mass choreography (Hanley, 1986). A further choreographic segment, in agreement with Llinés, was during the handover of the flag from the mayor of Munich to the mayor of Montreal, which gave way to a display of Bavarian and Quebec folklore (1996). The handover of the official Olympic flag from Mexico City to Munich was also accompanied by music and dances typical of Mexican folklore followed by a Bavarian folk dance performance. The character of the ceremonies thus headed towards a transformation since, as Schantz (1984) points out, the intention of the Munich OCOG was to depart from the 1936 Berlin ceremonies and embrace values such as social equality and harmony between people by involving the audience in the stands more closely. This was also made possible by the care taken with the spectacle, the less militarised protocol and the employment of thousands of performers, mostly children. Unfortunately, the mass artistic programmes planned for the closing were suspended and replaced by the observance of a silent salute in front of the authorities' box (Hanley, 1986).

At the opening ceremony in Montreal 1976, the athletics track also offered plenty of space for mass performances. Local folklore was present during the handover of the flag from the city of Munich to the city of Montreal, with performances by Bavarian dance troupes and dancers from Montreal (Hanley, 1986). The ceremony, states Llinés, continued with the entrance of hundreds of Canadian girls and boys who presented group choreographies. The performance of a choral choreography by Montreal schoolchildren dressed in the Olympic

colours alternated with gymnastic performances of artistic and rhythmic gymnastics. Also during the closing ceremony, Llinés specifies, there was a mass performance with 500 children creating the shape of the five Olympic rings (Llinés, 1996).

The 1980 Moscow Olympic Games represented an amplification of the artistic and choreographic programme that had been seen up to this point. The duration of the ceremony was about three hours. The stage space changed shape. From the use of the athletics field, the entire football pitch was used. After the athletes left the field, more than 16,000 performers performed multiple mass choreographies occupying the entire parterre. There were choreographies with young boys dressed in the traditional costumes of the 15 Soviet republics (Hanley, 1986). Mass gymnastics performances were performed using artistic gymnastics, rhythmic gymnastics, acrogym and trampolining techniques. The stands were used to perform mass choreography with the use of coloured cards, called card stunts. The stadium, which can now be called the *Stadium Theatre*, will provide space for the great mass choreographies that will continue to feature in the Olympic panorama.

In accordance with Hanley (1986), the Moscow ceremonies were mainly focused on the total inclusion of the artistic component and its representation. In line with the thinking of Llinés (1996), it can be stated that the Soviet mentality profoundly marked the style of the spectacle, through the organised mass of athletes and gymnasts.

The Moscow ceremonies and the subsequent Los Angeles '84 ceremonies, which will be discussed in Chapter IV, will be influenced by the Cold War and by the relationship to the historical period the world was going through.

2.4. CLASSIFICATIONS OF CEREMONIES

After having retraced the stages that brought the artistic component into the Olympic ceremonies, and before continuing with the historical reconstruction, a subdivision can be identified which, taking its cue from the classifications offered by several authors, aims to underline the times and ways in which these moments of entertainment have become an integral part and driving element of the ceremonies.

Researcher Jiyun Kim (2016) proposes a subdivision of the OOC that sees three phases. The first moment, which he defines as primitive, refers to the first editions, from Athens 1896 to Berlin 1936, where no artistic programmes are evident. The second period is from the emergence of more spectacular protocol elements, such as the arrival of the Olympic torch and the athletes' parade, to the great change evidenced from the late 1990s to 2000, where we see, according to Jiyun Kim's analysis, a change in the meaning and value of the event. There is a technological development with a different commercial approach, i.e. a greater interest in the national economy and its financial involvement. According to Jiyun Kim, the opening ceremony of the Olympic Games not only served as the main instrument to embellish the national identity and economy, it also accelerated the process of changing the meaning and value of the event (2016).

In MacAloon's (1996) opinion, there are three models concerning the production and organisation of ceremonies: the impresario model, the cultural expert model and the author model. For the first model, MacAloon refers to those ceremonies that have entrusted major impresarios of television and advertising film production with the staging of a ceremony. Examples are David Wolper in Los Angeles, Lluís Bassat in Barcelona or Don Mischer (also from Los Angeles) in Atlanta. For the second model, the author refers to the management of ceremonies by those closer to the world of artists, managers and culture. An example MacAloon identifies is Tommy Walker and Ric Birch for Los Angeles, Pepo Sol and Manuel Huerga for Barcelona and David Goldberg for Atlanta (1996). The third model, defined as 'authorial', is that represented by the presence of a single multimedia artist, a creative, who can through his or her project provide a unity of vision for the work. An example can be found in the Albertville ceremony with author Decouflè, for which the French press called the 1992 winter ceremonies "decouflante".

On the basis of the elements examined in the historical investigation, and the analysis of the previous classifications, a personal classification is proposed below. It is possible to identify two quite distinct historical periods based on the relationship of the artistic component to the ceremonies.

To the first category belong the editions of the Olympic Games, precisely from 1908 until the end of the 1960s, during which multiple musical, theatrical and choreographic artistic events took place alongside, but not within, the

opening and closing ceremonies. These forms of performance art, including mass gymnastic performances, took place sometimes before and sometimes after the ceremonies. In this category, one should also include the art competitions organised by Coubertin in parallel with the sports performances, starting with the 1912 Olympic Games in Stockholm and ending with the 1948 Games in London, and the celebrations that were staged for the arrival of the Olympic torch in the host city, as in Tokyo 1964 and Mexico City 1968.

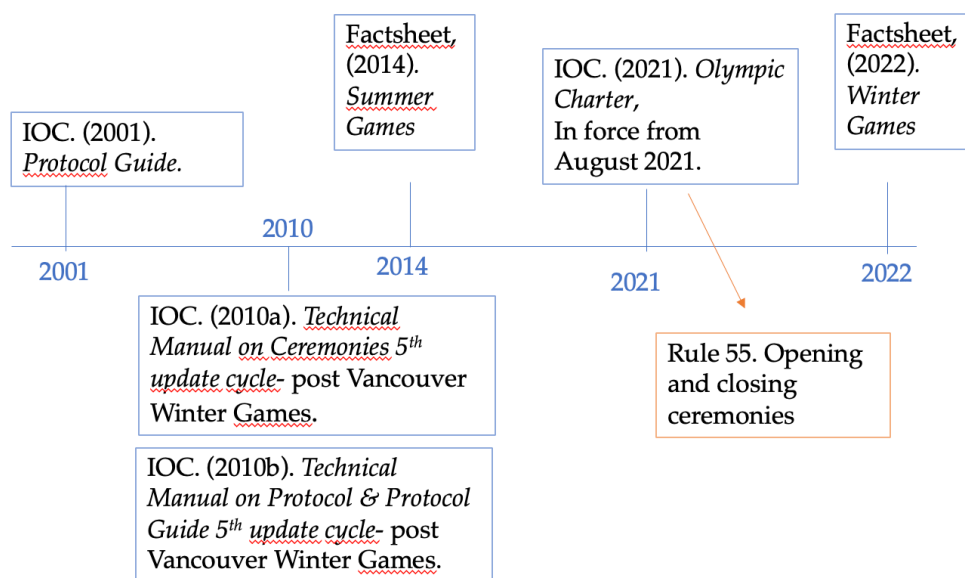
In this early period, however, there are two winter ceremonies, the one in Oslo 1952 and the one in Grenoble 1968, in which the first two artistic performances, both by ice skaters, appear.

The second historical period saw the definitive entry of the artistic component into the OCs, specifically from Munich 1972. From this edition onwards, there was an exponential growth of massive artistic proposals and different forms of performance art. It is from this time onwards that it is possible to identify the organisational models presented by John MacAloon.

2.5. THE IOC PROTOCOL

The documents that lay down the rules to be relied upon for the organisation of an Olympic ceremony are more than one, and they have been renewed throughout the life of the International Olympic Committee. The following analysis stems from the need to better understand how much the IOC accompanies the organising committees in the design of ceremonies. Particularly with regard to the artistic component, it is interesting to see how this issue is dealt with in official documents.

Figure 6. The official IOC documents that are related to the artistic component in Olympic Ceremonies in a personal scheme.



Currently, the organising committee of an OCOG (Organising Committee for the Olympic Games) must first refer to the Olympic Charter, where Rule No. 55 lists the protocol guidelines for the opening and closing ceremonies in three points:

55. Opening and closing ceremonies

The opening and closing ceremonies shall be held in compliance with the IOC Protocol Guide and other protocol-related requirements set forth in the Olympic Host Contract.

The contents and details of all scenarios, schedules and programmes of all ceremonies must be submitted to the IOC for its prior approval.

The Olympic Games shall be proclaimed open by the Head of State of the country of the host by pronouncing either of the following sentences as the case may be:

- if at the opening of the Games of the Olympiad:
I declare open the Games of ... (name of the host) celebrating the ... (number of the Olympiad)... Olympiad of the modern era.

- If at the opening of the Olympic Winter Games:
I declare open the ... (number of the Olympic Winter Games) Olympic Winter Games of ... (name of the host).

During the entire period of the Olympic Games, including all ceremonies, no speeches of any kind may be held by any representative of any government or other public authority, nor by any other politician, in any venue placed under the responsibility of the OCOG. During the opening and closing ceremonies, only the IOC President and the President of the OCOG are entitled to deliver short addresses (IOC, 2021a, p. 99).

The *Olympic Charter* is the codification of the fundamental principles of Olympism and the rules and standards adopted by the International Olympic Committee (IOC). This document is a kind of regulation concerning the organisation, actions and functioning of the Olympic Movement and establishes the prerequisites for the celebration of the Olympic Games. Although it was first published in 1908 under the title *Annuaire du Comité International Olympique*, it is only since 1978 that it has been recognised under the name Olympic Charter. Some of the rules contained in the first edition were written by Pierre de Coubertin himself around 1898.

In the versions of the *Olympic Charter* from 2001 to the present day, it has been noted that the rule concerning the opening and closing ceremonies has changed its numbering within it even though its contents have remained virtually unchanged. Currently, as of 8 June 2011, the rule on ceremonies is No. 55. The same rule was No. 69 in 2001, No. 58 in the edition in force since 1 September 2004, and then became No. 56 from 7 July 2007.

In point one of rule No. 55, the link of the OOC and OCC to the compliance of the other protocol requirements of the Olympic hospitality contract is highlighted. Point two highlights the IOC's supervision of the content and details of each scenario, such as timetables and other specifications, for official approval. In point three, it is emphasised that the ceremony must be proclaimed by the head of state of the host country by enunciating the precise phrases found in this document (IOC, 2021a).

The *IOC Protocol Guide* referred to in Rule 55 dates back to 2001, its latest edition date. This guide was produced in order to provide the many answers to

questions that have arisen over the years, with the intention of providing precise instructions to the Organising Committees of Ceremonies (OCOGs) and the IOC to ensure compliance with the rules of the *Olympic Charter* (IOC, 2001).

The chapter *Content of the Ceremonies* on page 47, is defined as a companion rule to the current Rule 55 of the Olympic Charter. The fifteen points of the chapter describe the procedures to be followed by the heads of state, the President of the IOC, the President of the OCOG and the delegations during their parade. The procedures also contain indications concerning the Olympic flag, the Olympic torch, and the flag bearers. It is curious to note that there is no precise indication as to where the OOC should take place, in fact the ceremonies in Paris 2024 are planned outside the Stadium. Instead, it is requested that the OCC take place inside the stadium after all events have ended.

There is also a manual in the official documents that is an integral part of the IOC Host City Contract whose name is *Technical Manual on Protocol & Protocol Guide* (2010b). The current edition is the 5th update cycle, the one after the Vancouver 2010 Olympic Winter Games. In this text, there is contractual, legacy and Olympic symbol usage content as well as educational information regarding all protocol content of the Olympic Games. From page no. 89 to page no. 116, the protocol of the OOC and OCC and *Victory Ceremony* is discussed, the chronological order to be followed with much more information often referring to more in-depth information contained within the *Technical Manual on Ceremonies* (2010a). This second manual is also in the 5th update cycle, the one after the 2010 Winter Olympics in Vancouver. In its 139 pages it contains more in-depth descriptions, with concrete examples through pictures and descriptions, recommendations, planning and staging guidelines regarding the opening, closing and award ceremonies. With regard to the artistic component, as the production of Olympic ceremonies is multifaceted, the manual recommends that the culture of the host city, region and nation be maintained in the programme, but at the same time that the technical and creative experience of the past be utilised (IOC, 2010a).

The main elements to be contained in the ceremonies are also highlighted in the short document already mentioned in chapter one: the Factsheet. Of it, there is a version for the OOC *Summer Games* (IOC, 2022c) and one for the OOC *Winter Games* (IOC, 2022a). In the version for the summer ceremonies, the document

opens with a short introduction on the history of these ceremonies, followed by the list of the 11 points of the protocol elements, as well as the dutiful reference to rule no. 55 of the Olympic Charter, which has already been analysed above:

Main elements of the opening ceremony

Today, Rule 55 of the Olympic Charter outlines the protocol that must be observed at the opening ceremony of the Games, including the wording of the opening words to be delivered by the representative of host country. The other important features of the opening ceremony are:

Entrance of Head of State (HOS) and International Olympic Committee (IOC) President;

1. Playing of the national anthem;
2. Parade of athletes;
3. Symbolic release of doves;
4. Olympic Laurel Award;
5. Official speeches;
6. Opening of the Games;
7. Raising the Olympic flag and playing the Olympic Anthem;
8. Athletes, judges and coaches' oath;
9. Lighting of the Olympic flame;
10. The artistic programme (IOC, 2022c).

The document presents an in-depth description of the points presented above. For point no. 11, the one on the artistic programme, no specific guidelines to follow are given, only narratives on how some organising committees have interpreted the task. Regarding the artistic programme, it is recognised that the creativity used over the years by the organisers has been an amalgamation of protocol and entertainment. This is the section that is absolutely kept secret until the very end and is the main element to differentiate the ceremonies and to create a unique spectacle (IOC, 2022c).

The version of the Factsheet for the closing ceremony is much shorter and

does not include the artistic segment (2021b). In the same type of document concerning the opening ceremony of the Winter Games there is again a reference to the artistic segment, although less emphasis is given to it than in the Factsheet for the Summer Games (2022a). These documents are brief and also contain information, for each edition, on which heads of state declared the Games open, which flag-bearers were present, which athletes and judges read the oath and for the OCC on which authorities made the flag pass.

An analysis of the above-mentioned documents did not reveal any regulations that impose pre-determined artistic solutions on the organising committees. It is certainly the protocol elements that are the components to be respected in terms of order and organisational mode. It is also true that over the years these elements too have undergone variations, also given by inspirations and solutions proposed by the OCOGS. The IOC, Balich reports (M. Balich, personal communication, April 3, 2023), hardly enters into the judgement of artistic choices and encourages the presence of volunteers, which it knows to be the real strength of this great system. In the official documents, there is a full awareness between the lines that it was precisely the coming together of creative teams from different and distant cultures and in such different historical periods that gave personality and innovation to these great events.

III – THE MASS CHOREOGRAPHY

III - THE MASS CHOREOGRAPHY

Investigating the origins of mass choreographies and how many types of them exist is not an easy task and initially moves one's gaze to different, even very distant areas. When speaking of mass, one wonders whether it can only be understood as the product of groupings of human beings, or whether it is possible to identify other modalities. Even drones themselves can be the protagonists of massive choreographies created in the skies with symbolic and spectacular images, as appeared in the last Summer Olympics when 1,824 drones slowly rose above the stadium to form the emblem of Tokyo 2020².

This study focuses on the mass as a multitude of people who, through their interrelation and meticulous organisation, give rise to coordinated movements, mainly associated with music and appreciated by an outside audience. The space in which such choreographies can be performed is mainly outdoors, in large streets, in large squares or in a delimited area such as a stadium.

The mass movements within the Olympic ceremonies, the context of this study, convey an aesthetic inherent to performances in the great spaces. The use of large moving images to reach the audience in the stands has always been a necessity. The bodily techniques with which these choreographies have been staged over the years have been varied, also depending on the event. Choreographies may contain elements of gymnastics, folklore, different types of modern dance techniques, or simply body elements that are accessible to non-professionals and suitable for the movement of large apparatus or costumes (Scursatone, 2013b). The result is amplified images that communicate, convey messages, or simply represent the culture of the host country. Mass

² The design of planet earth flew over the Tokyo Olympic Stadium on the evening of 23 July 2021. <https://video.repubblica.it/dossier/euro2020/tokyo-2020-oltre-1800-droni-in-volo-per-disegnare-il-pianeta-terra/392494/393207>.

choreography, says Marco Balich, is a science apart from other types of choreography (personal communication, April 3, 2023).

From the very beginning of this study, it appeared important to search for the context in which the choreographies examined are set. Claudia Carbajal's (2019) classification was a starting point. In the diagram below, the author's classification of the choreographies that she defines as monumental is presented, which starts from the purpose of the choreographies themselves.

Referring to this subdivision, the genre dealt with in this thesis falls under monumental sports choreographies. They are defined as such by Carbajal as they unite art and sport through collective dances (2019).

Figure 7. Classification of monumental choreographies (Carbajal, 2019, p. 48).

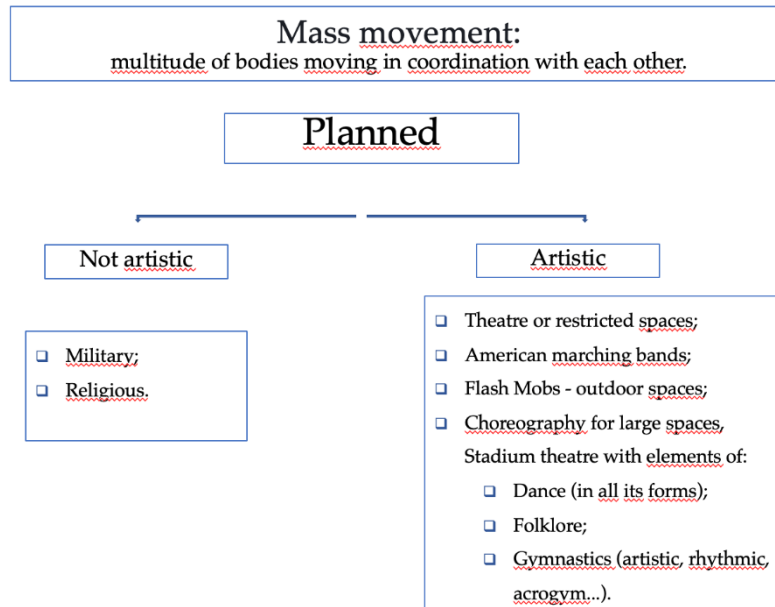
Tabla 3. CLASIFICACIÓN DE COREOGRAFÍAS MONUMENTALES

Nombre	Clasificación a partir de
Coreografías monumentales religiosas	Su finalidad
Coreografías monumentales militares	Su sector de procedencia
Coreografías monumentales populares	Su sector de procedencia
Coreografías monumentales deportivas	Una técnica específica
Coreografías monumentales relámpago	Su modo o forma de operar
Coreografías monumentales nacionalistas	Su finalidad

FUENTE: Elaboración propia a partir de la bibliografía consultada.

Similarly, another classification is proposed, which groups mass movements by artistic purpose, naming genres and styles.

Figure 8. Classification of mass movement planned (personal elaboration).



The term 'planned' has been specified in this outline, as all spontaneous, uncoordinated mass movements resulting from social situations such as panic flights or collective demonstrations of any kind have been intentionally excluded from this analysis. Within planned mass movements there is also a branch that includes military and religious genres, excluded from the artistic category and therefore not examined in this work.

The first mass organisations can be traced back to the tradition of gymnastics in Germany in the early 1800s by the pedagogue Fredrich Ludwig Jahn (1778-1852) known by the name *Turnvater* (Burnett, 2013). He developed exercises in the great outdoors for educational purposes but also for preparing the body for war (Coroginnica, 1992). Gymnastic movements centred on collective exhibitions were also being developed in those years by the Swede Per Henrik Ling (1776-1839) (Goldblatt, 2012). At the same time, another current was present in the United States of America (USA). As early as the mid-1800s, university marching bands, known as marching bands, made their first appearance in American universities. With their music and drums they entertained the audience following sporting events (Cumberledge, 2017).

The holding of the first Olympic Games in Europe brought with it the tradition of those years. Artistic and rhythmic gymnastics performances, activities that were considered educational and were widespread, were then the predominant demonstration methods in the great outdoors. They evolved from gymnastic exercises into competitions before becoming exhibitions. In artistic gymnastics, in addition to large apparatus, there were free-body team competitions. In rhythmic gymnastics, there was a study of space, rhythm and the use of small apparatus. These two sports, which Scotton (2003) classifies as technical sports of a qualitative nature have always contained a large educational as well as aesthetic and spectacular component³.

Gymnastic performances were for years the only mode of mass movement present in the Olympic Games, although initially, although related to the event, they did not take place within the opening and closing ceremonies. In this vein is the style assumed by the 1936 Berlin Olympic Games, which saw several spectacular events take place, but not during the ceremonies.

From the Munich 1972 edition onwards, mass choreography definitely entered the ceremonies, with performances inspired by local folklore and rhythmic gymnastics, which was on the rise in those years. The 1984 Los Angeles ceremonies saw the use of the masses as a form of spectacle and entertainment, in response to and in a form of competition with the masses of Moscow 1980; both ceremonies also performed an operation to promote local culture (Hanley, 1986).

³ Rhythmic gymnastics had its official presentation at the First International Congress of Physical Education in Paris in 1913. On that occasion, the groups of Demeney, Jacques-Dalcroze, the Hellenic gymnastics of Raymond and Isadora Duncan were compared. The simultaneous collective performance form alternates with group interventions as well as individual interventions by all members. The gymnastic methodology moves away from command performances in favour of musical accompaniment as an executive guide to the exercises. Rhythmic gymnastics took the name Sports Rhythmic Gymnastics in 1970 (Aparo, 1999).

3.1. THE MASS CHOREOGRAPHER

From the late 1980s to the present day, with the multiplication of large-scale spectacular events aimed at a worldwide audience thanks to television media, the figure of the mass choreographer has assumed an increasingly significant role. Such large-scale events, one thinks of Olympic ceremonies but not only, have required the development of expert and specialised professional figures for their organisation.

The profession of mass choreographer requires many skills. A choreographer must know how to imagine, plan and stage a movement for hundreds of people. He must know how to order, calculate times and spaces. He must know and be able to use choreographic writing methods through appropriate methodology. Effective communication is a skill that the choreographer must have developed, as he has to interact with hundreds of volunteers whom he coordinates. In addition to the creation of moving images, a mass professional has an extended role, as he or she manages the large flows of performers, from athletes and all those who perform actions on the field related to the protocol elements throughout the ceremony, through teamwork and interrelation with other professionals.

In particular, this line of research focuses on three emblematic figures who made a fundamental contribution to mass choreography within the Olympic ceremonies: Judy Chabola, Doug Jack and Bryn Walters. In the line of research analysing their activities, their professional profiles will be introduced in order to better understand their path.

The focus on each professional and the subsequent analysis of their work will lead to an understanding of whether and how mutual influences led to the formation of a style. It will also be observed how the interrelation between their careers came about.

3.1.1. Judy Chabola

The Californian choreographer Judy Chabola (1952-1999) still lived on Venice Beach as a child. A former student at Santa Monica College, she gained experience as a cheerleader and flag twirler. Ric Birch recalls that Chabola's path

began in the context of 'drill teams', very similar to cheerleading squads (personal communication, January 30, 2023).

In college, he led the SMC (Santa Monica College) Coronets, a 100-piece marching band, with which he participated in international competitions. Beverly Tholen, SMC professor and advisor, said that Chabola had great leadership qualities. In 1975, the choreographer appeared on the front page of the official magazine of the North American Drill Teams Association *Let's Cheer* (Sanchez, 1999). As an expert on drill teams, in 1981, the choreographer founded Miss Dance Drill Team International (World Championships) with the first event held in California in 1982 (Wikipedia contributors, 2021). In US ceremonies, Judy Chabola was the assistant of Kay Teer Crawford (1914-2001), considered the 'mother of the drill team' (Birch, personal communication, January 30, 2023).

For the 1984 Los Angeles ceremony, Chabola made a major contribution with dance routines for both the opening and closing ceremonies. The 1984 ceremonies saw the transformation of Judy Chabola from being an educator and drill team instructor to a professional capable of managing large international events.

After her experience in Los Angeles, she worked in Singapore in 1990 for the 25th anniversary of independence show, establishing herself definitively as a mass choreographer.

In her career Judy Chabola has choreographed not only the Olympic ceremonies, but also the Emmy Awards, the Grammy Awards, the Oscars, the Billboard Music Awards and *Essence* (Oliver, 1999). Thanks to her international experience, she was one of the main protagonists of the major event ceremonies in the 1990s. From the interviews conducted and the documents consulted, it is clear that her communication skills were appreciated by the many volunteers she coordinated over the years.

3.1.2. Doug Jack⁴

Born in Massachusetts in 1960, Doug Jack gained his first artistic experiences at Disneyland in the entertainment industry. His first job as assistant choreographer for Disney was in Indianapolis, Indiana, for the Pan-American Games Opening ceremonies in 1987. Working for this event with Gary Paben, director of large outdoor ceremonies, led him to approach mass work and big shows.

In 1990, he met Judy Chabola in Singapore at the ceremony for the country's 25th anniversary of independence. From then until Chabola's death, he worked with her and Ron Mangham, also a choreographer in the Singapore team. All three of them are together in the Barcelona 1992 ceremonies. After this ceremony Doug Jack took part in the OCs of Atlanta 1996, Sydney 2000, Salt Lake City 2002, Athens 2004, Turin 2006 and Sochi 2014. His role as mass choreographer also included for some of these editions the general direction of the ceremonies, the direction of the protocol and the athletes' parade. He has signed many mass choreographies, among which The Great Skier of the Turin 2006 OOC is noteworthy due to its specificity.

His close collaboration with Chabola led Doug Jack to learn the organisational techniques that the choreographer had been implementing since the late 1980s. Jack's presence on the international scene for all these years will make him the choreographer at the forefront of the great changes brought about by technology. Among these, as will be discussed in more detail in the chapter on choreographic notation, Doug Jack contributed with his collaborators to the transition from hand choreographic writing to choreographic planning techniques using software.

⁴ The following information is the result of consulting the official guides of the main events he attended, personal communications with Doug Jack and interviews on his YouTube channel. <https://www.youtube.com/c/DougJack/featured> and information received from other choreographers.

3.1.3. Bryn Walters⁵

The British choreographer, who grew up in Cambridge and is now based in London, was born in 1966. His experience in show business is rooted in his participation in the 1980s in the theatre and then in the cinema in the musical *Cats* in the role of Macavity.

In 2002, he worked for the Commonwealth Games ceremony in Manchester, where he met Doug Jack for the first time. Thanks to his great skill in using computerised writing programs, Bryn Walters began to specialise in the role of choreographer-choreographer, working alongside and as part of Doug Jack's team for several years. He was with him at Athens 2004, Turin 2006 and Vancouver 2010, to name but a few major events.

Bryn Walters fully experiences the years of the development of technology, suspended choreography, as they will be seen in Sydney 2000, the advent of video projection and the further development of choreographic notation, to which he contributes his skills and experience. Noteworthy is the opening ceremony of the Juventus Stadium in Turin in 2011, for which Bryn Walters did all the mass choreography and movement on the field. He will collaborate on London 2012, Sochi 2014 and Rio 2016. The Sochi and Rio ceremonies will be the expression of his utmost creativity and technical and organisational skills, as will be analysed later.

⁵ The following information is the result of consultation of the media guides of the OCs he attended, personal communication with Bryn Walters, , consultation of his website (<https://brynwalters.com/index.html>) and information received from other choreographers.

**IV – FROM THE 1984
LOS ANGELES CEREMONY:
THE BIRTH OF A METHOD**

IV -THE 1984 LOS ANGELES CEREMONY: THE BIRTH OF A METHOD

4.1. LOS ANGELES 1984

In the Los Angeles edition, it was the organising committee's intention to include something in the ceremonies that had not been done before, but at the same time be a demonstration of the host country's culture (LAOOC, 1985, p. 200).

A series of technological elements were included that, despite economic limitations, created a spectacle that also involved the home audience. Hand-held cameras and those in use on helicopters produced different patterns of television footage from vantage points otherwise inaccessible even to the audience in the stands (Chappellet, 1996).

Los Angeles 1984 marked the definitive shift of the ceremonies towards the spectacular.

The first part of the opening ceremony featured an extensive choreographed segment, even before the athletes entered, offering the audience an innovative performance arts show. The 1,262 members of the typical military drill teams opened the ceremony with the *Welcome* sign across the playing field using white and gold balloons as props (LAOOC, 1985). For the first time, the ceremony did not present sharp divisions between protocol and artistic segments, resulting in thematic lines.

The music of the United States was therefore chosen to tie all the elements of the ceremony together. The first segment, itself consisting of six parts, called 'The Music of America', traced the history of American music through its genres and atmospheres.

In the stands, the 85,000 members of the audience formed images of almost all the flags of the participating countries, having never taken part in any rehearsal, moving the stunt cards, a choreographic solution already used for the Moscow Games. With the exception of the press, the entire audience in the

stadium took part (LAOOC, 1985). The approximately three-hour show, as Hanley (1986) points out, presented countless dancers on the big stage, placed at the heart of the festivities, representing the role of dance in America.

For the reasons listed above, the Los Angeles ceremonies mark an important milestone, which will lead to the development of new organisational techniques. The mass choreographer Judy Chabola gained her first experience here by assisting the founder of the *national drill team competition*, Kay Teen Crawford, in the handling of large drill team and marching band groups.

The American choreographer went here to put into practice on a large scale the planning and organisational techniques she had acquired in her experience of managing drill teams. Her vision will influence the development of the methodologies she will later develop, including the organisation of volunteers for rehearsals.

The production direction of LA was entrusted to Ric Birch. Born in Sydney, Australia, in 1945, he oversaw the production and direction of the major Olympic ceremonies from Los Angeles to the present day. At the time, he was an executive producer in the entertainment department of the Australian Broadcasting Corporation. A producer of many musical series involving professional choreographers and dancers, he was involved in the 1982 Commonwealth Games in Brisbane. As Birch reports, he had plans to follow the model of the mass choreographed ceremonies such as those recently produced for the Moscow ceremony. Birch in Brisbane included some choreography but realised the complexity of organising it (personal communication, January 20, 2023).

It was due to the success of the 1982 Commonwealth Games ceremonies that Ric Birch became production manager for the opening and closing ceremonies of the 1984 Olympic Games in Los Angeles. Another important event for Birch was the Singapore show in 1990. He was commissioned to create and art direct the show for Singapore's 25th anniversary of independence by Robert (Bob) Jani (1934-1989), the first Disney producer for the 1984 Los Angeles ceremonies (Birch, 2004). Having worked with Judy Chabola for the Olympic event, when it came to organising the Silver Jubilee Spectacular, Birch brought the choreographer with him.

4.2. SINGAPORE 1990

The Singapore ceremony for the 25th year of independence played an important role in the creation of the team of choreographers who worked together for several years and contributed to the transformation of the Olympic ceremonies. It was from these important international experiences that the figure of the mass movement specialist was beginning to form. As Doug Jack states, this was a beginning, in which professionalism still had to be built, but passion and determination were still the basis of the work (D. Jack, personal communication, February 20, 2023).

It was on this occasion that Doug Jack first saw Judy Chabola, and he says he was impressed by how she had the ability to manage the organisation of so many performers, without ever losing control of the whole (personal communication, May 11, 2020). Also on the team was Ron Mangham, a professional dancer, who had met Doug Jack two years earlier at Disneyland and to whom he had proposed this collaboration. Doug Jack, although less experienced, quickly managed to match the high level of the rest of the team (Birch, 2004, p. 142). The American choreographer recounts that when he joined the team, Judy and Ron were alone in organising and supervising 6,000 people and Judy was directing the rehearsals from above through the microphone (D. Jack, personal communication, May 11, 2020). The presence of experts in the field was still very small.

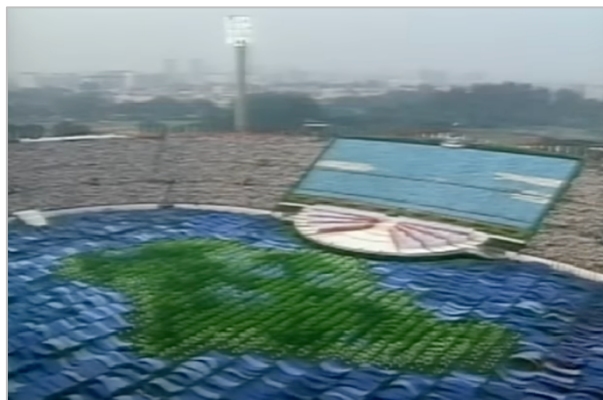
The *Silver Jubilee Spectacular* was very impressive, despite the fact that it was not an Olympic ceremony. It can be seen as a kind of testimony to the slow transition between the ceremonies of the 1980s and those that would later mark a new way of choreographing in the *Stadium Theatre*. It involved professionals who had already had experience in at least one Olympic ceremony. The design was by Christa Bartels (who would later also work on the Atlanta '96, Salt Lake City 2002 and Athens 2004 ceremonies), wardrobe by Dave Profeta and Katrina Kerr, the production manager was Sayre Wiseman, lighting director Jim Tetlow, sound director Christian Hugener and the stunt cards were programmed by Scott Givens (Birch, 2004). There was much mass choreography on the *field of play* (FOP) as well as in the stands with the *stunt cards*. The choreography on FOP reproduced articulate formations and images that were made possible by the

presence of the three experienced choreographers. Ric Birch reports that the show had a huge cast of 15,000 performers, the largest he had ever worked with (Birch, 2014). The use of large props, such as coloured cloths, underlines a diversification of the way the cast was organised in order to create a kind of scenography within choreography.

The narrative style chosen by Birch would be the prelude to the change of style that would take place in the 1992 Barcelona ceremony. As he tells it, the first segment was very articulate:

The first scene of the show established a visual representation of the island then the following scenes introduced Chinese, then Malay, then Indian performers in national costumes to populate it, followed by the British, with Sir Stamford Raffles standing tall in a ship that sailed a resolute path over prostrate natives. As each successive wave of arrivals moved across the stadium floor towards their island home, they brought with them large props and objects, and a 5000-member card section rotated through image after image as the choir sang on and dancers performed on the main stage. (Birch, 2004, p. 142).

Figure 9. Singapore 25th Anniversary 1990 Jubilee Spectacular. Image from the video. <https://www.youtube.com/watch?v=YF0PMbVcSNY>.



From the image, you can see the picture formed by performers using blue fabrics to create the uniform colour of the sea. The space left free is shaped like the island of Singapore. What stands out is therefore a painting in motion. The

hundreds of performers coordinated by Judy Chabola's team remain on stage for the duration of the segment and emphasise, with the use of the coloured fabrics, the scenes that are being formed. The first tableaux closes with the entrance of the large boat of the English colonists, which crosses the sea creating great mass movements.

Figure 10. Singapore 25th Anniversary 1990 Jubilee Spectacular. Image from the video. <https://www.youtube.com/watch?v=YF0PMbVcSNY>.



Judy Chabola consolidated her techniques here and formed her style characterised by her ability to organise large masses of volunteers. From the testimonies of the volunteer performers, they describe this experience as tiring, not easy, but fun and fulfilling, and state that they felt proud to represent their country⁶. Through this event, the choreographer begins a process of studying mass choreography, which, as will be further explored later, will lead to the creation of real visual art works.

⁶ In the initial part of the video (4:04) there are interviews with the ceremonial volunteers. <https://www.youtube.com/watch?v=YF0PMbVcSNY>.

4.3. BARCELONA 1992

In Barcelona 1992, after the 1990 experience, the American team was brought in only a year before the opening ceremony. The previous choreographers had quit and Ric Birch had called Judy Chabola as director of choreography, who had in turn brought Ron Mangham and Doug Jack (D. Jack, personal communication, May 11, 2020) onto the team. The choreographers had to join a project that involved collaboration with a Catalan avant-garde art group *La Fura dels Baus*. At first, the choreographers of the US team were bewildered by the great difference in artistic approach compared to their previous work (Jack, personal communication, May 11, 2020). The impact was between an unstructured company, who liked to impress the audience with their special effects, and three choreographers who represented the order of the training teams. For Judy Chabola and her team it was a great challenge, for which they had to find a way to make order out of chaos (D. Jack, personal communication, May 11, 2020). The Spanish company on its website comments on the design of the central part of the OOC in Barcelona:

Mediterranean, Olympic Sea marked a departure from the tradition that had previously defined the opening performances of the Olympic Games, which were merely moving around large groups of people, coloristic but lacking content, pretty to look at but not conceptually risky. La Fura dels Baus' stamp was for the first time put on a performance conceived especially to be watched live by millions of people all over the world. The international response was enthusiastic and highlighted the fact that Mediterranean, Olympic Sea had successfully communicated an ideology linked to the origins of the Olympic host city's culture through a risky and innovating staging. With this largescale performance, La Fura dels Baus's work surpassed the sphere of small theatre audiences, transcending it exponentially and achieving massive reception and repercussion (<https://lafura.com/en/works/mediterrani-mar-olimpic>).

It was through this segment that the Barcelona ceremony made a change from what had been proposed in previous editions. Josep Roca, director of the opening and closing ceremonies, explains that the model followed was different from that of Los Angeles, Seoul and Albertville. The Barcelona ceremony was the

result of cohesion between a large team (Roca, 1996). The cultural dialogue took place through the creation of fantastic characters, scenic settings by artist Peter Minshall, and the direction of thousands of volunteers by Judy Chabola (Roca, 1996). Lluís Bassat reports that the aim of the ceremony was to offer culture, history, but also something modern and contemporary. The OCOG wanted to show that it could design an innovative show, without neglecting centuries of history and culture (1996).

The artistic segments were numerous and also very different. In the official programme of the opening ceremony, the choreography with which the show opens is described in the following words:

A bunch of flowers welcomes the word from the hearts of Barcelona, at the opening ceremony, 80 musician sounds the Olympic fanfare by Carles Santos and the shrill bray of the tenoras summons us to the great festival. Flowers, birds, and their Mediterranean joy, are among the symbols of this city which welcomes one and all with the great word of friendship: *Hola*! More than 800 performers, in costumes by Peter Minshall and choreographed by Judy Chabola, form a smile which turns into the logotype of Barcelona Games. The festivities have begun (COOB'92, 1992b).

The *Hola* segment certainly made an impact with its simple and direct way of communicating. A single word was used to welcome the audience from all over the world, through three minutes of choreography with colourful costumes representing flowers and birds. Doug Jack recounts that when the volunteers were getting ready to start rehearsals, they used to greet the arrival of the choreographer with the cry 'Hola Chabola'. This was a demonstration of the involvement that the volunteers, mostly students, had with Chabola and, as Joseph Roca says, "Judy Chabola directed the choreography of thousands of Catalan volunteers who admired her tremendously" (1996, p. 232).

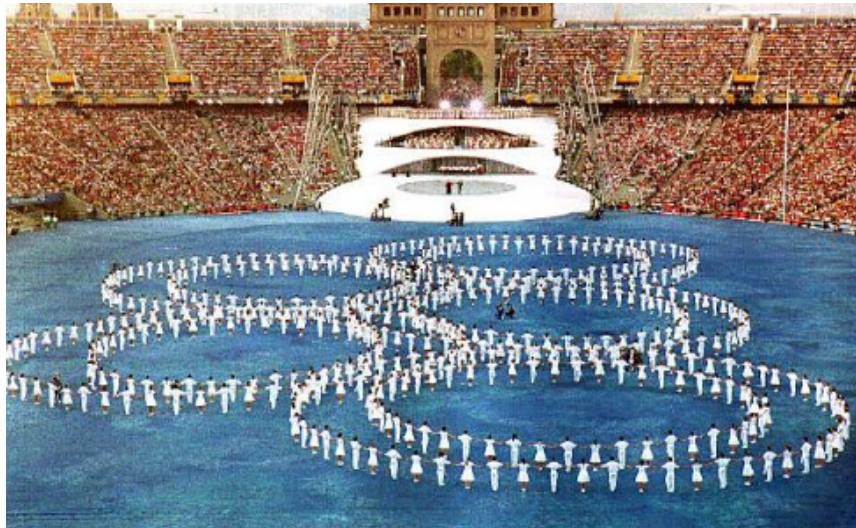
Figure 11. The inscription HOLA. <https://wanderwisdom.com/travel-destinations/Olympic-Games-in-Barcelona---Join-us-for-Opening-Ceremonies>



As it appears in the media guide, the team formed by Chabola, Mangham and Jack were responsible for several tableaux of the opening ceremony (COOB'92, 1992b). The team carried out the paper mapping and field placement of all the mass movements of the ceremony (D. Jack, personal communication, February 20, 2023).

After this first opening segment, Chabola collaborated with the local choreographer to stage a second choreography, featuring a typical Catalan dance called Sardana. This popular local dance is performed by people in parks and during festivals, with the use of white handkerchiefs and movements in a circle. Hundreds of people were involved in the ceremony and were organised into a large final formation representing the five Olympic rings.

Figure 12. Mass choreography with Sardana dance. The 1992 Barcelona games offered a new sense of what an Olympics could do for the city (*insidethegames.biz*).



The closing of the folk dance took place in a renewed formation. The symbolism of the first part of the choreographic segment thus gives way to the shape of a heart. As in the first segment, this image is intended to communicate the affection and warmth of the host people, much appreciated by the Catalan audience present (D. Jack, personal communication, February 20, 2023).

Figure 13. The hearth-shaped formation (*olympics.com*).



The most significant moment of the Barcelona ceremony was undoubtedly the choreography *Mar Mediterraneo, Olympic Sea*, which took place before the athletes' parade. This choreographic segment was much talked about, both journalistically and artistically, with controversial opinions. In an article in the newspaper *La Vanguardia*, which came out two days after the ceremony, the authors pointed out that the performance by *la Fura dels Baus* was innovative even though it was an amplification of a staging from eight years earlier (*La Vanguardia*, 1992, 26 July). However, the introduction of the independent style of theatre companies introduced completely different scenarios to the traditional uniformed gymnastic teams present in previous Olympic ceremonies. As de Moragas and Rivenburgh argue, it is very likely that the intention was to distance the Spanish public's memory from the popular gymnastics performances of Franco's regime (1996).

The use of mass in this segment was staged by Judy Chabola, through the use of colour and costume movements of hundreds of performers. The work was to organise, through the methodology of writing and written design, the creativity of *La Fura dels Baus* with the music of Ryūichi Sakamoto.

The masses opened the stage wearing Peter Minchall costumes representing flames and sunbeams with props by Nico Nubiola. Doug Jack recalls that the size of the costumes prevented the performers from passing directly under the stadium tunnels (personal communication, February 22, 2023). The cast had to wait in the tunnel, staying well aligned and with their costumes folded on top of each other like dominoes and "...when they ran out of the tunnel they were like bulls running into the stadium. The performers bent and then the flames rose as they passed the tunnel entrance." (D. Jack, personal communication, February 22, 2023). Running and moving neatly through the space, the performers position themselves in the centre of the stage to form a large sun. Their opening and closing movements give breadth and breath to the image drawn on the field and create contrast with the blue colour of the ground.

Figure 14. *The sun. Opening Ceremony Barcelona '92 (lafura.com).*



In the next scene other performers enter the FOP in massive numbers, wearing huge blue costumes. Their movement represents the motion of the sea, of the waves, and creates a large stage space on which the large boat enters.

Figure 15. *A moment of the choreography Mediterranean, Olympic Sea (lafura.com).*



Although it does not represent the focus of this work, seeing this image brings to mind the first part of the Singapore 1990 ceremony analysed earlier. By comparing the images of the two performances, it is possible to find similarities that could represent points of contact between the two works. Both scenes depict a boat in a sea created by the illusion of mass movement with fabrics and costumes. It is interesting to note that the Chabola, Mangham and Jack team was as present in Singapore 1990 as in Barcelona 1992.

Figure 16. Mediterranean, Olympic Sea seen from afar (lafura.com).



The great mass in Barcelona directed by Judy Chabola is organised to bring order to a situation of apparent chaos. The overhead shots enhance the scenic space, blending the blue colour of the lawn cover with the costumes, creating uniformity in the three-dimensional movement of the sea.

4.3.1. The Grid

The 1992 OOC marks an important milestone in the development of mass choreography in Olympic ceremonies. For the first time, the grass of the football pitch is covered with a blue cloth, bringing a scenic change. The background creates uniformity by emphasising the designs and images that the mass

choreography draws on the field. From this edition onwards, there will no longer be a large-scale ceremony without the use of a lawn cover. The theme of the background, the backdrop, becomes of great importance for the choreographies that will follow in the years to come. The cover will be the support on which will be marked the coordinates that the performers and the entire performance staff will use to find its position on the large stage of the stadium.

Figure 17. Doug Jack tries on the giant flower costume designed by Peter Mitchell on the blue grass cover (Jack personal archive).



This mapping of the space is called Grid. The grid of coordinates on the field is reproduced to scale on paper. In the chapter dedicated to choreographic notation, the stages that choreographic notation has gone through will be retraced, passing from handwriting, still present in the ceremonies of Barcelona '92, to computerised notation, beginning in Atlanta '96.

4.4. ATLANTA 1996

After the great contribution of Barcelona, Chabola took part in the Atlanta 1996 ceremonies, its third Olympic ceremony. These are the Centenary Games. The team finds itself without the presence of choreographer Mangham, who had died the year before. The hand-written mappings on paper of the choreography, for which so much time was spent in the Barcelona ceremonies, give way to

computer mappings. As choreographer Jack points out, it was possible to create so many images and movements thanks to the new, faster and more precise choreography writing system (D. Jack, personal communication, February 28, 2023).

So there was a big leap. It became increasingly clear that producing the show's *charts* had become very important as the ceremony featured multiple segments of mass choreography. A new team was set up for Atlanta, where two computer experts were brought in to create the charts digitally, Collin Surles and Jason Oltaf. thus, speeding up the writing process was very important.

The first segment, *Call to the Nations*, which Chabola together with Kenny Ortega staged, is the one that opens the ceremony. The wide range of performers, wearing the colours of the Olympic rings, welcomes the audience from all over the world, as described in the media guide:

Every human culture has a sonic means-vocal or instrumental-of summoning the community together for celebration, deliberation and worship. For 100 years, the Olympic Movement has been calling the nations of the world together in ever increasing numbers. For the Centennial Olympic Games, the call has been answered by more than 10,000 athletes and billions of viewers throughout the world (ACOG, 1996, p. 8).

This mass movement, with 1240 performers wearing costumes by the artist Peter Minshall, here artistic director production and costume director, draws Olympic symbolism on the field of play. In the first six minutes of the show, the tribes of spirit pour onto the field in clothes in the colours of the five Olympic rings and the cloths drape the stadium. The 450 children dressed in white write the number 100 in the middle of the stadium (ACOG, 1996). On the anthem 'Summon the heros' composed and conducted by John Williams, with the Atlanta Symphony Orchestra, the children draw and animate the dove, symbol of peace. The resulting final image is one that will remain in the eyes of spectators and in images that will go down in history.

Figure 18. Call to the nations. Performers form the Olympic rings during the opening ceremony at Olympic stadium (photograph by David Taylor, atlantamagazine.com).



The second segment of the Chabola team, *Atlanta's welcome to the world*, was dynamic and impressive, lasting nine minutes and ten seconds with the participation of 1,234 performers (ACOG, 1996). The style of group work with cheerleaders and marching bands is well represented here, following American traditions. In fact, groups such as the Southwest DeKalb High School Bands, the National Association of Cheerleaders (NCA) or the Cloggers Precision Dancer and Stepper (ACOG, 1996) are staged.

The segment *Summertime the beauty of the south*, was the most impressive of the entire ceremony that Judy Chabola's team had to curate. Consisting of four parts, the 15-minute show featured 840 performers. The great costumes of artistic director Peter Minshall also featured in this segment. The media guide describes it as "an artistic segment, a symphony in four movements evoking the special feeling of the American South, its grace and beauty, its music and poetry, its spirit and history" (1996, p. 16). The large butterfly-shaped costumes represent wealth before the advent of war, the white river the arrival of people and customs from other parts of the world. The large cloth moving across the stage represents the thunderstorm that recalls the civil war and the great devastation after the defeat.

The narrative performed by the choreographers through this segment therefore contains historical implications. As in *Mar Mediterraneo* in Barcelona, the idea was to guide the spectator within a narrative through the images of the mass on the FOP. Judy Chabola and Doug Jack's group stages a different way of doing mass choreography, which they had already started to experiment with in Barcelona. According to Jack, the ability to tell such a contrasting and beautiful story with such costumes was a great feat that brought an innovation of style within the major American events and allowed for great professional growth (D. Jack, personal communication, February 22, 2023).

In the Atlanta ceremony, the choreographers demonstrated their ability to handle mass through various techniques of expression. They recreated Olympic symbolism in the first part of the show, highlighted the great American tradition with large groups of dances typical of the United States, and told the story of the country with non-verbal narration.

This ceremony was the last one in which Judy Chabola participated. Her last job, together with Doug Jack, was the preparation of the half-time show of the XXXIII Superbowl in Miami in 1999. Chabola, Jack recalls, continued to work with dedication despite her illness (personal communication, March 6, 2023) and the teamwork was what enabled the job to be finished despite the difficulties.

4.5. THE CHOREOGRAPHIC NOTATION

The term choreography has a Greek etymology combining the word dance with the word spelling. The Treccani encyclopaedia defines it as "the art of composing danced actions in harmony with music" (Coreografia, n.d.). In the 1931 Italian encyclopaedia by Carlo Schmid, it is defined as "the art of composing dances by describing and fixing conventional signs, the distribution of figures, the movements of the principal dancers and the masses, harmonising them with music and set design, but also exceptionally with acting" (Coreografia, n.d.). Whereas before the 15th century this term was understood to mean only choreographic notation, today it is understood to mean the actual score of steps, movements and figures coordinated with a musical score.

According to Ric Allsopp and André Lepecki, the fusion of the two terms, movement and writing, into a single linguistic sign has triggered a number of

effects. The former on the creation and reception of dance performances over the last four hundred years, the latter on the theories of performance practices over the last four decades (2010).

On the topic of writing, performance and dance theory studies have raised questions related to the archiving, documentation and preservation of the ephemeral duration of a gesture or step. Allsopp and Lepecki's article highlights how:

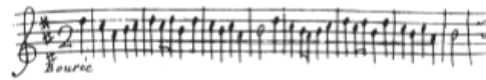
We find an increasing consensus that writing is something profoundly more dynamic, active, fluid, and indeed mobile and ephemeral and uncontainable than it is usually perceived as being. Or maybe the rethinking of the role of writing in relation to movement, of writing in relation to dance and performance derives from the fact that we are living at a time when a vast amount of performance practices and theories have been explicitly complicating the never simple relations between pastness, historicity, memory, and archiving with notions of presentness, futurity, movement, forgetting and destruction (Allsopp & Lepecki, 2008, p. 2).

Writing, therefore, can have several functions depending on the need and context in which it is placed and must be understood as something dynamic, active and fluid. For different purposes, various notation and transcription systems have been developed over the years. The main objective is to transmit a repertoire and to share didactic lessons. Alongside the purely didactic dimension, the graphic representation of dance became fundamental in transcriptions of classical academic ballet. This was important in order to record the different movements and positions of the dancers in space, which had become increasingly complex and articulated, due to the development of ballet technique.

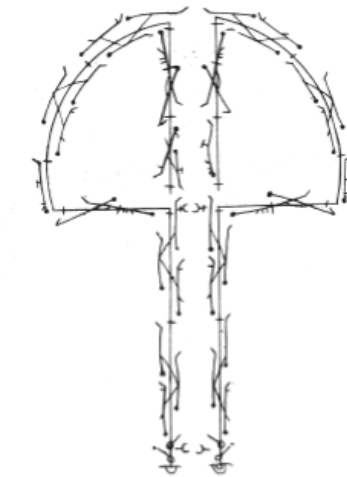
One of the systems that was used to record the movements and positions in space of the dancers was that used for court dances. As early as 1680, there were different dance notations in circulation in the French courts, and Pierre Beauchamps' was considered the most effective (Zbikowski, 2014). This system allowed the graphic representation of dance steps and dancers' movements. Its dissemination, however, came, through a series of publications, at the hands of another dance master, Raoul-Auger Feuillet. The latter sensed the potential of this choreographic writing and produced a series of publications that hadn't been

anticipated by the creator, Beauchamps (Zbikowski, 2014). Feuillet also included a section to further detail the correlation of music with body movements.

Figure 19. The first page of Raoul-Auger Feuillet's notation for Louis Guillaume Pécour's choreography *La bourrée d'Achille*, from Feuillet, *Recueil de dances* (1700) (Zbikowski, 2014).



la Bourrée d'Achille.



In the image shown above, there is a staff with eight musical measures at the top of the page. Below the musical script is a combination of steps that the choreographer Pécour created for the opening part of the ballet *La bourrée d'Achille*. The mode of reading the image is a bird's-eye view, as in all choreographic scripts, where space is seen from above. The dancers' movements are oriented towards the point of view of the King or the person of highest rank, which graphically coincides with the direction of the pentagram placed above (Zbikowski, 2014).

The transcription of a choreography allows it to be disseminated and passed on without necessarily the presence of the dancers and the choreographer. As is argued in Ann Hutchinson Guest's text, the choreography notation system is intended to be simple and to provide an aid to the memory of those working on

the choreography (2014). However, the system may be too simple and lack information, or it may be too complex. It is necessary, therefore, to know the purpose for which that system is intended (Guest, 2014). Since choreographers have to deal with the problems of space, motor gestures, rhythm and structure, it is necessary to define a symbology. Notation, according to Jean Newlove, helps the observer to obtain a clear and exact record of a movement that recalls all the nuances of expression. Such notation was called Kinetography by Rudolf Von Laban, one of the greatest exponents of early 20th century European dance. This mode helps the observer to have a clear record of the movement by recalling it in all its different expressions. Kinetography is currently used to reconstruct dance, movement and the choreographer's intention (Newlove, 1993). Laban was very interested in human behaviour and his analytical studies of movement were able to convey a greater understanding and awareness of human movement patterns to his students (Newlove, 1993).

4.5.1. Notation in mass choreography

In the same way as for dance, the use of symbols to share moving images is also present in the world of sport, such as for artistic gymnastics, rhythmic gymnastics or skating and is present within the scoring codes. Similarly, choreographic writing that allows the organisation of large movements can also be found, but there are no official manuals describing it, because it is only a necessity for the choreographer and therefore a personal tool. Nevertheless, over time, conventions and symbols become shared rules among the professionals involved.

The historical analysis that will follow, and the related in-depth technical analysis, is not aimed at all the writing methods used in mass choreography. Indeed, as in dance, there are no unambiguous transcription methods in this context. Performers from Eastern countries are usually professionals, or military cadets, who spend a lot of time rehearsing, and may have developed different methodologies. The method in use in the Western school, the one headed by Judy Chabola, will be analysed here, as an instrument that reflects the competence and experience of the mass choreographer. It is also intended to highlight the links

and influences between past methodologies and those still in use in mass choreography.

The choreographic notation of mass choreography has its roots in the movements of popular *marching bands* in American high schools and universities. The organisation of such movements required a great deal of preparation which, as Steve Boyd⁷ recounts of his experience, was done by using coloured pencils to write on sheets of graph paper (S. Boyd, personal communication, February 17, 2021). This method of writing on paper was also used by Judy Chabola who, having already experimented with it in Singapore 1990, developed it for the Barcelona 1992 ceremony, given the need to move thousands of performers (Jack, 2009). The reproductions on paper of the images produced by the performers' positions on the field, in the environment of mass choreography are called *charts*. They represent the most important and immediate projection and mapping on paper of creative thinking for large-scale choreographies (Scursatone & García, 2023b).

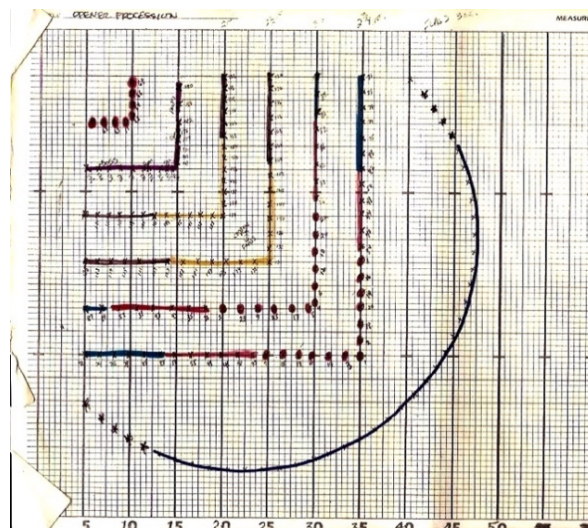
Choreographers created *charts* to design spaces and to improve efficiency in communication, so much so that they are also created and used by choreographers to share ideas with each other. They are to all intents and purposes a kind of story board for choreography. The *charts* are a necessary communication tool for the director, the producers, the stage managers (who support the choreographers and manage the movements on stage and the preparation of the *mise-en-scène*) for the entire broadcast and for those who work

⁷ Steve Boyd, who grew up in the US, now lives in the UK. He built his career specializing in Olympic ceremonies and working for 16 consecutive Olympic Games from Barcelona 1992 to Beijing 2022. His experience in large-scale events with a multitude of volunteers led him to experiences such as the Special Olympics, Commonwealth Games, Asian Games and Super Bowl half-time events. Steve has worked as a graphic designer for several Condé Nast magazines including The New Yorker. <https://www.steveboydportfolio.com>.

with lighting and projections⁸. They also become material for use by performers to better understand the positions they have to achieve.

The following is a valuable handwritten chart document granted by Steve Boyd. Very simple in its design with right-angled lines, you can see how the colours and positions drawn on the sheet create precise formations. The distances between the various numbers will then be the same that will be reproduced, duly proportioned, on the field stage, on the field of play (FOP). The process, therefore, is to plan the positions on a small scale and foresee the footprint and flows for proper space management.

Figure 20. Hand chart of a marching band (Boyd personal archive).



The variety in the formations of mass choreography has increasingly grown in parallel with the development of writing methodology. Over the years, mass choreography became, as Doug Jack says, more and more about charting and preparing movements: “Choreography became all about charting and very little

⁸ This information is based on the author's personal experience and conversations with choreographers Doug Jack, Bryn Walters, Steve Boyd and Laura Guglielmetto.

about dancing. We were the link in taking a performance and turning it into a spectacular. This us the power of mass choreography: 80% charting and music rehearsal and 20% dance” (D. Jack, personal communication, February 20, 2023).

A great leap forward in finding a faster and more effective method of choreography occurred, as mentioned earlier, during the preparation of the Atlanta ceremony in 1996. This step was also crucial because, as Doug Jack reports, handwriting involved a lot of work, up to eight hours for each individual chart, with the risk of having to do it all over again for a single mistake (D. Jack, personal communication, February 22, 2023).

The computer experts who joined the team of choreographers both had writing experience in American marching bands. Collin Surles from Utah and Jason Oltalf from California used their skills to create what was needed through the *Adobe Illustrator* programme (D. Jack, personal communication, February 27, 2023).

At the same time, Steve Boyd, as part of the choreography team, was in charge of the athletes’ parade and also had to find a clear way for the broadcast to understand where the teams would be positioned on the FOP. The need arose to improve efficiency and visual impact, so that the movements would be smooth and intuitive for all those involved. Boyd thus brought his experience as a graphic designer by also starting to use *Adobe Illustrator* to draw the moves (S. Boyd, personal communication, February 17, 2021).

This method thus replaced writing on paper, and slowly began to become more and more a fundamental and precise tool. Choreographer Bryn Walters became acquainted with this work in 2002 in Manchester at the Commonwealth Games. He learned to use the software from Steve Boyd while they were both working with Doug Jack (B. Walters, personal communication, April 27, 2021). Subsequently, other choreographers such as the British Roxana Smith and Gina Chan Martinez began to emerge, who started to produce charts with the use of the simpler *Power Point*, and then they too came to the use of *Adobe Illustrator*. Even now, this programme is still the one mainly used by choreographers, although in rare cases *charts* are still written by hand or with the use of programmes such as *autoCAD* (Scursatone & García-Sottile, 2023b).

Bryn Walters' experience continued with the role of *chartist* and associate field choreographer for the opening and closing ceremonies of Athens 2004. The choreographer recounts that it took many years to acquire the skills he currently holds and that the process of learning and experimentation is continuous, constant and enriched by the input from experienced colleagues in the field (B. Walters, personal communication, April 27, 2021). Often, according to Walters, new aspects and useful suggestions are shared between choreographers, because after all, this is research work and the adaptation of software for a purpose for which it was not created (B. Walters, personal communication, April 27, 2021).

Over the years, different tools related to choreography writing have been added through the use of *Adobe Illustrator*. The steps and the number of tools available for preparing a choreography on paper have grown and become more and more complex over time (Scursatone & García- Sottile, 2023b). Retracing the stages, the first corresponds to the one in which the choreographer reports the images of the stage space on his software, after having received the measurements of the stage from the drawings produced using the *AutoCAD* programme. The projection of the stage on the computer is then mapped through the creation of coordinates that create a sort of grid called grid. The same co-ordinates will then be shown with the appropriate proportions, from the moment the rehearsals begin until the ceremony, on the FOP. Using the *Adobe Illustrator* programme on the computer, the formations are thus drawn and the numbers and positions for each performer are marked. Each volunteer in the registration phase is assigned a number that will occupy a position in the drawing.

This process is done for each individual image to be reproduced, thus creating a different chart for each formation. The CAD drawing is used on several layers and sub-layers in the Illustrator file. It is thus possible to superimpose illustrative elements, such as projection images and props although "importing from CAD is sometimes a bit complicated, with time and care it is possible to separate all the technical CAD drawings into many layers in the Illustrator file" (B. Walters, personal communication, February 09, 2022). These multiple layers in the programme allow drawings to become more and more complex.

Bryn Walters explains that by deactivating the grid of technical layers, numbers, dots and adding or revealing the more pictorial layers, more illustrative images can be generated for the next step in *Power Point* (PPT) (B. Walters,

personal communication, February 20, 2022). Walters also points out how the number of charts has increased exponentially over the years. From the Turin ceremony, in which there were about ten charts per choreography, to about a hundred for the 2016 ceremonies (personal communication, February 20, 2022). As can be seen from the following images, the information contained in them has become increasingly complex.

Figure 21. A chart of *The Great Skyer*, Turin 2006, and a zoom of part of the chart (Walters personal archive).

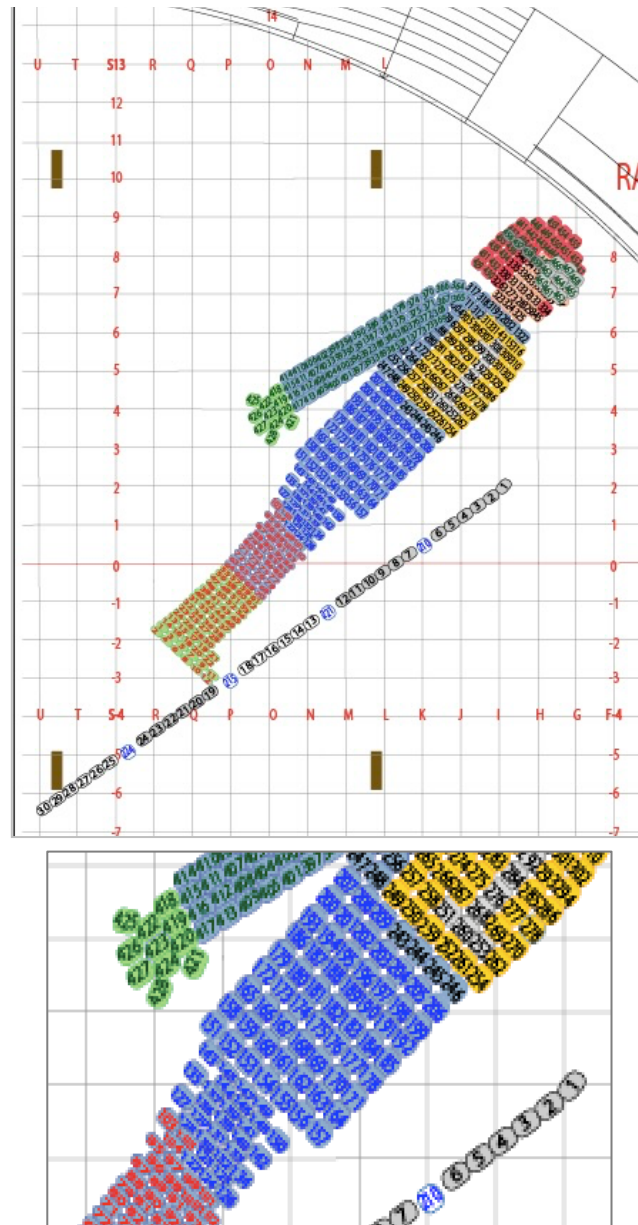
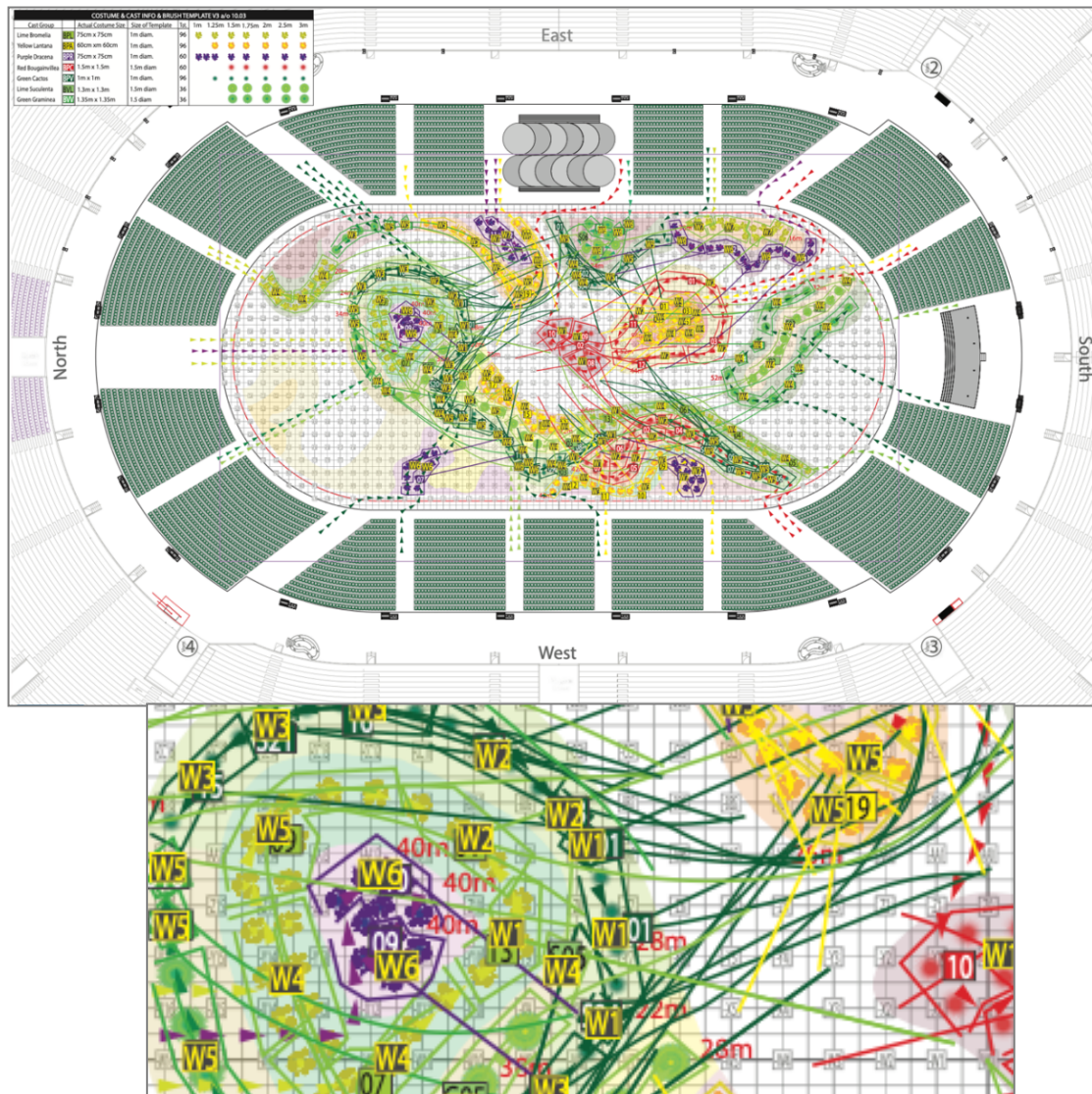


Figure 22. Chart of Painting to Exagon, OCC Rio 2016, and zoom of part of the chart (Walters personal archive).

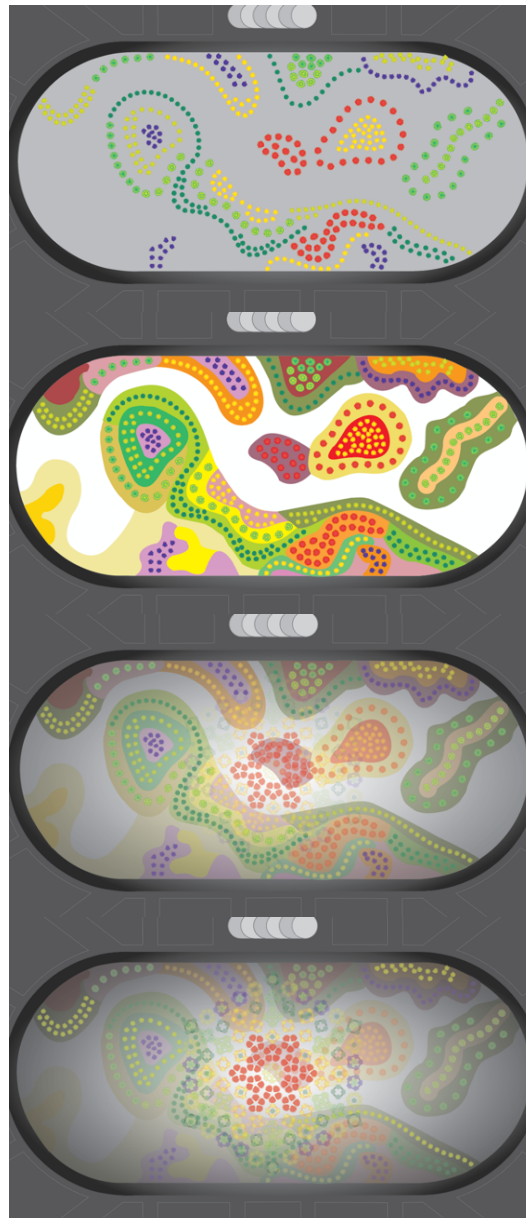


4.5.2. Increasing communication tools

In recent years, in addition to the increased complexity of drawings, choreographers have also created other documents. From the charts come simplified charts, produced via PPT, which contain the images necessary to build the storyboard of the choreography. The purpose of the PPT is to create a kind of narrative of what will happen during the choreography, which formations will be highlighted and how the stage space will be occupied. This tool is much easier to read and interpret than the charts with coordinates and numbers, as it only contains images related to the main design that the choreographer wants to reproduce. This document contains less information, but for this very reason it is easier for everyone to read.

The use of rapid page shifting in the PPT creates the illusion of movement, almost like reading flipbooks, those little books that have a series of consequential images that seen in rapid succession seem to create movement. Some choreographers use PPT for choreographic notation only, which is simpler than charts, but certainly less accurate (Scursatone & García, 2023b). As can be seen from the example, in the last slides of the choreography *The Art of Burle Marx* from the PPT of the Rio 2016 OCC, the succession of images gives an idea of the movement and forms that the mass of performers will create (Figure 23). It can be seen that this writing does not contain numbering and coordinates.

Figure 23. The PPT of a part of the choreography *Burle Marx*, 4 chart in a temporary sequence. OCC Rio 2016 (Walters personal archive).



The subsequent steps, and thus the creation of further documents, arose from the need to teach the performers choreography, and specifically, to have them memorise the many positions they must assume during the entire choreography. With a more refined writing system, it became possible to add many shifts and formations, so the information to be given to the performers definitely increased over time.

From the charts at this point in the process an Excel is created, where all the data for each individual performer is given, and in particular what position they must assume on stage for each figure they represent in the choreography. From this Excel is created a document, called a mail merge, containing all the individual information broken down for each person. This last document will accompany each individual performer until the day of the official ceremony and help them to follow (Scursatone & García, 2023b).

The choreographer also keeps track of the steps of the choreography. In the case of Bryn Walters, he uses an Excel spreadsheet as shown in the following figure.

Figure 24. The Excel of part of the choreo of the movement. An example of Bryn Walters (Walters personal archive).

Start Time	End	Duration	8's singles	8's	Choreographic piece	Choreo	BRYN CUE
0:00:00	0:01:03	0:01:03	1,2	2x8	01:02	1 TURN, 2 (4 + 1x8 + 4)	TURN 2345678 1 2, SUR PLACE 1
0:01:03	0:01:11	0:00:08	3,4	2x8	01:11	3,4	1 2, SURPLACE 2 4
0:01:11	0:01:20	0:00:09	5,6	2x8	01:18	5,6	5 6
0:01:20	0:01:27	0:00:07	7,8	2x8	01:26	7,8 = ARRIVE IN 1ST POSITION	1 2, SURPLACE 3 8 234, PLACE D'ARRIVE
0:01:27	0:01:35	0:00:08	9,10	2x8	01:34	9 = 10 GROUPS 10 = NORD / CENTRE - GO	DIX GROUPES NORD , CENTRE , ESPACEE
0:01:35	0:01:40	0:00:05	11	1x8	01:42	11 = CONTINUE TO ESPACEE	 5678

The ability to write, especially after the transition from handwriting to digital writing, has led to the choreographer's skills being in high demand by TV directors and producers. This is because, as Doug Jack states:

We could offer a view of the show before the show was even on the field which was crucial for all aspects of show design costume design prop design lighting. We gave a truth to the scale of what was just a dream in the director's heads we could show the reality of what that footprint was (D. Jack, personal communication, February 20, 2023).

The complexity of creating mass choreography could not be separated from the use of appropriate tools for its staging. Over time, the development of notation in mass choreography took on enormous complexities, adapting to the historical technological context. Rehearsal times for the performance also adapted over time to the need not to commit too many hours to the massive presence of volunteers. Choreographers have therefore had to refine, edition after edition, the organisational system and the method of working and writing choreography, and the new tools have simplified the process of staging increasingly articulated mass choreographies.

V – FROM SYDNEY 2000 TO TORINO 2006: SPACE GROWS

V - FROM THE SYDNEY 2000 CEREMONY: THE SPACE GROWS

5.1.1. Sidney 2000

The Sydney ceremony was the product of a collaboration between Director of Ceremonies Ric Birch and Artistic Director David Atkins (SOCOG, 2000).

Birch had, by this time, gained a great deal of experience in the field of entertainment and ceremonies. Previous roles had seen him as Director of Production in Los Angeles 1984, Creative Producer & Director in Singapore 1990, Executive Producer in Barcelona 1992, and Producer of Flag Handover in Atlanta 1996 (Birch, personal communication, March 16, 2023). This long career had created in him a broad, yet precise vision of the kind of show he wanted to make.

David Atkins had in his career performed, produced, directed, choreographed and produced over 20 musicals in various countries around the world (SOCOG, 2000). Birch and Atkins wanted to create an exciting and fantastic version of Australian history and culture: “We have handed the direction of the creative segments to a select group of some of Australia’s leading talents from theatre, dance, film and music.” (SOCOG, 2000, p.11).

The Sydney ceremony was attended by 12,600 performers and 4,600 production and volunteer staff were present on the back stage (SOCOG, 2000). The staff working on the ceremony consisted of 650 people (Birch, 2004). Ric Birch requested Doug Jack for the mass management, even though there were Australian choreographers with extensive experience in coordinating large casts. He considered him to be one of the best mass choreographers in the world due to his great communication skills, which led him to generate enthusiasm and commitment in the cast of any country (R. Birch, personal communication, March 8, 2023). The American choreographer also brought with him the method based on writing mass choreography, and Birch wanted this knowledge to be passed on to the new team of choreographers, which was now to be reformed after the passing of Ron Mangham and Judy Chabola (personal communication, March 8, 2023). Doug Jack realised how great the responsibility was, realising the role Chabola had played all these years: “as head of a department and with Judy’s

passing, I realised how much pressure she had been under.” (D. Jack, personal communication, March 7, 2023).

The novelty introduced by Birch in the Sydney ceremony was the creation of aerial choreography, redefining the stage space with choreographed movements and ‘flying’ performers through the use of new technologies.

Doug Jack believes that Sydney’s staging changed the shape of the stage, making it possible to take the actions from the field to the top of the stadium and vice versa, involving the entire audience in the stadium (personal communication, March 22, 2023). Leonardo Boccia also stated that the three-dimensionality of the performance conducted in such a large arena was one of the most significant resources for the development of the stage space, causing great audience involvement (2013).

From then on, the aerial dimension was always present in every subsequent Olympic ceremony, although not always with such a preponderant role as in the Sydney ceremonies.

The choreographies that Doug Jack and his team took care of were *Nature*, *Tin Symphony*, *Eternity*, and *Rag-heroes live forever*. For these segments, large mass movements were realised with the use of large costumes, in a variety of fabrics and colours, with large props that blended in with the rest of the artistic production. The result was a mammoth production, which for the first time was able to make use of lighting and projections as the entire ceremony was performed in the evening hours.

Figure 25. The Opening Ceremony of Sydney 2000 (Julian Smith/AAP, westernsidney.edu)



5.1.2. Salt Lake City 2002

Doug Jack's participation in the 2002 Salt Lake City production was under the direction of Don Mischer, David Golberg, Geoff Bennett and Kenny Ortega, who also served as choreography supervisor. The stage consisted of an ice rink with ramps for entrances and exits.

Concerning the technical features of the ceremony Doug Jack states that there were many innovative solutions that the specialist staff had to adopt, in order to overcome the difficulties created by a stage formed by an ice rink: for example, the stilt walkers had to adapt the bases of the stilts in order to be able to walk on the ice as well as on the outdoor set-up (D. Jack, personal communication, March, 03, 2023). The choreographies were composed for skating artists, so there were no traditional collective choreographies with the participation of volunteers. For this ceremony, Doug Jack was honoured with an *Emmy Award* for field choreography, together with Sarah Kawahara for ice choreography and Kenny Ortega as supervising choreographer.

5.1.3. Atene 2004

The Athens 2004 ceremonies won an *Emmy Award* in 2005 for *Outstanding Lighting Direction*. They were signature ceremonies in that they were designed and directed by Dimitris Papaioannou, who produced the ceremony according to his own aesthetic taste, moving away from the Hollywood entertainment model (Lattiponpung, 2016). There were no mass choreographies according to the classical models of the Olympic ceremonies.

Papaioannou's design, at first only partially shared by the IOC, represented a new approach to the stage space, which in the first part of the ceremony was transformed into the sea. Doug Jack, in Athens, was the director of protocol and the athletes' parade and was joined by Claire Terri and Paul Winkelman; while Wanda Rokicki was joined by Nikos Lagousakos and Bryn Walters, who undertook the role of field choreographer and chartist.

These are just a few of the names of those who took part in the Athens ceremonies, but they are considered significant for the purposes of this research as it was from this ceremony that the team that would be involved in the winter ceremony in Turin 2006 was formed.

**VI - FROM TURIN 2006
TO RIO 2016: THE VIDEO
PROJECTIONS**

VI - FROM TURIN 2006 TO RIO 2016: THE VIDEO PROJECTIONS

6.1. Turin 2006

In order to create a ceremony that would highlight the qualities of the organising country, Filmmaster, with Marco Balich as executive producer and creative director of the event, assembled a team of the best professionals of major events at the time for Torino 2006.

These were ceremony expert Ric Birch, set designer Mark Fisher and choreographer Doug Jack. The creative team also included Alfredo Accatino as author and content supervisor, and Lida Castelli as art director (TOROC, 2006). Balich and his team had participated in the handover of the flag in the previous winter edition in Salt Lake City in 2002 and were preparing to realise their first Olympic ceremony. The artistic segments of the Turin OOC were directed by different choreographers, thus requiring complex lighting planning, as lighting designer Durham Marengi states (<https://www.youtube.com/watch?v=sAZxSZpJFo4>).

The production involved 6,100 artists and specialised workers selected from 11,000 people through a 90-day casting process (Dichter & Teetzel, 2020). For the city of Turin, the ceremonies undoubtedly turned into a great opportunity, leading the city to change its stereotype of a city known only for its automobile company (Guala, 2009).

Choreographer Doug Jack, as previously described, had participated in the ceremonies of five Olympic Games, including as director of choreography. In Turin, for the first time, the American choreographer took on the role of general director and found himself managing the Italian ceremony entirely.

For the 2006 OOC, Doug Jack formed a team consisting of the choreographers he had already worked with at Athens 2004: Bryn Walters, Claire Terri and Nikos Lagousakos. This team was responsible for the design and realisation of the mass choreographies contained in the ceremony, 'The Mosh Pit' and 'The Great Skyer', as well as handling all the mass movements of the protocol segments, including the athletes' parade (TOROC, 2006). Laura Guglielmetto was

also present as assistant choreographer, who would later take part with Bryn Walters in the Sochi ceremony in 2014, as well as other major events.

The stage was built in such a way as to accommodate choreography in several places on the stage. It had a shape reminiscent of the stylised design of an anatomical heart, with a hole inside it (TOROC, 2006). Doug Jack will perform the two mass choreographies by taking advantage of the stage feature. The athletes will take their position in the centre of the stage, inside the pit to follow the ceremony after their entrance.

This ceremony will mark an important milestone. Doug Jack will stage a choreography that will remain unique within the Olympic ceremonies and create the illusion of the movement of a human person. The Turin OOC will be the last one without the use of special video projection systems. The innovations in choreography writing that will revolutionise image communication for the professionals involved are not yet here. In the opening ceremony Bryn Walters will sign his first Olympic choreography, the Olympic Spirit, created for the dancers on the floor.

It is for all these reasons that the Turin ceremony will be analysed in depth later, in particular the two mass choreographies by Doug Jack that were chosen as case studies. Through them and their technical content, the choreographer's style and technique will be highlighted.

Mass choreographies in the years to follow began to interact significantly with the new lighting systems that were also gradually gaining a foothold in large open-air events. As Matthias Schnabel recalls, in Beijing in 2008, a giant carpet and LED screens hanging above the field of play were used in a way never seen before on such a large scale, together with large projections within the spectacular segments that allowed for drastic changes in the contributions of the sets (personal communication, May 08, 2023).

In the Vancouver 2010 ceremony, video projections definitely took their place inside the Olympic *Stadium Theatre*, developing and going beyond what had already been seen in Beijing. At Vancouver 2010, again Schnabel reports the use of stage/field of play projections as now routinely seen (personal communication, May 08, 2023).

On the same date, choreographic writing techniques will develop new notation systems that will speed up rehearsal times.

Schnabel remembers how the next step for ceremonies the use of a mix of large LED elements as scenic elements, large-scale field-of-play projections and scenic mapping was (personal communication, May 08, 2023). All this has become possible with the advancement of technologies in the field of show and event lighting. LEDs have become cheaper, projectors more powerful. Today, even for 'smaller' and less visible ceremonies such as the Saudi Games Opening Ceremony or closing ceremonies and Paralympic ceremonies, it is no longer surprising to commit many dozens of projectors (M. Schnabel, personal communication, May 08, 2023).

For these ceremonies, the use of digital lights and images (projected or LED) is mainly at the service of broadcast filming, but their balanced use results in a spectacle that is also appreciable for the audience present.

6.2. LONDON 2012

For the London 2012 opening ceremony, under the artistic direction of Danny Boyle, the organising committee wanted to recruit the best British artistic and creative talents who had never participated in an Olympic event, but who would have the opportunity to work with highly specialised producers (LOCOG, 2013).

Schnabel recalls that at London 2008, stage mapping - a stylised London house on an enormous scale - was introduced as the main element, which also represented the only use of video on stage throughout the ceremony. While this was not the first time that mapping was used, it is probably the first time that a director has focused exclusively on this element (personal communication, May 08, 2023).

As Bryn Walters reports, the London ceremony was organised with very large teams and the responsibility for the artistic segments was divided in an unusual way (personal communication, February 22, 2023). For each large segment or pair of segments there were directors and choreographers who had their own creative team within them. Steve Boyd and his team had the role of

facilitating the movements within the choreographies, planning and tracking them.

The same team managed the flow and movement of the athletes' parade for which significant planning was required.

In the London Closing Ceremony the choreography was mainly done by paid professional dancers and the stage design was limited, so that the mass team was less involved in the preparation than in the previous ceremony.

6.3. SOCHI 2014

The narrative line adopted for the closing ceremony of the Sochi 2014 Winter Olympics, on which Bryn Walters collaborated, was the historical theme. Featured themes were Russian achievements such as industrialisation, space exploration and the founding of St Petersburg, but also themes such as the celebration of its great authors and composers (Factsheet, 2022). The Sochi OCC was produced by Balich Wonder Studio as was the opening and closing of the Paralympic Games, with Marco Balich as Artistic Executive producer. The Chief Creative Director was Konstantin Ernst, the artistic director, author and director Daniele Finzi Pasca.

Schnabel recalls how in Sochi, after Beijing, floor projection was used on the field of play in an extremely powerful, invasive, integrative and creative way, as never seen before. Everything was done with graphic processing work that Schnabel believes surpassed that of Beijing on par with an animation studio film production even in terms of production time (M. Schnabel, personal communication, May 08, 2023).

Bryn Walters took on the role of director of choreography and director of mass choreography for these three ceremonies. What characterised the large-scale choreographies, conceived and realised by Walters, was the expressive research, which went beyond mere spectacle. For the closing ceremony, he created multiple mass choreographies including *The Sky and the Sea*, *Colours of Malevich*, *Kandinsky*, *Chagall* and *The Magic of Circus*.

Theatrical lighting and the use of video projections helped to create a true art form in the mass choreographies he created, linking body techniques, costumes and lighting with the narrative of the host country's culture.

6.4. RIO 2016

In the Rio de Janeiro 2016 summer ceremonies, the leading role was played by Brazilian music and culture, which gave rhythm and colour to the artistic segments (IOC, 2022c, pp. 3-4). The 12,000 selected volunteers helped to make this event great. The OOC was led by Creative Director Andrucha Waddington, Creative Director and Production Designer Daniela Thomas and Creative Director Fernando Meirelles, creating a complex artistic structure.

In the creative team of the Olympic Closing in Rio, Bryn Walters served as Live Action Director. Rosa Magalhaes was the Show's Creator and Creative and Alê Siqueira the Music Director (COJOPR, 2016b).

In the message of the creatives, the aim of the opening ceremony was to highlight issues related to the individual and the world he or she lives in, promoting man's peace with the planet as the main value (COJOPR, 2016a). The aim was to highlight human talent, rediscovering the man-made works of the past and present, celebrating the Brazilian people through history and national culture, reflected in the unforgettable works made with the hands of its artists (COJOPR, 2016b).

What was presented to audiences around the world through the interrelationship of the professionals involved was a complete fusion of visual, scenic and performing arts. In order to observe the technical content, style and technique of Bryn Walters himself, a mass choreography, *The Art of Burle Marx*, was chosen as a case study.

It can be concluded that video projections have become an integral part of Olympic ceremonies since 2010, enhancing the visual impact, narrative and overall entertainment value of the event.

As Matthias Schnabel states, through the introduction of video projections, which came from the theatrical experience, within the dimension of the stadium, an additional 'actor' was effectively introduced on stage as a storytelling medium (personal communication, May 06, 2023). Through video content, it is possible to decorate sets, change the shape and expression of the depicted location, create transitions in animation between scenes that become an integral part of a story and content that breaks up or augments the flow of a story.

The use of new technologies has thus created new opportunities in the staging of organised mass movements, culminating in the Sochi 2014 and Rio 2016 ceremonies. Thanks also to the use of LEDs combined with costumes and props, increasingly theatrical choreographies were realised.

What a stage designer once created with analogue means, he now stages through these technological tools. The interrelation between the work of a choreographer and a stage designer helps to amplify the *wow effect*, which is increasingly sought after by the general public in an entertainment show such as an Olympic ceremony.

VII – CASE ANALYSIS: A COMPARISON OF MASS CHOREOGRAPHIES

VII - CASE ANALYSIS: A COMPARISON OF MASS CHOREOGRAPHIES

The changes that have taken place and the evolution of mass choreography in the Olympic Ceremonies can be evidenced through their historical reconstruction, particularly since Los Angeles 1984.

In this historical excursus, a number of important milestones have been identified with regard to the artistic path of the choreographers examined, Doug Jack and Bryn Walters, who signed many choreographies throughout their careers. However, the peak of their work within the Olympic ceremonies can be traced back to two precise moments, Turin 2006 for Doug Jack and Rio 2016 for Bryn Walters, for the reasons outlined below.

We will therefore examine Doug Jack's two mass choreographies from the XX Olympic Winter Games in Turin 2006 (*The Mosh-Pit* and *The Great Skier*) and Bryn Walters' choreography (*The art of Burle Marx*) for the closing ceremony of the XXXI Olympic Summer Games in Rio 2016.

The creative and production design for Torino was developed and produced by K2006 - FilmMaster Group (TOROC, 2006a). The Rio 2016 Closing Ceremony was produced by CC 2016 with Marco Balich as executive producer, Abel Gomes as creative executor and Rosa Magalhães as creative and show creator. Marco Balich was present at both ceremonies.

The Turin ceremony was the one in which Doug Jack held the position of general director for the first time and in which he presented a style of mass choreography that had never before been seen in an Olympic ceremony. The 'Human animation' with *The Great Skier* marks the moment of the gradual move away from the creation of a performers-only image, which Birch, describes as 'warmer' (R. Birch, personal communication, March 8, 2023). The comparison, says Birch, is with images that could be 'colder' when video mapping projected onto the stage could replace or prevail over performers by involving the spectator less (personal communication, March 8, 2023). Marco Balich argues, however, that the use of subsequently developed technologies, if carried out in a balanced

manner, helps to enhance the emotional power of volunteer performers (M. Balich, personal communication, April 3, 2023). This aspect can be observed later through the analysis of Rio's work.

The example of Rio 2016 has been selected because its content can be seen as representing the culmination of many years of developments in how human and digital components have been combined. Taking a 10-year leap, from 2006 to 2016, also allows us to examine, through concrete examples, a choreography deriving from human and digital components that was the result of multiple researches by choreographers, as well as providing a marker for the last Olympic ceremonies before the Covid-19 pandemic.

The analysis of these cases will provide us with useful elements for achieving the objectives that have been set for this research project, namely to understand, through an analysis of methodological and artistic content, the extent to which the choreographic approaches of Doug Jack and Bryn Walters were influenced by Judy Chabola.

7.1. THE MOSH-PIT

The first choreography, under analysis was staged on the night of 10 February 2006 at the *Stadio Olimpico* in Turin. The project was part of the artistic segment that opened the ceremony, the *Rhythm of Passion*, which appears as segment n. 03 (TOROC, 2006). The choreography under analysis was animated by 300 professional dancers, skaters and percussionists and was directed by the choreographer Giuseppe Arena (TOROC, 2006).

The choreography *The Mosh-Pit* was created thanks to the 480 volunteers from all over Piedmont and was created in a scenic space called "Piazzetta" (TOROC, 2006). The choreography was created under the direction of Doug Jack with the collaboration of assistant choreographers Bryn Walters, Claire Terri and Nikos Lagousakos. For the design, Doug Jack took inspiration, as he says, from watching the synchronised swimming competitions in Athens 2004 (<https://www.youtube.com/watch?v=BBbF4oRRKNQ>). The aim was to create a stage space in which the artists could move by having them hide or highlight parts of their bodies, just as if they were coming out of the water.

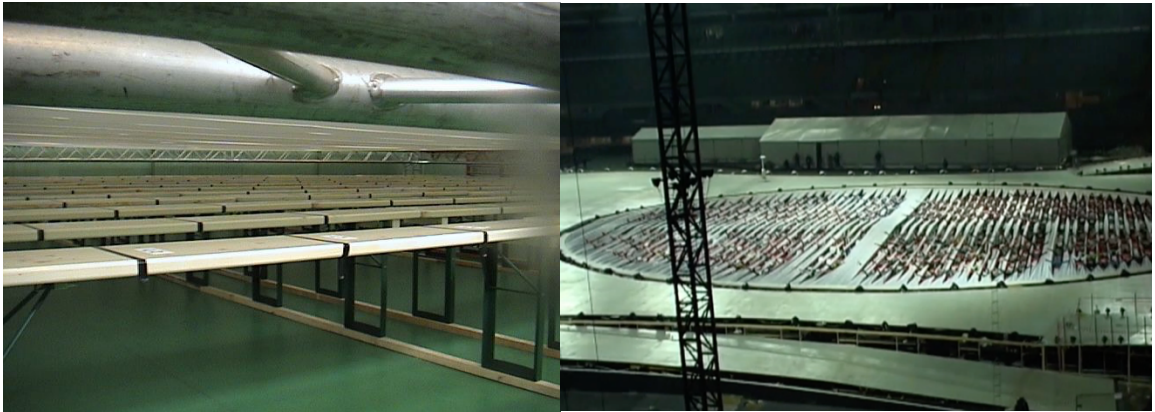
The scenic space for the implementation of the choreographic design was composed thanks to the construction of a hole, around which the main stage was built. The creative process of the Mosh-pit was the product of the collaboration between several professionals, led by Marco Balich, and required different decision-making processes (B. Walters, personal communication, January 17, 2022). During the creative workshops, several searches were carried out before reaching the choice of wands as props, as can be seen in the following images.

Figure 26. The Mosh-Pit workshop (Walters personal archive).



The design phases went through a miniature reconstruction of the stage and its transformation into a computer simulation (Toroc, 2006a, p. 30). The pit was covered with large elastic strips stretched over the entire area to give the idea of a single white surface. Under the elastic bands were benches on which the volunteer performers could lie down to perform the arm and leg movements typical of choreography.

Figure 27. The benches under the fabric and the Mosh-Pit choreography during the stadium rehearsal (from the video of the back stage. <https://www.youtube.com/watch?v=Pafolg51OCc&t=16s>).



The plan was that, at a later stage, the stage space would be transformed into the place where the athletes would be welcomed and seated once they had entered the stadium.

Figure 28. The mosh-pit with the athletes (from the video of the back stage. <https://www.youtube.com/watch?v=Pafolg51OCc&t=16s>).



Figure 29. One chart of the Mosh-Pit choreography (Walters personal archive).

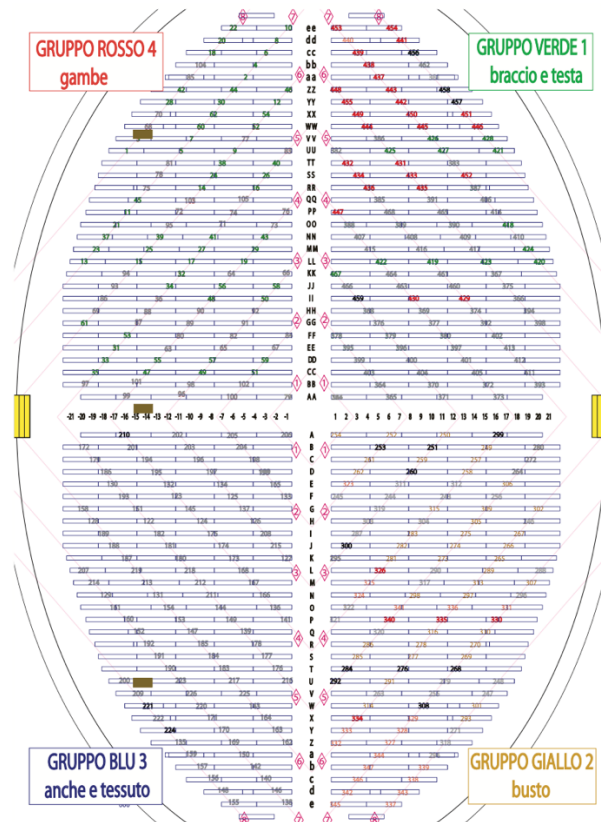


Table 3. Credits segment 03. Passion Lives here.

TURIN 2006	Opening Olympic Winter Games
RHYTHM OF PASSION	<i>Credits</i>
Rehearsals	5 months
Show	February 10, 2006
Venue	Turin, Olympic Stadium
Concept and creative Director	Marco Balich
Art director	Lida Castelli
Authorial supervision	Alfredo Accatino
Production design	Mark Fisher
Director	Gabriele Vacis
Choreography	Giuseppe Arena
The Mosh-pit choreography	Doug Jack
Costumes	Lino Dainese
Shaman's costume	Lino Dainese, Gabriella Pescucci
Original Score	Michele Centonze
Flame effects	Cristophe Berthonneau

The choreography *The Mosh-Pit* (TOROC, 2006) lasted three minutes and 24 seconds and was performed with 413 volunteers wearing silver Lycra costumes and holding two LED light sticks as props. Each performer occupied a precise position on the benches inside the pit, which they maintained for the duration of the choreography. The music was composed by Michele Centonze and reproduces a structure in simple 4/4 time. The piece opens with a gong strike and continues with more percussion, with strong accents between drums and electronic sounds. The melody enters later, repeats itself stubbornly and brings with it vaguely oriental harmonies and synthesised choral sounds, emphasising each moment of the choreography.

An analysis of Doug Jack's entire choreography is presented below, through the use of the previously mentioned observational parameters.

Table 4. Analysis of choreography *The Mosh Pit*, part 1.

The Mosh-Pit						
Timing	Use of space	Body space	Individual movements	Group movements	Line-ups	Image
Frame 1 00:00 01:23	Inside the Mosh-pit, on the bench. Everyone has their own fixed position. The vertical space available outside the Lycra strips is used. The space outside is occupied by other performers.	Each performer on a bench in a specific place. Below the stage level.	Arms emerge, arms outstretched from the centre, alternately, then synchronized. The whole body never appears.	The performers are stationary in place. Synchronized arm movements, canon-like movements. Slow and fast.	Geometric forms, diagonals, rows and lines.	Well-defined geometric shapes, concentric rhombuses appreciable from all points of observation. Image The artists outside the mosh-pit perform a separate choreography.
Frame 2 01:24 03:00	Inside the Mosh-pit, on the bench. Everyone has their own fixed position. The only space visible to the public is the vertical space available outside the Lycra strips.	Each performer on a bench in a specific place. Below the stage level.	Simultaneous stretching of the legs, scissor-like opening of the legs which subsequently change their direction of movement. Bending and stretching movements of the legs. Bicycle movement. The whole body never appears.	The performers are stationary in place. Synchronized legs, canon-like movements with impulse from outside. Slow and fast.	Geometric forms, diagonals, rows and lines.	The lines are gradually formed by movements in succession, in canon. The whole is then enclosed in concentric rhombus shapes. Although it is a static formation, dynamism is conveyed by the fast movement of the legs.
Frame 3 03:01 03:48	Inside the Mosh-pit, on the bench. Everyone has their own fixed position. The vertical space available outside the Lycra strips is used.	Each performer on a bench in a specific place. Below the stage level.	Arms emerge simultaneously, move with scissor-like movement on musical accents, alternately, then synchronized. Stripes are moved without the body appearing.	The performers are stationary in place. Synchronized arm movements, canon-like movements. Slow and fast.	Geometric forms, diagonals, rows and lines.	The final image is clear with the performers compact in the formation of the mosh-pit, but also in a heart shape on the outside of it.

Table 5. Analysis of choreography *The Mosh Pit*, part 2.

The Mosh-Pit		
Timing	Video shooting	Video Mapping
Frame 1 00:00 01:23	The footage alternates quickly from close-ups to mid-floor. As there are several groups on stage, the cameras try to switch from one image to another. The general plan is a shot that from a distance takes in the whole stage including the mosh-pit, but which immediately gets closer. The aerial view is missing.	There is no video mapping in this choreography. The surface of the Mosh-Pit is coloured blue and highlights the red-lit sticks. The surrounding scene is illuminated in bright orange and red.
Frame 2 01:24 03:00	General plan on the opposite side of the large portal, taking in the large stage and mosh-pit. Close-ups of the mass choreography, Jury Chechi, the drummers and the skaters. General plan only on the choreography of the big stage.	The surface of the Mosh-pit is coloured yellow and red. The surrounding scene is illuminated in yellow with red lights.
Frame 3 03:01 03:48	General plan only on the heart shape of the big stage, general plan only on the mosh-pit, general plan on the whole stage.	The surface of the Mosh-pit is illuminated with bright lights. The surrounding scene is illuminated with bright lights.

An analysis of the structure in general, suggests three main choreographic moments, anticipated by an introduction to the scene.

The opening of the ceremony, and thus of *The Rhythm of Passion* segment, occurs with the actions of the famous Italian gymnast Yuri Chechi, symbolising the art of industrial Turin. The colours of the lights projected onto the stage are red, and the shots focus largely on details such as the dancers, percussionists and breakdancers, before switching to full-floor with a view of the mosh-pit. At this moment, the white elastic strips that are stretched across the pit still keep the mass of performers hidden.

As the scene on the big stage begins to come to life, the arms of the performers, holding red-lit stickers, begin to emerge from the cracks in the elastic strips. As the choreography unfolds, the fabric is illuminated in blue, increasing the contrast with the coloured stickers. The rhythm of the piece begins to increase in intensity and the arms move in rapid succession, creating a play between dynamism and precision. The movements of the arms, sometimes short and fast, sometimes wide and slow, emphasise the structure of the stage formation. The

elastic fabric, at the close of the first scene, makes the many arms disappear, gathering them back underneath it. The formation given by the position of the performers is that of concentric rhombuses.

In the second part, the legs slowly emerge in the stage space and, as in a real synchronised swimming exercise, point towards the sky and then move alternating directions in space. At this moment, the video footage does not leave much room for framing the mosh-pit, as the cameras move to the details of the professionals on the big stage. The choreographic design of the mass is later highlighted by a few general shots. The lights on the mosh-pit are in shades of orange and red.

It is the last of these choreographic moments that emerges as the most effective and articulate. The group of skaters is united to form a heart, the mosh-pit volunteers again have their glow sticks in hand and Yuri Chechi is still present on the scene. This creates an image that can be captured by the cameras and encapsulates the small group united in the shape of a heart and the mass organised into clear, precise formations. The contrast of colours, the white lights on the Lycra strips and the red LED sticks finally highlight the geometric construction of the choreography, which is made of rows, lines and concentric rhombuses. This choreographic segment ends with the gradual exit of all the performers from the large stage and the disappearance of the mass under the elastic bands of the mosh-pit. The same volunteer performers will be on stage again, at a later stage, inside the mosh-pit to form the image of a snowflake, this time with the whole torso emerging from the elastic straps, during the segment "The Alps Greeting".

At the conclusion of the analysis and also thanks to the use of the back-stage videos, it can be argued that the transmitted images did not always succeed in enhancing the choreographic project in its entirety. The fact that Doug Jack's choreography was part of a larger project has at times obscured the mass choreography itself. The different levels of the submerged stage and the big stage as well as the different styles of the two choreographers, Jack and Arena, made the amalgamation of the two parts more problematic.

To better understand how much the video footage emphasised the choreography within the mosh-pit, further analysis was carried out. From the official video, scenes that included or only included the framing of the mass were

extrapolated. Five moments were identified, divided by other shots that included the choreography taking place on the big stage.

The result of this analysis was that the total view of the choreographic moment that was taking place inside the mosh-pit, adding up each frame, was one minute and 19 seconds. Given that the choreography lasted three minutes and 24 seconds, the home audience would have only been able to see the mass choreography for a little less than half this time. On the other hand, the spectacle seen by the spectators in the stadium was decidedly different. They would have had a full view of the choreography. Nevertheless, the use of costumes, lighting and props, will have had an impact on the audience at home, conveying the 'rhythm of passion', the narrative theme of this first segment of the ceremony.

The glow sticks used in the mosh-pit as props can already be spotted in the opening ceremony of the Australian Rugby World Cup in 2003, in which Jack participated as choreographer. After the Turin ceremony LED wands will be featured in the impressive and precise mass choreography of the Beijing OC countdown in 2008. The use of percussion and drumsticks was undoubtedly present in several ceremonies, perhaps tracing this back to the ancient traditions of percussion instruments, the oldest of musical instruments.

The stage structure, as witnessed by choreographer Walters, required several adjustments. Temperature fluctuations were a risk factor and the elastic fabric had to be adjusted up to the last minute to find the right tension, which was fundamental to the success of the choreography (B. Walters, personal communication, January 17, 2022).

The stage space that was achieved was, therefore, the result of a structural solution that had never been conceived in an Olympic ceremony before. The athletes were thus invited to be part of the spectacle. Leaving them the space that was previously part of the show allowed them to become, in turn, both protagonists and spectators. Hence, the the Turin OOC opening ceremony created an enduring image, a symbolic legacy, that put the athletes, the true protagonists of the Olympic Games, in the foreground.

7.2. THE GREAT SKIER

The second choreography analysed was also staged on the night of 10 February 2006 at the Olympic Stadium in Turin. It followed the first part of the ceremony, exactly after the first protocol segment, the entrance of the Italian flag and the national anthem marked as segment no. 06 of the media guide. The choreography was composed with the same 480 volunteers who performed *The Mosh-pit* and was presented on a stage space called 'Piazza' (Toroc, 2006). The choreography was created under the choreographic direction of Doug Jack with the collaboration of assistant choreographers Bryn Walters, Claire Terri and Nikos Lagousakos.

Doug Jack recounts that he was inspired by images from a sports magazine in which a ski jump was depicted in all its stages, in a sequence of about 40 shots (https://www.youtube.com/watch?v=m-1mw_bNenc&t=76s). Hence the idea of creating a moving image that reproduced all the phases of a ski jump, from the descent at speed to the flight and landing. The choreographer's goal was to create a sports icon representing all the athletes and containing all the Olympic values they convey through their practice (Jack, 2009).

Thus, a *Human Animation* was created, i.e. a mass choreography with the representation of a human figure in movement created by a large number of people connected to each other. The hundreds of people present, as Jack says, created an intelligent choreography that, thanks to a distant *bird's-eye view*, created an illusion by showing what was not there (Jack, 2009).

This imposing union of people went on to form the image of the skier, who has been given the name 'Rocco' by insiders. The name was inspired by a rugby player named Rocky, created with 700 performers in Sydney by the same choreographer at the opening ceremony of the 2003 Rugby World Cup (D. Jack, personal communication, April 16, 2023)⁹.

⁹ From 01:06 to 01:17 of the video you can see a few seconds of the choreography done by Doug Jack in 2003 'Rugby World Cup 2003 Highlights': <https://www.youtube.com/watch?v=zI0od6-uVzk> (accessed January 18, 2022).

Doug Jack reports that the technical problems that arose in Sydney were an experience that motivated him to better organise the *Human Animation* in Turin (personal communication, April 16, 2023). Bryn Walters reports in this regard that a great deal of time and effort went into changing and reconfiguring Rocco in order to make the design progressively simpler (B. Walters, personal communication, January 17, 2022). The design was changed and redrawn several times by Bryn Walters, which required a great deal of work.

The preparation and creation of this project took place in a disused factory in Turin, in which the large stage was reproduced. The space available was ample, although not enough to accommodate a full figure 20 metres high. The volunteers performed a total of 25 tests and were divided into two groups, one of which formed the lower part of the body and the other the torso, arms and head (TOROC, 2006). As Marco Balich states, the assembly in a larger space of the whole figure is the result of the valid methodology of choreographic notation and organisation adopted by the choreographers (M. Balich, personal communication, April 3, 2023). Only once the rehearsals began in the stadium, thanks to the projection of the choreography on screens, were the performers able to realise what was the product of months of rehearsals.

Figure 30. *The Great Skier*, (2006). Torino 2006 Ceremonies, Filmmaster Group, p. 23.

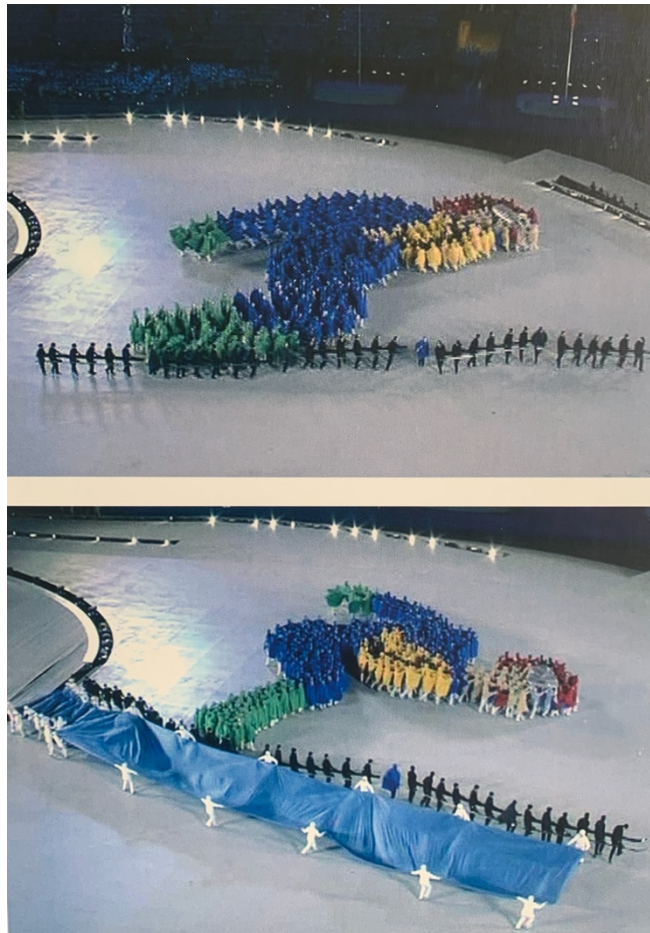
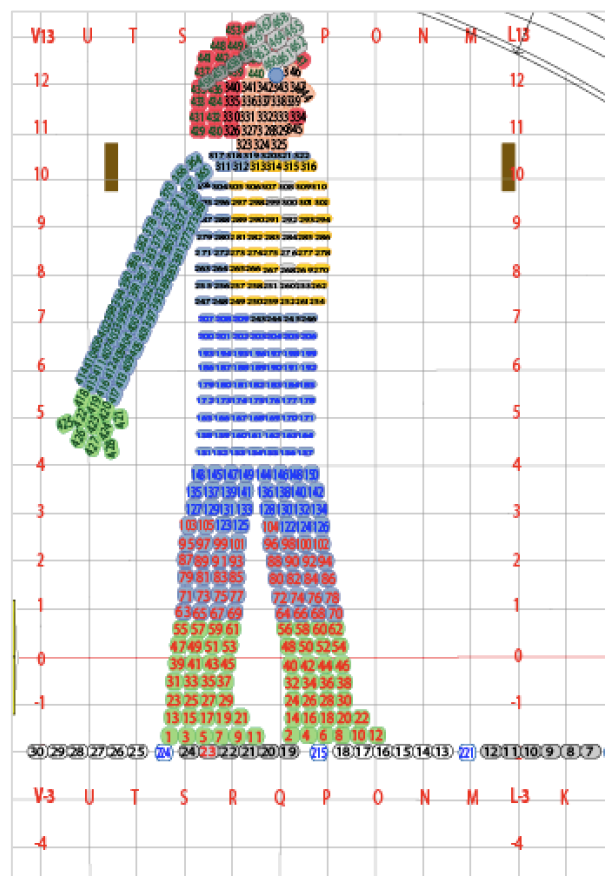


Figure 31. One chart of *The Great Skier* choreography (Walters personal archive).Table 6. Credits segment 06. *The Great Skier*.

TURIN 2006	Opening Olympic Winter Games
THE GREAT SKIER	<i>Credits</i>
Rehearsals	5 months
Show	10th February 2006
Venue	Turin, Olympic Stadium
Creative Director	Marco Balich
Authorial supervision	Franco Accatino
Director	Doug Jack
Choreography	Bryn Walters, Nikos Lagousakos, Claire Terri
Costumes	Gabriella Pescucci
Original Score	Michele Centonze

The choreography *The Great Skier* (TOROC, 2006) lasts five minutes and 24 seconds and is performed by 413 Mosh-pit performers, with 30 performers added to represent the skier's skis and 34 carrying a blue cloth under their skis to simulate snow. All the volunteers wear colourful ponchos to create the different colours of the different parts of the skier. All volunteers wear colourful ponchos to create the different colours of the different parts of the skier, worn over their silver suits before the choreography. Each performer assumes precise positions on the large stage, which will gradually be modified in relation to the different images that will form during the segment.

Michele Centonze's music is a succession of musical comments to the choreographic moments. When all the performers are united and form the figure, there is a succession of human voice sounds and technical noises that emphasise the ski jumper's preparation. The music is in simple time, with a melody emphasising the skier's basic movements. In the second part of the choreography, the rhythm picks up and emphasises the speed of the descent and the passage of the blue fabric under the skis. In Rocco's flight phase, the Rocky soundtrack makes the moment solemn.

The following table does not include the first two minutes of this segment, as it is considered a choreographic moment in its own right, albeit performed with the same performers, and not a concrete part of the skier. The timing will therefore start at minute 2:04 seconds, which is considered the exact moment of the change of music and the movement of the mass to create Rocco.

Table 7. Analysis of choreography *The Great Skier*, part 1.

The Great Skier						
Timing	Use of space	Body space	Individual movements	Group Movements	Line-ups	Image
Frame 1 02:04 02:48	On the big stage. The group occupies all the upper and central part of the stage.	A large, shapeless group.	Running with sudden changes of direction	They all move in random order, with contrasting movements, gradually approaching each other.	No line-up, everyone spread out on stage.	So many white dots that move and turn into as many coloured pixels.
Frame 2 02:49 03:54	On the big stage. The group occupies the central part of the stage.	A single formation created by a larger central part and smaller parts. The perimeter lines follow the shape of a body.	The performers are standing and walking around.	The group is compact, the performers are bound by their hands on their shoulders, the group representing the arm moves intersecting with the others. The movements are in synchrony.	The performers are lined up in rows parallel to each other.	Image of a great skier, standing, in profile, with his suit and helmet defined by colours.
Frame 3 03:55 04:34	On the big stage. The group occupies the central part of the stage space.	A single formation created by a larger central part and smaller parts representing the arms and legs.	Movement in space through walking. Someone remains stationary.	The group is compact, with the ligament on the shoulders almost the whole group moves in synchrony, leaving the shape but changing the position of the human body they represent. Some performers enter running with a cloth in their hands. Others are standing at the bottom of the skier's figure.	Parallel lines. In pairs carrying the cloth. A unique line with skis on.	A skier bent over his legs in an egg-shaped position.
Frame 4 04:33 05:10	On the big stage. The group occupies the lower position in the stage space.	A single formation created by a larger central part and smaller parts representing the arms and legs.	Movement in space through walking.	The group is still compact, now the shape stretches towards the top of the stage, bringing the lower part with skis closer to the group.	The formation in the figure is schematic through the organization in rows.	A skier with skis in his flight phase.
Frame 5 05:11 05:45	On the big stage. The group occupies the lower position in the stage space.	The formation is united, but the legs are evident as they move away from each other.	Movement in space through walking and a little running.	The formation, while leaving the shape, clearly emphasizes the small groups representing the arms and legs.	The formation in the figure is still schematic through the organization in rows.	A skier who lands after a jump and then brakes at the end of the movement.

Table 8. Analysis of choreography *The Great Skier*, part 2.

The Great Skier		
Timing	Video shooting	Video Mapping
Frame 1 02:04 02:48	Aerial view and general plan looking towards the large portal. Close-ups of the performers.	There are no video projections in this choreography. The lights from below on the stage are clear, pink and purple.
Frame 2 02:49 03:54	General plan with point of view of the authority stage. Aerial view.	The lights from below on the stage are white, making the backdrop of the image clear.
Frame 3 03:55 04:34	Aerial view. Close-ups of the performers. General plan with point of view of the authority stage.	The lights from below on the stage are white, making the backdrop of the image clear.
Frame 4 04:33 05:10	General plan with point of view of the authority stage. Close-ups very fast of the performers. Aerial view.	The lights go out to highlight the performers' foreheads
Frame 5 05:11 05:45	General plan.	The lights from below on the stage are white, making the backdrop of the image clear.

For this choreography we can identify five main choreographic moments: the creation of Rocco, the preparation, the descent phase, the flight phase and the landing.

The formation of the images is immediately surprising and unexpected. In the phase of Rocco's creation the performers come out of the covered pit and take up their positions on the large stage to perform an ensemble choreography. At the end of this part, the performers split into two groups to form the Roman numeral XX, symbolising the Turin edition. The music for this part is the 'Jingle Torino 2006' long version 'Torino Olympic City' (TOROC, 2006).

The choreography *The Great Skier* opens with the creation of the figure of the skier on the big stage, which occurs thanks to the transformation of the performers' costumes. Like a painter who draws coloured dots and lines on a

white sheet of paper and succeeds in giving them form, so the 477 performers with their different colours create a defined image, with their bodies and faces, in contrast with the white background of the stage. The stage is well lit with bright lights and its remainder is completely devoid of scenery and other performers, a situation present in the previous choreography. The image is thus defined and the human semblance distinguishable. The music emphasises the first moment, that of preparation. The skier's breathing, the sound of the visor closing, the movement of the arm and legs, emphasise the skier's concentration and attract the attention of the observing audience.

Rocco's movement increases its speed; the performers have to move in space while maintaining the compactness of the figure in order to simulate the second moment, that of sliding down the slope, until they reach a static position. At this moment, the 34 performers run, carrying a blue cloth that, like snow under their skis, emphasises the speed of the skier's descent.

In the third phase, that of the skier's flight, the scene changes, the soundtrack of the film *Rocky* plays in the background. On the forehead of each of the volunteers a small light is turned on, which, with the stadium lights off, emphasises the moment of the great performance, the great jump, and transports the public to the symbolic and representative moment.

The final landing, with Rocco's bent legs, underlines the great success of the jump by the skier, the performers and the entire audience. For the Turin 2006 Olympic ceremonies an iconic image is created that will remain in the minds of those who witnessed the live performance, but also of those who saw the recorded show.

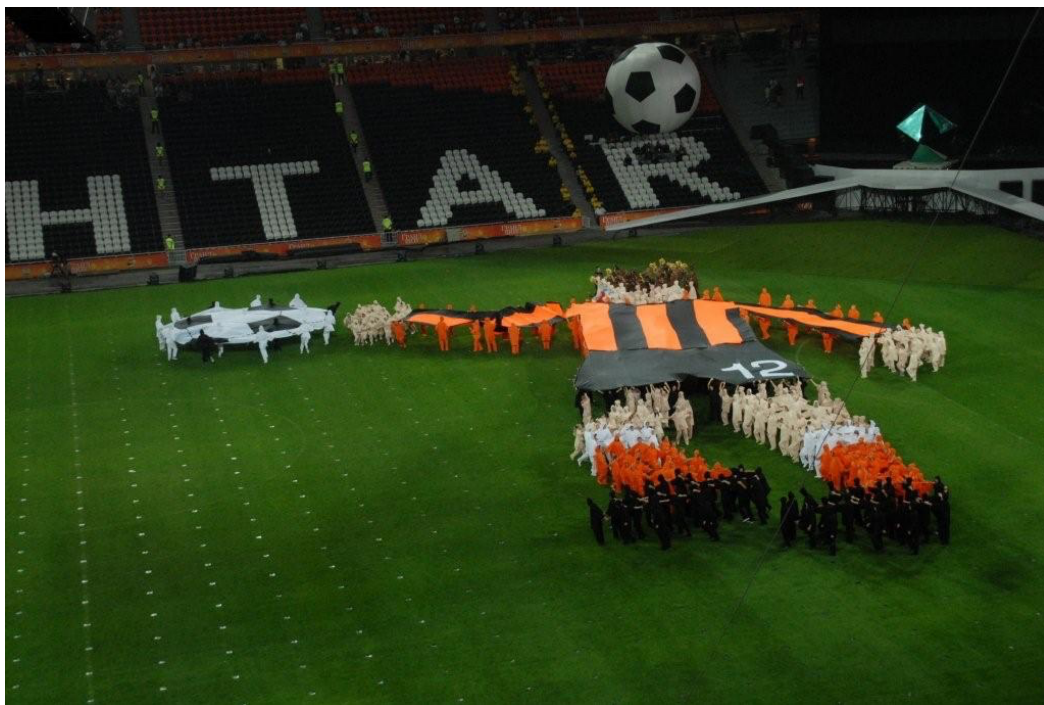
Most of the video footage taken enhanced the whole image, thanks to a very open plane, also achieved with aerial shots, but the ability to trace the faces and bodies of the performers with narrower planes helped to draw attention to the human values implicit in the choreography.

Apart from the Turin edition, there will be no other examples of *Human Animation* within an Olympic ceremony. They are not to be found before but no choreography with this narrative style will be reproduced in subsequent editions either. To find *Human animation* similar to that of the great skier in Turin, it is necessary to look at other large stadium events. At the opening of the Donbass

Arena stadium in Ukraine in 2009 for the closing ceremony of Euro 2012, choreographer Bryn Walters created an animated footballer player as seen in the image below.

Another example was for Euro 2012 where the same choreographer created several body parts inspired by Keith Haring's outlines – a kind of human animation but without the whole figure being involved¹⁰.

Figure 32. Donbass Arena Stadio, 2009 (Walters personal archive).



¹⁰ You can see these two examples in the following videos: 'Bryn Walters: Donbass Arena Opening Ceremony – Director of Mass Choreography', from 00:48 to 01:07. <https://www.youtube.com/watch?v=AJ4Vh8CHD7Y>:. See 'Bryn Walters: EURO 2012 – Live Action Director' from 01:10 to 01:18. <https://www.youtube.com/watch?v=0KJHM5LwhFg>.

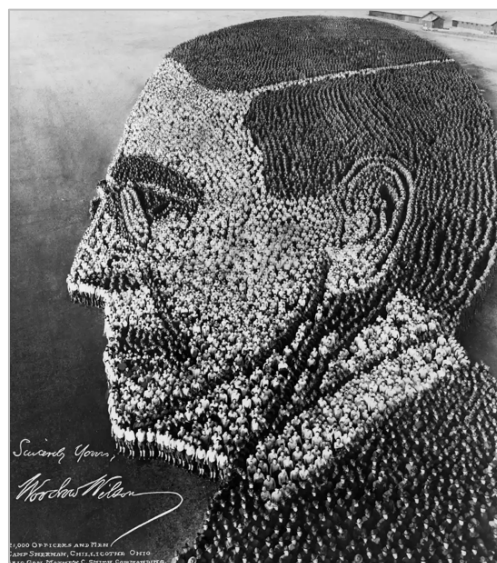
However, various mass choreographies representing shapes and symbols to depict and celebrate the values related to the Olympic Games continued to be present after Turin 2006, as they were before. Examples of this type can be seen in the formation of the dove of peace for the OOC in Atlanta 1996, or that formed by 398 brides for the OCC in Turin 2006. Five-circle shapes with the use of mass can be found in Barcelona 1992, Lillehammer 1994 and Atlanta 1996, as well as Sochi 2014. The 2014 OCC was characterised by a little play, when the choreographers left one of the five circles closed, only to have it open later, mocking the technical problems in opening the five circles at the OOC.

Images representing symbols of the country are very clearly visible in the *Olympic Wings* segment of the Rio 2016 OCC where the shapes of the *Sugarloaf Mountain* and *Christ the Redeemer* follow one another.

Images depicting human figures, or rather portraits of faces as produced by the ensemble of a multitude of people, can be found in the works of the Anglo-American photographer Arthur Mole, who created many living photographs with soldiers (Scursatone, Gómez-Lozano, & García-Sottile, 2023c).

This artistic expression had its development in the years of the First World War when Mole took several shots, that could convey the demonstration of control over bodies, with the characteristic of being appreciated from a bird's-eye viewpoint.

Figure 33. President Woodrow Wilson, 21.000 men at camp Sherman, Chillicothe, Ohio: Photograph Chicago History Museum. <https://www.theguardian.com/artanddesign/2015/aug/24/arthur-mole-living-photographs-military>.



The image of *The Great Skier* produced by the ensemble of volunteers who make up the whole is clearly visible to the audience in the stands but is even better portrayed for the audience at home. The volunteers are thus emphasised as part of a whole. The impact is thus that of a large human form enclosing many coloured pixels, each of which is represented by a performer (Scursatone et al., 2023c). The close-up shots render the human aspect of the image, which, partly due to its inaccuracies, makes the choreography one-of-a-kind.

7.3. THE ART OF BURLE MARX

The choreography was staged on the evening of 21 August 2016 at the closing ceremony of the XXXI OG in Rio. The choreography was created under the choreographic direction of Bryn Walters with the collaboration of assistant choreographers Claire Terri, Laura Guglielmetto, Renata Vieitas, Giselle Motta, Soraya Bastos, Juliana Gama, Marcello Vilar and Carolina Dias (B. Walters, personal communication, April 20, 2020).

The choreography ‘The Art of Burle Marx’ is a tribute to the Brazilian artist and landscape artist Roberto Burle Marx (São Paulo, 1909 - Rio de Janeiro, 1994). As described in the media guide, the peculiarities of this artist are his use of sinuous forms and typical Brazilian vegetation (COJOPR, 2016b). He was an artist who worked with a range of media, including ceramics and jewellery design (COJOPR, 2016b).

The conception of the project and the costumes was entrusted to Rosa Magalhães, recognized as one of the most successful creative directors of the Rio de Janeiro Carnival. The creation of the costumes was produced by the Association of Women Entrepreneurs of Brazil (AMEBRAS), which was founded with the aim of creating useful skills to strengthen the creative industry related to the carnival (COJOPR, 2016b).

The mass choreography in question is part of a video mapping project that has been massively developed both in the OOC and in the OCC of Rio. The close connection between the use of technology and the organization of bodies in space makes this choreography an appropriate model for analysis.

The aim of the collaboration between Bryn Walters and Rosa Magalhaes is to reinterpret some works and icons of the artist Burle Marx through a mass

staging. The project saw a great deal of image creation, through writing on graphics with the *Adobe Illustrator* program, and the design of video content. Although the original concept was by Rosa Magalhaes, Walters directed and choreographed the entire segment adapting much of Burle Marx's works for choreographic purposes (Walters personal communication, July 19, 2022).

The piece of music used is in $\frac{3}{4}$ time and is Tom Jobim's version of 'Chovendo na Roseira'. The delicacy and harmony of the piece emphasise the choreographic forms that are created, from the softest to the most schematic.

Figure 34. One chart of *The Art of Burle Marx* (Walters personal archive).

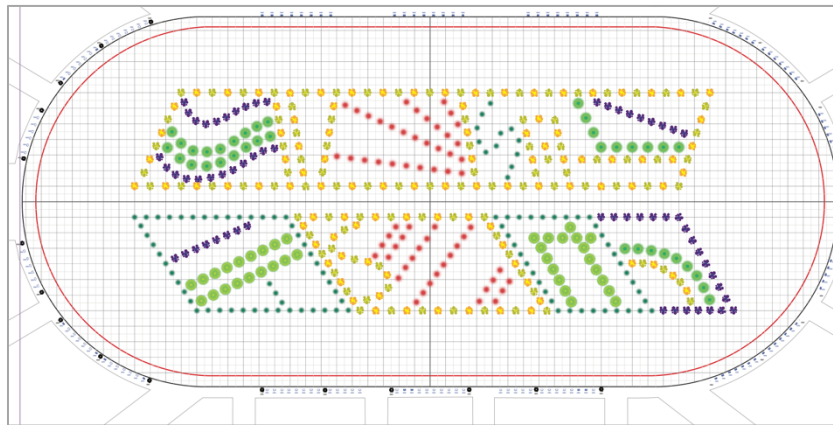


Figure 35. The choreographic moment of the OCC of Rio 2016 corresponding to the chart above (Olympic channel).



Table 9. Credits The Art of Burle Marx.

RIO 2016	Closing Olympic Summer Games
THE ART OF BURLE MARX	<i>Credits</i>
Rehearsals	3 months
Show	August 21 th 2016
Venue	Rio de Janeiro, Stadio Maracanã
Art director	Rosa Magalhães
Production design	Rosa Magalhães
Director	Bryn Walters
Choreography	Bryn Walters
Costumes	Production by Association of Women Entrepreneurs of Brazil (AMEBRAS)
Music director	Alé Siqueira
Music	Chovendo na Roseira, Jobim
Stage space	105x 68 m

The choreography *The art of Burle Marx* (COJOPR, 2016) lasts four minutes and 13 seconds and is performed by 480 volunteer performers. The costumes they wear, Walters refers, are inspired by Brazilian flora: the green ones represent trees and plants, the reds, yellows and purples are flowers, including the Bromelia, Lantana and Bougainvillea. Each individual plant/costume/performer group has a variation of the same choreography, which differs according to the movement possibilities that the costume itself allows (Walters, personal communication, March 12, 2023).

The choreography is highly articulated and consists of different pictures representing the works of Burle Marx. The pictures are created by the performers' positions in space in combination with video projections. These pictures are connected to each other through a work of image transformation: this moment is identified as transitional, as it consists of the performers moving across the stage to assume the next form and position.

Table 10. Analysis of choreography *The Art of Burle Marx*, part 1.

The Art of Burle Marx						
Timing	Use of space	Body space	Individual movements	Group movements	Line-ups	Image
Frame 1 00:00 00:48	Entry from all sides. Use of the entire stage.	Small groups.	Each performer / costume performs different movements: steps, chassés and pas de bourrée, turns, and small combinations of arms and legs.	Little distance between performers, no connection between them, moments of synchrony between groups of the same colour.	Files with irregular traces, small groups with sinuous lines.	Coloured spots with sinuous shapes
Frame 2 00:49 01:42	The transition takes the group from occupying a very large space to being arranged in the central area of the stage.	Large hexagonal group with row and circle organization.	Movements with chassé and series of dance combinations.	In the transition, movements in synchrony. In the large group, movements in contrast and succession for heights and directions of movement.	Small circles, spectated lines, and small groups.	A large flower shape.
Frame 3 01:43 02:19	The transition brings the group back to the stage in almost complete order.	Five large groups in the shape of rectangles with round sides.	Small combination of old jazz style dance steps, with small jumps and arm movements.	Movements in synchrony of the individual performers even if adapted to different costumes.	Parallel lines, curved lines.	A large figure with matching colours to form a pattern as a fabric print.
Frame 4 02:20 02:43	Over the whole area mainly on the centre line.	Ten groups each in the shape of a half moon.	Slipped side steps for some, static arm movements in place for others.	The outer lines of the formation they walk over the area. Inside in contrast the performers lower themselves or make small. movements.	Curved lines, small wedge-shaped groups.	Spikes tied together to form the Copacabana Promenade.
Frame 5 02:44 03:07	The entire stage space.	Six parallelepiped shapes with internal parallel lines.	Movements with chassé and series of dance combinations.	Movements in synchrony respecting the diversity of costumes.	straight lines, parallel or converging.	Formation recalling the designs of the Avenida Atlantica.
Frame 6 03:08 04:13	The entire stage space.	Small, irregularly shaped groups.	Arm movements and small leg movements, all while remaining in place	Smooth distance between performers, no ligaments, synchronized movements.	Small groups with sinuous lines.	The spots recall typical Burle Marx designs, like a large garden.

Table 11. Analysis of choreography *The Art of Burle Marx*, part 2.

The Art of Burle Marx		
Timing	Video shooting	Video Mapping
Frame 1 00:00 00:48	General plane, medium plane, high general plane, close-up.	Yellow, pink, beige, green stripes. These lines become blobs, of irregular shapes, distributed over the entire surface of the stage. While maintaining the same shape, they change their background colour in time to the music. However, the same types of colours are always maintained.
Frame 2 00:50 01:42	General plane, close-up, medium plane, close-up.	Coloured brushstrokes and spots are maintained, albeit slowly taking on a mainly yellow colouring. During the kaleidoscope flower, the part around the shape turns violet and grey. No shapes are projected.
Frame 3 01:43 02:19	General plane, medium plane, general plane, close-up.	As the performers move, the projection maintains a purple background. Geometric images of clear lines are subsequently superimposed on the previous background.
Frame 4 02:20 02:43	General plane, close-up, medium plane.	The same image is repeated in this frame, with gradual changes in brightness.
Frame 5 02:44 03:07	General plane, close-up, high general plane.	In the change of scene, the background darkens again, always in shades of purple, always with geometric line shapes, and then lightens again.
Frame 6 03:08 04:13	General plane, close-up, high general plane.	Large, colourful peninsulas with a white border are projected in bright, vivid colours. These gradually lose their intensity but leave the geometry of a Burle Marx garden.

Six main, distinctly distinguishable images and transitional moments can be identified.

The choreography begins with the gradual entry of the entire cast onto the stage. Accompanied by the brushstrokes of colour projected onto the stage, the performers enter from each side, moving to the first notes of Jobim's piece, to slowly take their positions:

I took these water colours as the starting point and populated them with our plant-costumed cast, creating complex pathways of travel steps to enable the

cast to eventually reach their final positions. The projection was designed to appear as simple brush strokes as if the pen of Burle Marx himself is painting on the floorcloth. These brushstrokes gradually coalesce so as to only form the completed image when the dancers also reach their formation and are entirely captured by the completed shapes (B. Walters, personal communication, July 19, 2022).

The first image that is formed is one that takes its cue from a painting method known as gouache. Impressionistic watercolours are an example of this form and Walters states that these images can be seen in two ways: as abstractions of interconnected curvilinear shapes of various complementary colours, but also as paintings of flowerbeds and borders in landscape and garden design (B. Walters, personal communication, July 19, 2022). The shape of the projections is sinuous; the colours are sharp and change on the tempo of the music, and the performers are grouped by colour and type of costume.

The second transition slowly brings all the performers towards the centre of the stage. The movements take place with compound steps and arm movements. Concentric lines are slowly created by colours and shapes. The resulting image is now that of a hexagon where the colour green and violet prevails on the outside of the figure and a central yellow, red star with a green interior form a large flower shape. The performers' movements on several levels create an optical play:

Each costume plant type had their own sequence of movements which enables the entire image to oscillate and shift in focus, with different colours becoming highlighted as the dance rises and falls, thus reinforcing the idea that we are looking at the patterns within a kaleidoscope (B. Walters, personal communication, March 12, 2023).

The lights and projections make the colour pink and purple prevail, creating a sharp contrast to the strong colours of the central, more illuminated area. Walters states that the inspiration for this image did not come directly from a specific work of the artist, but from a form that could express his art. More precisely, he states that he was prompted to draw this figure by a dramaturgical choice, with the aim of having a moment in which all the performers were grouped in the centre of the stage, to create a choreographic contrast with the rest of the segment (B. Walters, personal communication, April 18, 2023).

Moving outwards from the stage now causes the previous image to disperse and each plant/flower to move slowly to another position.

Now the formation is once again open and distributed over a large part of the stage. What can be perceived is a regular, predominantly geometric and schematic design with a grouping of colours and costumes where the red flowers remain in the centre, and the green plants and purple flowers further away from it. The projections delineate clear lines almost as if drawing a net. Bryn Walters named this image *Tapestry*, with reference to one of the many ways in which the landscape architect expressed his creativity (B. Walters, personal communication, April 18, 2023).

The transition to the next formation is very quick and occurs by slightly changing the distance between the performers. In fact, half-moon shapes are quickly brought to the fore, forming interconnected segments. This image is clearly reminiscent of the tile designs of the Copacabana Promenade designed by Burle Marx in Rio de Janeiro. The performers, despite being in place, perform small movements with their bodies that give dynamism to the figure. The video projections are always light and create a background that changes in brightness.

The harmonious rhythm of the choreography now brings the performers into a rather schematic formation, formed by parallelograms with internal lines. This image reproduces the pattern produced by the pavement of the Copacabana promenade, the *Avenida Atlântica*.

The finale features the video projections illuminating the centre of the stage, the performers performing dance steps, small chassés and arm movements, and the $\frac{3}{4}$ musical piece leading the audience towards the final act. The sixth and final identifiable image is again a perfect synergy between the projections on stage of sinuous coloured areas and the small groups formed by the colourful performers within them. The choreographer led the audience present and the audience at home, as the media guide commented, into a vast Burle Marx garden (COJOPR, 2016b). From this scene, with the group of mass performers still present on stage, a very poetic and original scene that Bryn Walters has created will open: the extinguishing of the cauldron, under a reproduced torrential rain, with the suave voice of Mariene de Castro interpreting the song 'Pelo tempo che durar' by Marisa Monte and Adriana Calcanhoto.

For the recognition of these images the references were multiple. In addition to the media guide and the ensuing speaker's commentary, the frames were placed alongside the power point project from the choreographer's own personal archive.

The choreography analysed is characterised by the creation of images and forms inspired by artistic works. The portrayal of something that acts as a transfer to understand values and messages is, as previously mentioned, characteristic of every ceremony. The choreographer's action was not only to highlight national identity by drawing inspiration from artistic works, but to use a new form of art to redesign and reinterpret them (Scursatone, García-Sottile & Gómez-Lozano, 2023a).

At Sochi 2014, the OCC whose title is 'Reflections of Russia', a narrative was created to highlight the people and their prominent characters. It is in this ceremony that one can identify other mass choreography composed and directed by Bryn Walters. In the artistic segment named *Colours of Malevich, Kandinsky, Chagall*, Walters represents the art of Chagall, with a cast of 120 performers including 10 brides suspended on clouds and 41 stilt walkers and jumpers (SOOC, 2014). Here, too, there is a reference to an artist.

Close to the shapes of Rio is the choreography *The Sky and the Sea*, also by Bryn Walters for the 2014 OCC in Sochi, which with 700 performers wearing costumes with mirrors, created shapes, yin and yang, waves and the infinity symbol. The glittering mirrors of the costumes spread wonderful reflections around the stadium (SOOC, 2014).

The affinities with *The Art of Burle Marx* lie in the quest to revisit an artist's imagery in a choreographic art form. It can be concluded by saying that Bryn Walters and his team have created a live performance with a strong visual and communicative impact, following an atypical choreographic structure, far removed from the more traditional mass organisations.

7.4. ANALYSIS OF RESULTS

In order to arrive at the conclusions and results of the case study, the analyses of each of the completed choreographies, *The Mosh-Pit*, *The Great Skier* and *The Art of Burle Marx*, were compared using individual descriptors.

Thus, starting from the analysis of each individual component under observation, the following is noted:

- The scenographic structure of the Mosh-pit allowed the performers to move their bodies in vertical space, preventing them from moving in horizontal space, while the other two choreographies made use of mass to compose both static and dynamic representations and images. The movements in space were more present in the Rio choreography, while to compose the skier it was necessary to keep the group of performers always compact and 'bound' through the use of their arms, therefore less free to move across the stage. Within the choreography of Rio, the choreographer created many small formations, organised according to colours and costumes, as well as a large central grouping.
- With regard to the use of the body, Doug Jack's two choreographies made different uses of body techniques. While the choreography of Mosh-pit presented technical movements of the legs and arms using props, in *The Great Skier* the movements in space were not produced with a specific body technique, as the individual volunteer performers moved with a simple walk, or small run. In the choreography *The Art of Burle Marx*, on the other hand, each performer was associated with a different type of costume/prop and made use of dance techniques typical of old jazz style dance, in relation to the movement possibilities that the costume gave them.
- Many combinations were observed in the use of the modes of collective work. In the choreography The Mosh-pit, arm and leg movements were organised in synchronisation, in canon or in rapid succession. In The Skier, the performers moved in synchronised movements, using contrasting movements of space, both in the very first part of the choreography and at the end of it, when all the performers moved off in a fast run to form the final picture. No other modes of collective work were found in this second choreography. In the choreography of Rio, many forms of working in synchrony were proposed. These were organised in individual groups as well as in a large group and they were used to create

moments of contrast in terms of level of movement (some lowered and others raised), direction (with rows running side by side in different directions) and at certain moments also in terms of rhythm, with some performers performing slow movements and others fast ones at the same time.

- The formations in the space all turned out to be organised in the same manner and legible, in their trace on the stage, for all three performances. The choreographic patterns in the mosh-pit, although unable to change due to the static nature of the choreography itself, presented parallel lines that joined to form concentric rhombuses. In *The Great Skier*, the image of the human silhouette as a whole presents a sinuous shape. A close look inside it also shows a schematic organisation, as could also be seen from the charts. For each different image created to give continuity to the illusion of the skier's movement, a series of parallel rows of different lengths are drawn according to the body part to be represented. In the third choreography observed, *The Art of Burle Marx*, the formations are sinuous, but at times also squarer. Within them are curved lines that, parallel to each other or connected in different directions, create round shapes, but also organised according to a pattern of alignment in rows.
- The images transmitted were of a different nature. In the three examples taken for the case study, the different methods of video filming and the objective difficulties in conveying the human and technical aspects of the choreographies to the home audience without losing an overview are highlighted. The main choice in narration is made by the director. An analysis of the videos in *The Mosh-Pit* choreography showed great differences between what could be seen by the audience, in the stadium and what could be seen in the broadcast. Very few minutes were devoted to the mass choreography and the lighting and choreography around it did not facilitate a clear transmission of the choreographic content. On the other hand, the shots with a general plan, prevalent in the choreography for *The Great Skier* and for *The Art of Burle Marx*, made

the reading of the images very distinct, as if the choreography were an animated drawing on stage. The video projections in the Rio choreography created a clear difference in the use of the image, as has been extensively analysed above.

In the choreographies of Doug Jack and Bryn Walters, presented in the case study, it is possible to identify great differences. However, there are also many points of contact, despite a ten-year jump in the timeline. Marco Balich's presence at both ceremonies has certainly contributed to a continuity of style, and there is visible evidence, through the ceremonies he has staged over the years, of a continuous search for the best of all communicative and narrative possibilities.

The style of each choreographer is related to his or her history and professional training, but a style model, both artistic and methodological, emerges from observing the choreographies analysed.

First of all, the organisation of the forms and images created in all three works is clear and visible. The formations all have the same organisational system within them. The orderly presence of the bodies on the stage space was created by parallel lines and is visible through freeze frame, or by reading the choreographers' own charts. In confirmation of the observed elements, it is possible to find the same working methodology, whose long evolution has been analysed above, because of the observation of the charts themselves. In fact, the method used appears to continue in line with Judy Chabola's legacy, which originated with the American drill teams and marching bands. The development of choreographic notation thus evolved on the basis of the legacy left by the choreographer and as a consequence of the technical requirements of the choreographers, who found great support in the use of software.

Although the body techniques used differed, for all three works the choreographers' research was directed towards the creation of moving images that were refined and captivating. In the course of the performances, the individual bodies create an image that forms and evolves, creating narratives that go beyond the mere stage effect, arousing emotions and involvement.

Each individual performer is part of the whole, and is a pixel that, connected with the others, creates the whole image. The presence of human bodies, even if in the choreographies with the use of video projections supported

by shapes and colours outlining the spaces, transmits energy and involves the audience. When video footage lingers on the details, it can detract from the overall vision of the image. However, it can also highlight the human aspect of the choreography and draw attention to its complexity. What remains, especially for the audience in the stands, but also for those who see the transmitted images, is an immersive experience proper to the performing arts.

VIII - CONCLUSIONS



VIII - CONCLUSIONS

The historical journey that was undertaken and the construction of a timeline showed how different forms and interpretations of the Olympic event have been staged over the years. It was possible to point out that the format that we have become accustomed to seeing in recent ceremonies took shape definitively between the 1980s and 1990s, even though it was the result of a long evolution. The search for the fullest possible realization of form and spectacle and the great freedom of interpretation of the event afforded by the organising committees, albeit with different productions, has always made great use of mass movements.

Mass choreography for spectacle was definitively introduced in Olympic ceremonies from the 1970s onwards. However, from the 1984 Los Angeles ceremony onwards, there was a gradual move away from the forms of gymnastic and military exercises that had accompanied the Olympic rituals of previous editions. The methodology developed since that time by Judy Chabola, born from her experience with American drill teams and marching bands, made it possible to create impressive mass choreographies, with the use of bodies and costumes introduced within new narrative styles, as for the opening ceremony of Barcelona '92.

The introduction of the figure of the volunteer performer in the early 1990s gave rise to new challenges and requirements in terms of the use of time and space for staging the performance and the need for improved communication with all the professionals involved. Choreographic notation has therefore evolved on the basis of the legacy that was left by Chabola and indeed as a consequence of the technical needs of choreographers, who went on to find great support in the use of software.

It is now possible to state that the professional relationships between the main choreographers involved were manifold. As could be verified, Judy Chabola and Doug Jack worked on common projects from the beginning of the 1990s, until the death of the choreographer herself in 1999. Subsequently, Doug Jack was

joined by Bryn Walters from 2002 to around 2010. These interrelationships have increased the competence of the professional figure of the mass choreographer in general, leading to the birth and development of an artistic community linked to the above-mentioned names. Evidence of this can be seen in the use of the same working method, not only by the leading choreographers, but also by the teams working alongside them. The aim of this generation of choreographers was also to create different levels of emotional involvement, not only based on spectacle, but also arising from themes and cultures pertaining to the host country. Engaging narratives were also added to the Olympic symbolism, thanks to theatrical lighting, props, and of course projections. The choreographic approach was underpinned by a concern to unite all the people involved, from the athletes, to the volunteers, to the audience, without departing from the original model.

One might think that the use of technologies, as presented at Rio 2016, in comparison to the choreographies created at Turin 2006, signaled an eclipse in the importance of the human component. What can be observed, however, is that the opposite is true; only the mass can create three-dimensionality, which a projected image is unable to produce. It is therefore argued that only the right balance between the human element and images can give rise to true works of choreographic art.

The line of study drawn has been able to highlight the submerged work of those mass choreographers, who have created a kind of continuity between the past and present of the Olympic ceremonies. Through the work carried out, the analysis of the choreographies, and the information received from the protagonists, we can prove and finally affirm that a style has indeed been established that runs through the work of these three choreographers and through the work of the professionals related to them that has left an imprint, and has marked an era, leaving a legacy that can be drawn on in the future.

An Olympic ceremony is a very complex system and as such, is a great team effort. Many areas remain unexplored to date, and much material has yet to emerge. Further studies could bring to light the methodologies and working styles of other professionals who have specialised in the masses, thereby helping to reconstruct the history of the great form of spectacle and entertainment that an Olympic ceremony represents.

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