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Music in the Sky Like Bombers: Representations of Airplanes in Interwar Futurist Music

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MUSIC IN THE SKY LIKE BOMBERS: REPRESENTATIONS OF AIRPLANES IN INTERWAR FUTURIST MUSIC, 1920-1940

by
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Abstract

Since its founding in 1909 by F. T. Marinetti, the artistic movement of futurism gathered momentum as a politically charged avant-garde that challenged tradition and day-to-day life while promoting nationalism, war, and complete artistic expression. Marinetti and his artistic movement followed fascisms' slow march to power through multiple aesthetic phases, beginning with the study of movement through plastic dynamism (1909-1919), engaging with speed and controlled power through machine aesthetics (1920-1929), cumulating with the more mystical aeroaesthetics (1929-1944), which Marinetti described as "the daughter of fascist aviation and Italian Futurism."

This posturing was not done merely in support of fascism. In 1929, Marinetti was elected to the Academy of Italy, serving within Mussolini's government. It was then that he published the *Futurist Manifesto of Aeropainting* and relabeled his own free-words poetry as aeropoesia. In seeking to establish futurism as a national art, Marinetti recognized that his movement must give up the political provocation that so defined it; but in order to preserve the avant-garde identity of futurism, he had to resist Mussolini's reactionary preferences for realist art. With the conflicting fascist and avant-garde impulses as a guide, this thesis diagnoses aeromusic with a split personality. I contend that the representation of airplanes in aeromusic like that of Mario Monachesi's, functions as a floating signifier of Italian supremacy under fascism, making it useful fascist propaganda; while the compositional practices of geometricism and synthesis subtly pushed back against conservative tastes in hopes of restoring the avant-garde Italian culture that futurism enjoyed in its first two decades. Aerofuturism, an institutionalized futurism in the 1930s, was a far more postured polemic than the anarcho-fasci-syndicalist futurism of the 1910s: a slap on the wrist of fascist taste.

My research explores the music created by the most prominent composer of aeromusic, Mario Monahcesi, and places his aeromusic within the broader narrative of the futurists' reluctant assimilation into fascist culture by creating an inoffensive avant-garde that used the airplane, a fascist symbol, as a means of furthering the futurist fascination with dynamism, synthesis, nationalism, and war, while subtly critiquing the conservative reactions of *Il Duce* that had increased along with Mussolini's ties to Nazi Germany.

MUSIC IN THE SKY LIKE BOMBERS: REPRESENTATIONS OF AIRPLANES IN INTERWAR FUTURIST MUSIC, 1920-1940

Introduction

Reconstructing the Aerodrome

Introduction

November 6, 1931 saw the inauguration of the "Exhibition of Aerial Painting and Futurist Scenography," an event that realized a creeping change that had been developing in futurist aesthetics and self-representation starting in 1929 with the futurist founder F. T. Marinetti's *Futurist Manifesto of Aeropainting* and *Futurist Manifesto of Aeropoetry*.[1] At this exhibition, futurists presented works of poetry, art, and dance that constituted aerobatics and dogfights, arial spaces and perspectives. Attached to these painting was the notion that the airplane represented spiritual themes of resurrection, eternal life, and liberation through material transcendence. Anja Klöck illustrates this change by creating a dichotomy between this new aesthetic, oriented verticality, and the horizontal orientation of the movement's previous polemics against museums, politics, and tradition.[2] Throughout the 1930s, every creative sphere within futurism took on the prefix "aero," including music. Manifestos were written covering all topics regarding the spiritual representation of aviation. [3] Perhaps the most notorious of them was *The Futurist's Cookbook* (1932), a polemical piece of writing that exemplifies Marinetti's desire to reconstruct every aspect of life into performance art—in this case, mealtime.[4]

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[1] Anja Klöck, "Of Cyborg Technologies and Fascistized Mermaids: Giannina Censi's *Aerodance* in 1930s Italy," *Theatre Journal* 51, no. 4 (1999): 402.
[2] Klöck, "Of Cyborg Technologies and Fascistized Mermaids," 403.
[3] There is even a manifesto dedicated to the futurist necktie, which references aeroaesthetics: "It is better to be decorated by an airplane in the sun rather than by a ridiculous neutral and pacifist rag." The counterpoint of the airplane against pacifist fashion is of note, here—that a bland necktie is anti-violent. Di Bosso, and Scurto: "The Futurist Manifesto of the Italian Tie," 171.
[4] Sam Rohdie, "An Introduction to Marinetti's Futurist Cooking," *Salmagundi* 1, no. 28 (1975): 126.

Aeroaesthetics are present throughout the recipes in this cookbook—for example, forming black truffle slices into airplanes and floating them upon a zenith of whipped egg-whites and orange slices. But aeroaesthetics is more than just 3-dimentional play and airplane imagery. It has a purpose and philosophy just as the recipes do, which Marinetti illustrates in the introduction, "The Dinner that Stopped a Suicide." Sam Rohdie interprets this introduction as an eccentric "parody-story," issued during a time when futurism had been "badly compromised by Italian Fascism."[5] He roots through the provocative rhetoric to piece together the story's target: literary forms and Italian traditions signified by foods—especially pasta.[6] Rohdie interprets this refresh as pitting the life-imbued futurist cuisine against the "sloth" of *pastasciutta* (the tradition of pasta).[7] Extending this metaphor, Marinetti sought to challenge tradition and establish national self-sufficiency, claiming pasta was nostalgic and reliant on imports, ultimately negatively affecting national identity which was centered around pasta. According to historians Fernanda Giorgia Nicola and Gino Scaccia, Mussolini was swayed by this cookbook, ultimately seeking to ban pasta in favor of less-sluggish grains.[8]

In challenging national identity and nostalgic tradition, *The Futurist's Cookbook* also reveals the climate of aeroaesthetics in the early 1930s. In "The Dinner that Stopped a Suicide," Marinetti and two painters, Enrico Prampolini and Luigi Colombo (under the pseudonym Fillià, must cook for their friend Giulio Onesti lest he commit suicide. Marinetti diagnoses Giulio, who I read as a literary stand-in for Mussolini, with a "tired palate" and rallies his fellow aeropainters and aerosculptors together claiming that his own aeropoetry will "ventilate his [Giulio's] brains

[5] Sam Rohdie, "An Introduction to Marinetti's Futurist Cooking," 125-126.
[6] Sam Rohdie, "An Introduction to Marinetti's Futurist Cooking," 125.
[7] Sam Rohdie,"An Introduction to Marinetti's Futurist Cooking," 128.
[8] Fernanda Giorgia Nicola and Gino Scaccia, "It's All About Pasta: Protectionism, Liberalization, and the Challenge for Quality and Sustainability of Made in Italy," *FIU Law Review* 14 no. 3, (2021): 489.

like whirring propellers."[9] In understanding Giulio's tastes as Mussolini's artistic repressive reaction toward realism, favoring the traditionalist *Novacento* style in particular, Marinetti's position is clear: his art is deserving of state sponsorship above any other.[10]

The futurists' cooking features important aeropainting techniques of planar intersect and three-dimensional plasticity "in which planes of nocturnal atmosphere were intersected by planes of greyish dawn, with expressive spirals of wind piped in pastry."[11] The aerofuturist foods, like Fillià's "sculptured aerocomplex of chestnut flour, eggs, milk and cocoa," were meant to inspire "optimism at the table," and "harmony between man's palate" and a changing world, "which [had] clearly inspired a dangerous depressing panic though its future direction remains unclear."[12] That is, the solution to the worn-down sensibilities of Giulio's poor suicidal tongue was no longer assault, like it was in the first decade, but medicine through instatement of aeroaesthetics: "synthetic, geometric, curative."[13]

Those concluding three words—synthetic, geometric, and curative—also appear as the subtitle to the *Futurist Manifesto of Aeromusic*, signed in 1933 by Marinetti and Maceratese composer Aldo Giuntini (1896-1969).[14] Within this manifesto lies a duality that I wish to explore in this paper. As with the food prepared for Onesti, "curative" aeromusic was meant to prevent artistic suicide; being a transparent reflex against the tightening grasp of fascist censorship, a tool

[9] F. T. Marinetti, *The Futurist Cookbook*, Translated by Suzanne Brill. New York: Penguin Classics 1989) 14-15.
[10] The story cumulates with Giulio cannibalizing a mechanical statue of a woman called "The Curves of the World and their Secrets." He does this in the secret of the night "with a terrible writhing in his loins." The anthropophagic consumption of a woman is horrific, but expected, and I read it as Mussolini achieving national supremacy through a world brought to life by futurism, (Marinetti, *The Futurist Cookbook*, 19-20).
[11] Marinetti, *The Futurist Cookbook*, 15.
[12] Marinetti, *The Futurist Cookbook*, 10.
[13] F. T. Marinetti, "Futurist Manifesto of Aeromusic," Translated by Nicolas Slonimsky in *Nicolas Slonimsky: The First Hundred Years,* (New York: Schirmer Books, 1994): 391.
[14] Slonimsky's translation cites it as being published in 1934 but there is an earlier draft that is dated 1929. (Filippo Tommaso Marinetti and Aldo Giuntini, "Manifesto Futurista della Aeromusica." 1927. GEN MSS 475, box 132, slide 5, *"Libroni" on Futurism: Slides*, Beinecke Rare Book and Manuscript Library, Yale University).

of empowerment for artists increasingly treated as "degenerate." In the same breath, Marinetti positions "curative" aeromusic as a means of reviving "the optimistic and active pride of living in the great Italy of Mussolini," propelling Italy, with futurism as its motor, forward as the "head of the Machine Age!"[15]

In advocating to establish futurism as a national art, Marinetti recognized that his movement must give up the political provocation that so defined it; but in order to preserve the avant-garde identity of futurism, he had to resist Mussolini's preferences for realist art.[16] With the conflicting fascist and avant-garde impulses as a guide, this thesis diagnoses aeromusic with a split personality. I contend that the representation of airplanes in aeromusic functions as a floating signifier of Italian supremacy under fascism, making it useful fascist propaganda, while the compositional practices of geometricism and synthesis subtly pushed back against conservative tastes in hopes of restoring the avant-garde Italian culture futurism enjoyed in its first two decades. Aerofuturism, an institutionalized futurism in the 1930s, was a far more postured polemic than the anarcho-fasci-syndicalist futurism of the 1910s: a slap on the wrist of fascist taste.

In Chapter One, I review the semiotics of futurist art, with consideration of the political side of this movement as witnessed through Marinetti's writings and analyzed by futurist scholars including Giovanni Lista and Gunter Berghaus. Focusing mostly on Marinetti's activity in the 1930's, this chapter presents the crux of my argument: that Marinetti found himself at the mercy of the fascist movement he ushered in. Though once an anti-institutionalist who called for the arson of museums in 1909, Marinetti joined the Italian Academy in 1929 and shortly after

[15] F. T. Marinetti, "Futurist Manifesto of Aeromusic," Translated by Nicolas Slonimsky in *Nicolas Slonimsky: The First Hundred Years*. (New York: Schirmer Books, 1994): 392.
[16] Francesca Billiani and Laura Pennacchietti, "The Regime and the Creation of an 'Arte di Stato'" in *Architecture and the Novel under the Italian Fascist Regime,* (Switzerland: Palgrave Macmillan, 2019): 21.

developed aeroaesthetics as an attempt to inoculate futurisms into fascist aesthetics thereby preserving his artistic movement as a state art. This argument places aeromusic within the context of a futurism that sought legitimacy under the institution of fascism.

Chapter Two presents F. B. Pratella's 1914 opera *L'avaitore Dro* as proto-aerofuturist music. Composed as the Great War was beginning, this opera represents airplanes in a way that glorified the heroism of the aviator, drawing a parallel between the myth of Icarus and Dro. Pratella's compositional style draws from contemporary practices like French Impressionism, a feature that was commonly a source of criticism of his work then and now. However, among the sliding whole-tone scales and mechanical rhythms are some unique musical gestures that foresee the geometricism and gestural trajectories found in aerofuturist writing. In this chapter, I present the symbolic significance of airplanes in *L'aviatore Dro* as a foil to the symbolic significance of airplanes in aeromusic while noting several compositional consistencies. Noting the disparities between Pratella's approach to the symbol of the airplane and that of later aerofuturist composers demonstrates that the significance of what airplanes represented underwent a transformation during Mussolini's administration.

Chapter Three is a profile of aeromusic proper, a term collectively adopted by several Italian composers who directly engaged with Marinetti during the 1930s. The collective identity they rallied behind was one of ideological freshness, dynamic energy, and essential brevity, which resulted in a small oeuvre of orchestra pieces, songs, and short piano miniatures, the latter of which appears to have been the most common to the genre due to its heightened prevalence among aero and non-aero futurist composers at this time. I study the identity of aeromusic in three pieces written by Mario Monachesi in 1937 and recorded by Danielle Lombardi in 1999: *Eliche por Due Pianoforti*, *Contraerei*, and *Ala Spaziale*. Thanks to Lombardi's curation, they

are the most well-preserved aero-compositions, allowing closer inspection that reveals a fresh perspective of the philosophically involved and spatially plastic alter-world of aerofuturism. To draw out this observation, I utilize a unique analysis method per piece based on Lombardi's performances and my transcriptions of them. In *Ala Spaziale*, I find concrete representation of an ever-shifting world as seen through the window of an airborne airplane.[17] In *Eliche*, I illustrate geometric shapes that engage in a unique way with the synthetic blocks of music that make up the piece. In *Contraerei*, I search for the synthesized sensation of flight in a more abstract fashion, imitating Marinetti's *tavole parolibere* (lit. free-word tables, or typographic pictures constructed out of free words) to replicate the rhythms of gunfire, extended techniques, and geometricism found in this piece.

Chapter Four expands the horizons of aeromusic to include Marinetti's *paroliberi*; useful as an analytical method through written words in the previous chapter, now repurposed from a theatrical practice into a musical one. The aerodancer Giannina Censi preferred to dance to these poems, and her dance practice expertly represented the fleeting spirit of aerofuturism: the repressed critique of censorship and the steady affirmation of the avant-garde. Censi's dances provide another means of engaging with aeroaesthetics. Aerodance parallels aeromusic in that they are both geometric and represent the airplane as a method of conveying topics and sensations.

The chapters are in dialogue with one another, each contributing an important piece of the puzzle that, when taken in total, represents a unique, underrepresented piece of futurist history in a way I hope encourages more research. It will be a motif throughout this work that

[17] F. T Marinetti, "Manifesto of Aeropainting" in *Futurism: an Anthology*. Edited by Lawrence Rainey, Christine Poggi, and Laura Wittman, (Yale University Press, 2009): 284.

there are titles to some pieces with no music, names of composers with no works attached to them; this paper is by no means a total profile of aeromusic as it was, just a profile of aeromusic as it remains.

Chapter 1

Multiplied Marinetti and Political Performance

Introduction

With such inflammatory rhetoric as that of the futurists', artists of all backgrounds were attracted to the movement for varying periods, resulting in a semi-liquid group of sculptors, poets, musicians, painters, etc., all working together to provoke the sensibilities of the past and present. Though some futurists were wary of this fact, the network of futurism was spun by the profuse manifestos and demonstrations of F. T. Marinetti (1876-1944). Because of Marinetti's charismatic leadership of the futurist art movement, to understand futurist history means engaging with his writings and political activities in some respect. By observing Marinetti's political alignments, a clear trajectory can be drawn from the proto-fascism rooted in anarchism and free expression of his prewar writings to his postured inter-war writings as an ally of a fascism he couldn't control.

With such inflammatory rhetoric as that of the futurists', researchers of all backgrounds have been attracted to the movement.[18] Informed by those backgrounds, plenty is available to study: metaphysics, mythology, inter-influence with other movements of modernity, material analysis, or the notorious analysis of futurist politics. Among a vast array of topics and perspectives, several notable futurist scholars stand out in the magnitude or importance of their contributions.

In his book *Futurism*, scholar Giovanni Lista (b. 1943) divides the Italian futurist oeuvre into three distinct periods marked by unique philosophies and aesthetics: plastic dynamism,

[18] Günter Berghaus, "The Historiography of Italian Futurism" in *International Handbook of Futurism*. ed. by Günter Berghaus, (Berlin: Walter de Gruyter, 2019): 3-27.

machine art, and aerofuturism. These categorizations reduce a complex interchange of ideas between futurist groups and other movements, but they accurately summarize the general perspectives informing the aesthetics of each period. The first period, plastic dynamism (1909-1914), was perhaps the most influential period of futurist art and indeed the most researched. It was during this period that the most caustic manifestos were published, beginning with Marinetti's essay "Le Futurisme," published in the French paper *Le Figaro* in 1909. In this article, Marinetti advocated for an art form that anticipated artistic developments and left old ones behind (as ashes). As the movement grew, more artists from other practices joined, eager to deinstitutionalize their respective fields. Thus, the air surrounding futurism during this period was constantly, blisteringly fresh. Plastic dynamism encountered movement in three-dimensional space as well as synesthesia, abstraction, and kinetics. Following in the wake of the First World War and the fiery deconstructionism of the first period came Machine Art (1920-1929)—the Bergsonian joyride in Marinetti's "roaring automobile" evolved into the proletariat cyborg musings in industrial machinery. During this period, the futurists began to look at "functional form and mechanical rhythm,"[19] or more material inspired by the rapid mechanical production necessary during WWI. The futurists deified the machine as an eternal structure of powerful movements imbued with a soul. Lista's final category is aerofuturism (1930-1944): the "remythifying of futurism to exalt flight and flying."[20] The music that was written in the lattermost of these three aesthetic periods, aeromusic, is my focus.

One of the most prominent scholars, Gunter Berghaus, is the editor of the *International Yearbook of Futurist Studies*, a useful yearly publication from 2011-2023 which acts as a

[19] Giovani Lista, *Futurism,* (New York: Universe Books 1986): 72.
[20] Giovani Lista, *Futurism*, 91.

"medium of communication amongst a global community of Futurism scholars."[21] He has also contributed the *International Handbook of Futurist Studies*, which synthesizes the yearbooks into a curt 964 pages. It opens with a state of research by Berghaus then splits into several main sections that span "fifteen artistic disciplines and thirty-eight countries."[22] The section on music is written by Daniele Lombardi, a musicologist, composer, and performer who has made plentiful recordings of futurist music and has a couple other writings on aerofuturism that stand as some of the only aero-musicological works available.

By tracing Marinetti's political evolution, a distinct path emerges from his early leanings towards proto-fascism rooted in anarchism and artistic expression to his eventual absorption into the fascist regime. This is important when considering that Marinetti's network of connections and influences renders him at the center of Italian futurist discussion. Not just a creator or collaborator, but a curator.

Musicians in the Futurist Machinescape

Most of the scholarly attention toward Italian futurist music is focused on the first few years of its existence, from the first musical output done by Francisco Balilla Pratella (1880-1955) in 1910 to his devolvement just after the end of WWI in 1914.[23] These years are nestled in the first decade of the futurist movement, 1909-1919, during which the dialectical foundation was laid through an insurgent output of manifestos distributed as pamphlets, published in newspapers, or disseminated as leaflets sown from airplanes during wartime.[24] Like with futurist art in total, which gathered artists together under a unifying label and goal, the music produced in

[21] From the publisher's website, Degruyter Publishing, [https://www.degruyter.com/serial/iyfs-b/html?lang=en].
[22] From the publisher's website, Degruyter Publishing, [https://www.degruyter.com/serial/iyfs-b/html?lang=en].
[23] Berghaus, "The Historiography of Italian Futurism," 13-14.
[24] Daniele Lombardi, "Music" in *Handbook of International Futuism*, 2018 p. 202.

this period was to be the fulfillment of the drive to destroy old institutions and practices. It was to be anti-establishment, ever-dissonant, and provocative, not derived from the music played elsewhere—certainly not from the music and techniques taught in conservatories.[25] The synthesis of machine sounds was revered as the natural way to achieve this, machines being powerful, noisy, and symbolic of modern progress. With the laying of this cornerstone through published manifestos and public performances, most of the physical sources that exist occur from around this time, and most of them are destructive—not yet built upon a futurist lineage or identity. There were fewer Italian futurist musicians, so while painters and sculptures were able to forge a lineage of artistic practices and customs, the growth of the futurist music mythology is stunted, stuck in the first stage of anti-institutionalism.

Another futurist musician, Luigi Russolo (1885–1947), developed instruments alongside his brother Antonio Russolo (1877–1943) that are now synonymous with futurist music, which he called *intonarumori* or "noise-intoners*."* These noise-tuners produce a sliding-timbral scale of machine-like whirring, rumbling, and crackling, which he orchestrated into "noise networks" in a sort of proto-noise collage of listenable art.[26] The intoners' completion and first performances in 1913 were accompanied by a manifesto detailing their purpose as new instruments that demonstrate superiority over nature. Their conception is described in Russolo's 1913 manifesto *L'arte dei Rumori* (literally, the art of noises), and it remedies the stunted mythology of futurist music somewhat. Russolo's manifesto is still crucial to the futurist deconstruction, but it builds something new in place: Italy's supremacy over nature through sound.[27] The principles

[25] Francisco Balilla Pratella, "Manifesto of Futurist Musicians" in *Futurism: an Anthology*, edited by Lawrence Rainey, Christine Poggi, and Laura Wittman, (Yale University Press, 2009): 75-79.
[26] Luigi Russolo, "The Art of Noises," in *Futurism: an Anthology,* edited by Lawrence Rainey, Christine Poggi, and Laura Wittman, (Yale University Press, 2009): 138.
[27] Russolo, "The Art of Noises," 133.

demonstrated by Russolo's instruments, noises, and manifestos are almost synonymous with the mythology of futurist music, thus earning themselves the center-stage of Italian futurist music discourse. Entire textbooks, like Luciano Chessa's *Luigi Russolo, Futurist: Noise, Visual Arts, and the Occult*, have been written about Russolo's influence within the futurist philosophy especially in the mystical imbuing of a soul into machinery—an important development that gave way to machine art and eventually the focus of this thesis, aerofuturism.[28] Pratella is less often addressed, usually receiving criticism for being more traditional than Russolo, even in 1921, though always respectfully acknowledged as the grandfather of futurist music.[29] His most well-avowed piece of futurist music is an opera called *L'Aviatore Dro*, which I discuss in Chapter Two. Because Italian futurist composers are scarce, profiles on musicians other than Pratella and Russolo are often sourced from composers influenced to varying degrees by the noise-music dispersion internationally like George Antheil, Edgar Varèse, Pierre Schaeffer, and John Cage.[30] Russolo's strange instruments found developments like the Russolophone, a collection of intoners operable from a keyboard. It fell to the wayside, though, through its impracticability and was usurped by electronic instruments like the theremin—the intoner's legacy.[31]

F. T. Marinetti, Art Activist

The author of the first futurist manifesto and the effective political figurehead that the art movement rallied behind was Filippo Tommaso Marinetti. Marinetti's inflammatory writings are myriad and extensively distributed, giving researchers a clear picture of the front-end of

[28] Luciano Chessa, *Luigi Russolo, Futurist: Noise, Visual Arts, and the Occult*, (University of California Press 2012): 138.
[29] Guido M. Gatti, "Some Italian Composers of To-Day. Postludium (Continued)." *The Musical Times* 62, no. 946 (1921): 834.
[30] Luciano Chessa, *Luigi Russolo, Futurist*, (University of California Press, 2012) 3.
[31] Glenn Watkins, *Soundings*, (New York: Schiemer, 1988): 236.

Marinetti's reaction-provocation. The back-end of his work is also obsessively documented in scrapbooks that he calls his *libroni*. Compiled from 1905 until his death in 1944, these *libroni* are overfilled storehouses of the reactions and writings of futurists and non-futurists, documenting Italian futurist history in the form of photographs, newspaper clippings, cartoons, and "other printed ephemera."[32] Microfilm slides featuring the *libroni* contents—10,705 in total, a testament to Marinetti's obsession—have been digitized and put online by the Beinecke Rare Book and Manuscript Library at Yale University.

Sam Rhodie's analysis on the polemics of *The Futurist Cookbook* against literary form are pertinent here. In "An Introduction to Marinetti's Futurist Cooking," he demonstrates how the cookbook is organized in a sort of literary collage, constructed of "newspaper clips, letters, memoirs, reported conversations, manifestos, menus, recipes, definitions, photographs," and even transforms some of the recipes from listed instructions into poems.[33] This literary organization is the same for Marinetti's *libroni*, which I consider the foil to his manifestos.

Both Marinetti's manifestos and *libroni* show futurism in life: the futurists' manifestos as imaginative, fantastical writings that demonstrate the active spirit of the movement in its most distilled form, and Marinetti's *libroni* as the reactions from an external, grounded perspective; the beliefs in practice—a universe Marinetti constructed and made permanent, one whose mythology he could dictate. Marinetti's control over futurist mythology is a consistent theme in his writings and in disputes among futurists, but his constant documentation and promotion was essential to futurist aesthetics and to the spread of their ideology. Because aeromusic is less researched than the futurist music from the movement's first two decades, Marinetti's *libroni*

[32] Information taken from the Beinecke Rare Book & Manuscript Library website [https://beinecke.library.yale.edu/collections/highlights/filippo-tommaso-marinettis-libroni-futurism].
[33] Sam Rohdie, "An Introduction to Marinetti's Futurist Cooking," *Salmagundi* 1, no. 28 (1975): 127.

contain important references and details that are essential to my understanding of the movement. In the chapters that follow I use some entries to supplement the manifestos and academic writings available.

With a discussion of futurism arrives plentiful discourse on fascism and anarchism, and Marinetti, who promoted his campaign against good taste through manifestos, public demonstrations, and legal office, receives a generous portion of the blame.[34] The members of the futurist groups occasionally wrote manifestos in protest of some of his rhetoric, especially futurist women like Rosa Rosà who were concerned with his extensive displays of anti-feminism. Though a poet and amateur musician, Marinetti's background was in law, which informed his approach to growing his movement. Sydney Conrad Kellen points out that the futurist diaspora is fueled by "a campaign of collective claim-making with forms of political action and acts of self-representation."[35] Marinetti's futurist campaigns were targeted against institutions and public taste and for the institution of something new, and his method of claim-making and self-representation was through manifestos and exhibitions.

Because futurist art included a distinct way of life—one of speed, superiority, oneness with machine, and violence—futurist performances, *serate*, were also explicit political demonstrations. The collective identity created by these performances and manifestos collected artists of varying backgrounds and desires, all liquidly unified under a similar campaign goal against a similar opponent, led by a totem figure in a way similar to other political movements. The most approximate example would be Mussolini's rule of charisma, but Sydney Kellen

[34] This is a common point of annoyance in scholar's writings, Like Sam Rohdie, who postulates: "If we are to locate Marinetti's politics, we shall obviously have to do better than those who have been satisfied with a superficial gloss of his avowed fascism" (Rohdie, "An Introduction to Marinetti's Futurist Cooking," 128.)
[35] Sydney Kellen Conrad, "Futurism and Propaganda: Manifestos, Theatres, And Magazines," 30.

Conrad notes that the mere labeling of futurist rhetoric as "manifestos" suggests inspiration from Marx's rhetoric, with which Marinetti would have been familiar.[36]

Marinetti's political edge came to a head in his 1918 manifesto of the Futurist Party wherein he advocated for social welfare, universal suffrage, "a government of twenty technicians excited by an assembly of young people under thirty," and the liberation from "from the church, priests, monks, nuns, Madonnas, wax candles, and church bells."[37] The futurism presented here envisions a postwar Italy that does not does not cling onto the Roman Catholic tradition and favors the working-class over the wealthy who can influence politics with their status and wealth. Marinetti concludes this manifesto with a declaration of means, which is to advocate for the futurist party "though the courage and violence which have characterized our movement in theaters and piazzas everywhere," finalizing with a sinister "And everyone knows, in Italy and abroad, what we mean by courage and violence."[38] If it wasn't apparent what Marinetti meant by "courage and violence," it became apparent by the coalition formed with Mussolini's fascist party, formed just around a year later. Marinetti served on the council for this program until Mussolini's drift to the right became too much for him.[39] He stepped away and soon after wrote *Beyond Communism*, a cynical manifesto, disillusioned by the decay of socialism, a background both he and Mussolini found each other in, and one which he still drew some inspiration from.[40]

Published in 1920, *Beyond Communism* already anticipates the absorption of aeroaesthetics into futurist politics—art in its purest form. Marinetti describes futurist art and politics as being synonymous—that politics could be achieved through art pieces, and that

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[36] Sydney Kellen Conrad, "Futurism and Propaganda: Manifestos, Theatres, And Magazines," 30.
[37] F. T. Marinetti, "Manifesto of The Italian Futurist Party," in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 247.
[38] Marinetti, "Manifesto of the Italian Futurist Party," 247.
[39] Berghaus, "The Historiography of Italian Futurism," 3.
[40] F. T. Marinetti, "Beyond Communism," in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 255.

politics themselves were art. To Marinetti, art was "revolution, […] impetus, enthusiasm, record-setting, […] struggle against every hindrance,"[41] that is, art that lives—art that is not only consumed passively in a museum, but engages with one's daily life in some way; a notion Marinetti called *l'arte-azione*: art-action.[42] He continues with the description, transitioning to a yearning for freedom through speed and spiritual transcendence: "…an aerial dance on the burning summits of passion, destruction of ruins in the face of holy speed, breaches to be opened, hunger and thirst for the sky […] joyous airplanes gluttonous for infinity."[43] The vertical-facing futurism here seeks expansion and expression in a seemingly non-confrontational way, opposite to the horizontal-facing art of record-setting and struggle.

Marinetti's polemics were a result of political movements, but the exchange goes both ways: his prolific dissemination of futurist principles inspired Mussolini's aesthetics, an idea Shadow Zimmerman expressed in *Mussolini and Marinetti: Performing Citizenship in Fascist Italy*.[44] Zimmerman determines that part of Marinetti's politics was in constructing the ideal Italian citizen—one that lived and acted in a futurist way: "free of every emotional morbidity, every womanly delicacy… [and] lively, pugnacious, muscular, and violently dynamic." [45] To Zimmerman, "Mussolini performed that ideal citizenship, the "new Italian," immediately in the form of his public persona."[46] This conception was intentionally derived from the machismo of the futurist *superuomo,* the iconoclastic man who exhibits these traits in full. There are a couple items that are at minor fault in this view. Zimmerman seems eager to declare Mussolini an

[41] Marinetti, "Beyond Communism," 262.
[42] Giacomo Balla and Fortunato Depero "Futurist Reconstruction of the Universe" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 210.
[43] Marinetti, "Beyond Communism," 262.
[44] Shadow Zimmerman, "Mussolini and Marinetti: Performing Citizenship in Fascist Italy," *Theatre Symposium*, 28 (2020): 42-55.
[45] Zimmerman, "Mussolini and Marinetti: Performing Citizenship in Fascist Italy," 44.
[46] Zimmerman, "Mussolini and Marinetti: Performing Citizenship in Fascist Italy," 45

"avowed futurist" and that he and Marinetti were political allies. While Zimmerman's work does an excellent job examining the positive aspects of the relationship between Mussolini and Marinetti, it is a little reductive of their relationship, focusing mostly on the positive aspect of it. Marinetti did indeed work within fascism and eagerly promoted it, vying for futurism's institution as the Italian national art—an obvious change in tone from the museum-burning rhetoric he used in 1909. Mussolini humored some of his efforts, seeing value in modern aesthetics as a cultural signifier and as propaganda, but inevitably looked elsewhere for a national style.[47] Marinetti used his office to directly influence Mussolini's attitude toward futurism as well—he did not tolerate them merely out of goodwill.[48] In 1943, a year before his death, Marinetti hosted a *serate* of futurist works to counter Nazi degenerate art. This show was not only done with the intention of equating Futurism with modern Italy, but in swaying Mussolini away from instituting such policies himself.[49] Thus, Marinetti's influence was not just in creating, dictating, and disseminating futurist ideologies, but in preserving it under the shifting artistic climate of the fascism he usured in.

Marinetti's work slowed down after WWI. While staying on the path of manifesto-writing, he stepped aside from futurist inflammation and instead took a detour into something more meditative and tender: tactile art. Pierpaolo Antonello characterizes the language of *Tactilism* (1921) as a rebirth, or a baptism in a "clear-sharp water" that calmed his senses rather than the ditch of refuse that he careened recklessly into in 1909.[50] Likely inferring from this

[47] Francesca Billiani, *Fascist Modernism in Italy: Arts and Regimes*, (London: Bloomsbury Publishing, 2021): 31.
[48] Günter Berghaus, "New Research on Futurism and its Relations with the Fascists" *Journal of Contemporary History*. 42 no. 1 (2007): 153-154.
[49] Lista, Giovanni. *Futurism*, (New York: Universe Books, 1986) 93.
[50] Antonello, Pierpaolo. "'Out of Touch': F. T. Marinetti's Il Tattilismo and the Futurist Critique of Separation." In *Back to the Futurists: The Avant-Garde and Its Legacy*, edited by Elza Adamowicz and Simona Storchi, 38–55. Manchester University Press, 2013. Antonello Notes Marinetti's name in this quote— *Mari* meaning sea and *Netti* meaning clear. He rebecomes himself in this strange and uncharacteristic manifesto.

manifesto, though there is no real reason given in *Futurism*, Lista writes that during the 20's Marinetti depoliticized. [51] Marinetti was in fact "revived" by fascism—allowing himself to be absorbed into Mussolini's caustic movement, a movement whose fundamental ideologies he was toying with since his first manifesto. The First Futurist Congress in November 1924, a massive gathering of futurists signaled his full embrace of fascism, as did the moving of his headquarters to Rome from Milan shortly after, following Mussolini's footsteps.[52] He was made secretary of the Fascist Writer's Union in 1928, and a year later became a member of the Accademia d'Italia, a curative position. Though Marinetti was apparently self-serving, and these events could be read as simply "saving face" in fear of complete ostracization, he "performed far too many activities on behalf of the regime and supported its initiatives in person and in print far too consistently, for his actions to be explained as pure opportunism."[53]

It is not a coincidence, then, that aeroaesthetic manifestos began circulation around this time, starting with the *Manifesto of Aeropainting* in 1929. Nor is it a coincidence that Marinetti went against his anti-religious and anti-public-taste stances, publishing the *Manifesto of Futurist Sacred Art* (1931), wherein he personified sacred art as a conscious monolith and demanded its assimilation to the "dynamism, spatiotemporal interpenetration, simultaneous states of mind, and the geometric splendor of machine aesthetics."[54] Marinetti claimed that only Futurists were capable of constructing the simultaneity of the Trinity, or of portraying a terrorizing, and thus dissuasive, hell; and only aeropainters could portray heaven in an inspiring way and "make a

[51] Lista, "Futurism." 85.
[52] Jeffrey T. Schnapp and João Cezar de Castro Rocha, "Brazilian Velocities: On Marinetti's 1926 Trip to South America." *South Central Review* 13, no. 2/3 (1996): 105–56.
[53] Ernest Ialongo, "Filippo Tommaso Marinetti: The Futurist as Fascist, 1929-1937." *Journal of Modern Italian Studies* 18, 4 (September 2013), 393-418.
[54] F. T. Marinetti, "Manifesto of Sacred Art" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 286.

canvas sing like angels."[55] The application of futurism here to not only target masses but revive sacred art is the propagandizing of futurism at its most contradictory—co-opted by a regime that favored sacred art in order to serve a purpose it never was meant to, just to stay off the fascist cutting-block.

Other Groups

The futurist movement did not stay totally unified throughout its history. As futurism spread internationally, a coalition of futurists in Russia formed that declared sovereignty from Marinetti's rule.[56] Though inspired by the political polemics, manifestos, and art styles—along with the art styles of cubism—the Russian futurists chose to develop in their own way, parallel from the Western flavors, rather than in submission to a "commander-in-chief" from a foreign country.[57] In the interwar period, a second wave of younger artists formally unacquainted with futurism joined the movement and formerly important members were killed off in war, like Umberto Boccioni (1882-1916), or simply moved on like Pratella did in 1919.[58] Lista mentions that some scholars believe this insurgence of new artists instigated the formation of a second generation of futurism. While he dismisses the notion of a distinct "second futurism," he accepts that starting around 1922 there was a notable change in Italian futurist ideology.[59] Given that 1922 was the same year as Mussolini's fascist coup, the March on Rome, this distinction seems a purposeful line drawn to neatly distance the pre-war generation of futurist artists, who at least conceal their fascist rhetoric among anarchy, from the new post-war futurists, who are transparently complicit in Italian fascism. Lista has been accused by other scholars of avoiding

[55] Marinetti, "Manifesto of Sacred Art," 286.
[56] Günter Berghaus, "The Historiography of Italian Futurism" in *Handbook of International Futurism* (Berlin: Walter de Grutyr, 2020): 4.
[57] Berghaus, "The Historiography of Italian Futurism," 4.
[58] Daniele Lombardi, "Music," 193.
[59] Lista, *Futurism*, 59

different member's fascist ties in a similar manner, like Luciano Chessa who challenges him on Russolo's affiliation with Italy during the 1920's.[60]

Some events foreshadowed this ideological change in the 20's. As early as 1914, a group of Florentine futurists including Carlo Carrà, who challenged Marinetti's self-mythicization, calling it an effort to build "an immobile church with an infallible creed."[61] They were some of the first artists to remove themselves from his iron clutch and to challenge the narrative he spun to keep himself at the center of futurist thought, thus creating a dichotomy between Milanese futurism, with Marinetti, and Florentine futurism with Carrà.

Another futurist enclave, formed in 1932 under different circumstances from the Florentine futurists', is the forgotten group *Umberto Boccioni* from Macerata. The group was headed by Ivo Pannaggi, who had left for similar reasons to Carrà in 1914. Pannaggi was one of the founders of machine art aesthetics, having published the manifesto of machine art in 1916. One of his exhibitions found Macerata, a "fertile ground" for the futurist philosophy, inspiring Sante Monachesi, Mario Buldorini, Rolando Bravi and Fernando Paolo Angeletti to form their own futurist enclave, even going so far as to request permission for the formation from Marinetti.[62] Together, the Maceratese group published a "high spirited," manifesto and a photograph of their faces.[63] Their philosophy of spirituality, dematerialization, brevity and freedom became popular throughout the Marche region, naming themselves after the painter

[60] Chessa, *Luigi Russolo and the Occult*, 4.
[61] Milton A. Cohen, *Movement, Manifesto, Melee: The Modernist Group, 1910-1914*, (New York: Lexington Books, 2004): 76.
[62] A common thing to do; The futurist group in Syracuse wrote a similar letter to Marinetti in 1933 waiting for permission to begin "all out propaganda" to glean more members ([Ugo?] Lucchesi, *Typed letter asking Marinetti for permission to start "Il Gruppo futurista di Siracusa,"* Siracusa, 4 novembre 1933). Since Marinetti was elected in the Academy of Italy in 1929, getting his approval for the upstart of a futurist faction meant getting the approval of the state.
[63] Anonymous. "Una mostra futurista a Macerata," *Giornale d'Italia*, Nov 23, 1939.

Umberto Boccioni, who was essential in developing the first futurist aesthetics of plasticity.[64] By adopting his name as *il gruppo futurista Umberto Boccioni*, and carrying themselves under Panaggi's leadership, the Maceratese futurists presented themselves as the heir of Futurist mythological lineage. Quickly, new artists like Mario Monachesi, Ermete Buldorini, Felice Raniero Mariani, and Umberto Peschi joined the ranks. These names became prominent ones in the second generation of Futurism, especially in the realm of aeroaesthetics.[65] There are a couple articles by Roberto Cresti, a professor in Macerata has written the most about this group. The most prominent member of the Maceratese group was Mario Monachesi, both a painter and composer, whose works have been preserved better than many futurist musicians', likely due to his immigration to Argentina in 1942, fleeing from the intense strictures and censorship faced under fascism. Though aerofuturism was already a trend developed elsewhere, it flourished within this group and its members' signatures adorn the *Futurist Manifesto of Aeropainting*, the first manifesto dedicated strictly to aeroaesthetics. Within this manifesto is a reference to *aerosculptura*, a medium devised by Boccioni, thus providing the group a unifying monument to center their work around.[66] This manifesto can be understood as the germ cell of other aero-works, and holds the DNA of some of the aesthetics' important synthetic techniques: perpetual mobility, the artist's "participation in velocities," "profound disdain for detail" thus creating the "necessity of synthesizing and transfiguring everything," and the agreement, or "double movement" of the airplane and the hand of the painter.[67] With these techniques *Il Gruppo U. Boccioni* ushered in "a new extraterrestrial plastic spirituality," which has "nothing in common

[64] Anonymous, "Una mostra futurista a Macerata."
[65] Günter Berghaus, "The Historiography of Italian Futurism," 5.
[66] Umberto Boccioni, Carlo Carrà, Luigi Russolo, Giacomo Balla, And Gino Severini "Manifesto Of Aeropainting." in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009) 62-64.
[67] Boccioni, Carrà, Russolo, Balla, and Severini, "Manifesto of Aeropainting," 284.

with reality as traditionally constituted by a terrestrial perspective."[68] The techniques discussed here are useful for understanding not only aeropainting or aerosculpture, this group's specialties. They apply to all modalities of aeroaesthetics, including aeromusic, something which I will inspect further in Chapter Three.

Conclusion

Futurist polemics against governmental rule and passivity sparked a multi-faceted and complex avant-garde movement, with presentation and distribution methods rooted in a political edge that contributed to its rampant ideological spread. In this chapter I discussed some writings of futurism's cultivator, Marinetti, and how his often violent and strange politics influenced different futurist cultures and ultimately my focus for this thesis, the aerofuturist period. Marinetti's politics are not always as straightforward as they seem, and they continue to be at the point of contention among futurist scholars. However, whether he was outrightly in support of Italian fascism, or merely trying to prosper under the tightening fist of fascist rule, his inherently political rhetoric was co-opted by the fascist party, often at his own discretion, often for purposes contradictory to the futurist movement's initial presence as anarchistic, anti-populist and free. Aerofuturism, the futurist aesthetic that flourished during Marinetti's position in the fascist government, especially suffered this effect.

[68] Boccioni, Carrà, Russolo, Balla, and Severini, "Manifesto of Aeropainting," 283.

Chapter 2

Crashing Icarus: Proto-aeromusic, Aeromania and Rumori

Introduction

Manifestions of the airplane appear throughout the futurist timeline. For instance Carlo Carrà's 1914 free-word painting *Manifestazione Interventista* (fig. 1) captures the novelty of flight and politics by harnessing the power of geometric typography to create images, convey ideas, and generate sounds. Carrà makes tangible the all-encompassing excitement of aviation, or aeromania, by creating a monoplane with dynamic words like c*ervellinmelma* (cerebral fluids) *si!* (yes!) and *evvivaaaa il rèèè* (longg liiiive the kiiing). Carrà used some English words too: "orchestra" (top left under "STRADA,") "sports" (center above the Italian flag,) and "stop" (middle left above) stand out. To create the illusion that the painting is buzzing with noise and life, Carrà scatters onomatopoeia and fragments of musical notation among the words. The entire piece is constructed to look like a multimaterial work of art, with each word appearing to have been cut from a magazine, newspaper, or musical score; all associating together to visually represent an airplane.

Figure 1: Carlo Carrà: *Interventionist Demonstration (Manifestazione Interventista)*. Note the composition of this piece, which is the shape of the nose of a monoplane. The center of the plane features two words: *Italia* and *aviatore*.[69]

In his opera *L'aviatore Dro* (1914), Francesco Balilla Pratella (1880-1955), a classically trained composer trying his hand at deconstructing the musical institution, represented through the mythicization of an aviator. He achieves this using machine-art musical writing and some impressionistic techniques that predict aeromusical writing. However, neither *L'aviatore Dro* nor

[69] Carlo Carrà, *Manifestazione Interventista*, 1914, Tempera, pen, mica powder, paper glued on cardboard, 38.5 × 30 cm. New York, Guggenheim Museum. Accessed April 7, 2024.

Manifestazione Interventista, created during the first two periods of futurism, feature airplanes in the same way later aeromusic would. Instead of representing material plasticity and spiritual freedom as experienced through aerobatics, these works represent the culture surrounding flight development, focusing on the aviator, not their aircraft, as a symbol of human achievement and heroism. In this chapter, I begin with a portrayal of aeromania as a global phenomenon. Afterwards, I apply aeromania to a reading of *L'aviatore Dro*, aided by Giulia Albertario's summary. I reveal Pratella's style of mechanical mimesis by impressionistic gestures and unique instrumentation that represents the myth of early flight. This reading will provide a foil to my exploration of aeromusic in Chapter Three, ultimately showing how and why airplane representation changed in futurist art.

Aeromania and Amateurism

Adam Jungdahl summarizes the spread of aeromania in *Air Power*, offering unique insight into the gradual acceptance of aviation into the public sphere. The first flight feels like a myth when recounted: two brothers, bicycle salesmen from Dayton Ohio, managed to develop methods of powering a rigid glider using their own engineered four-cylinder engine.[70] Despite numerous setbacks in dealing with bureaucracy and regulation, the two brothers managed to beat the rest of the world in the race to get a manned heavier-than-air vehicle off the ground. On December 17, 1903, Orville and Wilbur Wright completed their first powered flight over the sand dunes outside Kitty Hawk, North Carolina. "More or less" from the beginning,[71] The Wright brothers foresaw their invention as an tool in war as a method of delivering messages

[70] Adam Jungdahl, "Public Influence on the Proliferation of Military Aviation 1907-1912," *Air Power History* 60, no. 1 (2013): 30.
[71] Marvin McFarland, "When the Airplane was a Military Secret," *The Air Power Historian*. It is unclear what the author meant by "more or less."

quickly and safely, or for scouting; and in 1904, the Lieut. Col. John E. Capper, of the British balloon service, humored their theory.[72] On his way back from the Colombian Exposition in St Louis, he stopped by Dayton to pay the Wrights a visit and discuss their machine. They had improved enough upon their original flier that they felt confident enough in its capabilities to market its collection to the US Military.[73] Their proposition was totally dismissed in 1905 on the grounds that their model was an experimental one; that, once their craft was brought to the means of practical operation, their proposition would be considered.[74] The Wrights were forced to turn their services abroad, starting with Britain, since there was already interest expressed there; then moving on to France, Germany, and finally Italy. The Italian stage had been set for the Wrights four months prior by the 1906 Great International Exhibition in Milan, which featured a Gallery of Aeronautics.[75] There, the Wrights showed off their achievements among other builders, and *aeromania* finally found its way into the Italian public. The Aviators Club in Rome was formed a year later, and Aristide Faccioi became the engineer and pilot of the first airplane built entirely in Italy. His flight took place on January 13th 1909.[76]

It is during the year 1909 that aeromania seems to have erupted into global cultures, particularly within the inspirations and ambitions of amateur engineers, writers, artists and composers. For example, American author C. G. Grey wrote in the introduction to his book *Flying: the Why and Wherefore:*

> All this has been set forth in the simplest possible way, so that the man without engineering or mathematical training may be able to follow the various points of existing machines and the development of the machines of the future [...] though I

[72] Jungdahl, "Public Influence on the Proliferation of Military Aviation," 30.
[73] Jungdahl, "Public Influence on the Proliferation of Military Aviation," 30.
[74] Jungdahl, "Public Influence on the Proliferation of Military Aviation," 30.
[75] Jungdahl, "Public Influence on the Proliferation of Military Aviation," 32
[76] Jungdahl, "Public Influence on the Proliferation of Military Aviation," 33.

> hope it will not be without its value to those who are about to make, or are actually making, machines of their own.[77]

Grey wrote to support citizens and amateur engineers who worked on their own airplanes; F. T. Marinetti, in the same year, designed his own, though only on paper in his second manifesto:

> We cut out our Futurist airplanes from the buff-colored sailcloth of boats. Some of them had stabilizing wings and, being fitted with engines, soared like bloody vultures that took wriggling calves up into the sky. Look at this, for example. My multicellular biplane with its tail rudder: 100 horsepower, 8 cylinders, 80 kilograms... Between my feet I have a small machine gun I can fire by pressing a steel button... And we're off, intoxicated by our skillful maneuvers, in exhilarating flight, sputtering, weightless, and pitched like a song inviting drinking and dancing.[78]

Marinetti presents his aeromania here in his desire to build a unique aircraft, but it is also the grassroots nature of aviation that appeals to him. I see a direct parallel between Marinetti's futurism and the development of the airplane as being fueled by similar sentiments.

Though there was some government investment in flight—the Italian Ministry of Defense began an aviation unit in 1909, for instance—developments were most often urged on by industrial interests, aviation enthusiasts, and a captivated public as a dynamic catalyst in aviation. As such, the public had a close and personal relationship to airplane development.

In *Flying: the Why and Wherefore*, Grey includes eight photographs of record-setting airplanes, one of which is Wilbur Wright's biplane, the first craft to carry a man continuously for one mile—but its accomplishments are dwarfed by those of the other airplanes, three of which accomplished cross-country flights. One of these, the Cody biplane, became the first aircraft

[77] C. G. Grey, *Flying, the Why and Wherefore*, (London: Iliffe & Sons, 1909), accessed Dec 12, 2023. Smithsonian Archives and Libraries, 1.
[78] F.T. Marinetti in Gunter Berghaus *Futurism and the Technological Imagination*.

recorded to carry a woman, only mentioned as Mr. Cody's wife.[79] The other half of the airplanes in Grey's list were created out of lust for speed, all boasting some award achieved through their feat, all boasting the title "fastest in the world." The airplane as represented here was a means of uplifting one's status to that of the hero—meaning the focus of was on the aviator.[80]

There was also a sudden increase of popular compositions throughout 1909 that featured topics of aviation with titles like the American song *Going up, up, up, up in my Airplane* with music by Gus Edwards, the French *Le chant de l'aviateur* by P. E. Mesplès, and *Aëroplane: Valze Fatastique* from Polish composer Gebethner et Wolff. In the latter two pieces, there is an obvious characterization of airplanes in the piano part: both utilize interval tremolos in the left hand to simulate the throbbing motor and upward-directed runs in the right hand. *Le chant de l'aviateur* ends with a four-bar descending D major chord, puttering out before a stacked chord in the high and low extremes of the keyboard, meaning the performer must spread their arms out like wings. It is a rather abrupt ending to such a soaring piece; the implication of a tragic end to this aviator is a hard one to miss.

Aëroplane is a more optimistic piece. During the introduction, a glissando indicates the plane has soared off into the air, where it begins to dance a waltz that carries it over different countries: From the alps, over Italy, France, the Pyrenees and Spain, ultimately reaching the Carpathian Mountains. Its travel is represented by several different variations of the theme, most notable over Spain, where arpeggios imitate the sound of a Spanish guitar. In the coda, the left hand descends under a tremolo in the right hand[81] concluded by a triumphant rhythmic cadence.

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[79] Grey, *Flying, the Why and Wherefore*, Cover Slip. This claim is contradicted by a footnote on p. 9 of *Futurism and the Technological Imagination*, in which Bergaus notes that Mlle P. van Pottelsberghe de la Poterie may in fact be the first woman at flight and not the sculpter Thérèse Peltier, who he had believed it to be. The point is that the quest to be the first was essential to aeromania.

[80] Giulia Albertario, "'L'aviatore Dro' Di Francesco Balilla Pratella," *Rivista Italiana Di Muisicologica* 1, no. 48 (2013): 180.

[81] This could be a means of keeping the buzzing texture, but I hear it as applause.

There was an attitude during these years that is necessary to express, and it is represented in these pieces: the amateurism of aerodynamic engineering and the significance of single flights headed by brave pioneers—some of which end in catastrophe.

Mentions of the airplane are present in the first piece of futurist music theory: F. B. Pratella's *Futurist Music: A Technical Manifesto* (1911), a follow-up manifesto to his first, in which he lamented that music in Italy had not modernized the way it had in France. In this document, Pratella proclaims "the values of consonance and dissonance are nonexistent" and lists aesthetic demands for what futurist music should achieve. His eleventh and final requirement of futurist music is that it

> must contain all the new attitudes of nature, always tamed by man in different ways through incessant scientific discoveries. It must render the musical spirit of the masses, the grand industrial factories, trains, transatlantic steamers, battleships, automobiles, and airplanes.[82]

By "rendering the musical spirit of the masses," Pratella expects to recreate the noises of city life and modernization through musical means. He is intent on synthesizing the sounds of machinery with the instrument of the orchestra. Rather than merely imitating a machine through shape and contour, Pratella theorizes an "inharmonic mode," or a mode in some way comprised of quarter or microtones to reflect a string player or vocalist's tendency to play a D# differently than an Eb.[83] By freeing himself from a strict chromatic scale, he was able to more accurately imply the discordant clamor of the modern city.

Luigi Russolo presents a similar concept in a letter to Pratella: the infinitely deconstructable octave of noise-sound.[84] He rationalizes music that abstracts machinery by

[82] F. B. Pratella, "Futurist Music: Technical Manifesto," in *Futurism: an Anthology*, Edited by Lawrence Rainey, Christine Poggi, and Laura Wittman, (Yale University Press, 2009): 82.
[83] F. B. Pratella, "Futurist Music: Technical Manifesto," 83.
[84] Pratella, "Futurist Manifesto of Musicians" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 81.

declaring that the "evolution of music is parallel to the multiplication of machines," which everywhere are collaborating with man." Russolo cautions the aspiring futurist musician: "the art of noises must not be limited to an imitative reproduction. It will achieve its greatest emotional power in acoustic pleasure in itself."[85] Russolo's letter therefore points to an essential disagreement between Pratella and Russolo's philosophies: should the sounds of a machine be synthesized from other sounds or harnessed and abstracted into music—does the music become machine or vice versa? Russolo believed that while one may be able to synthesize the sound of a "pounding piston" or the "rattling jolt of a cart over cobblestones," the sounds must remain abstracted, musical in their own right.[86]

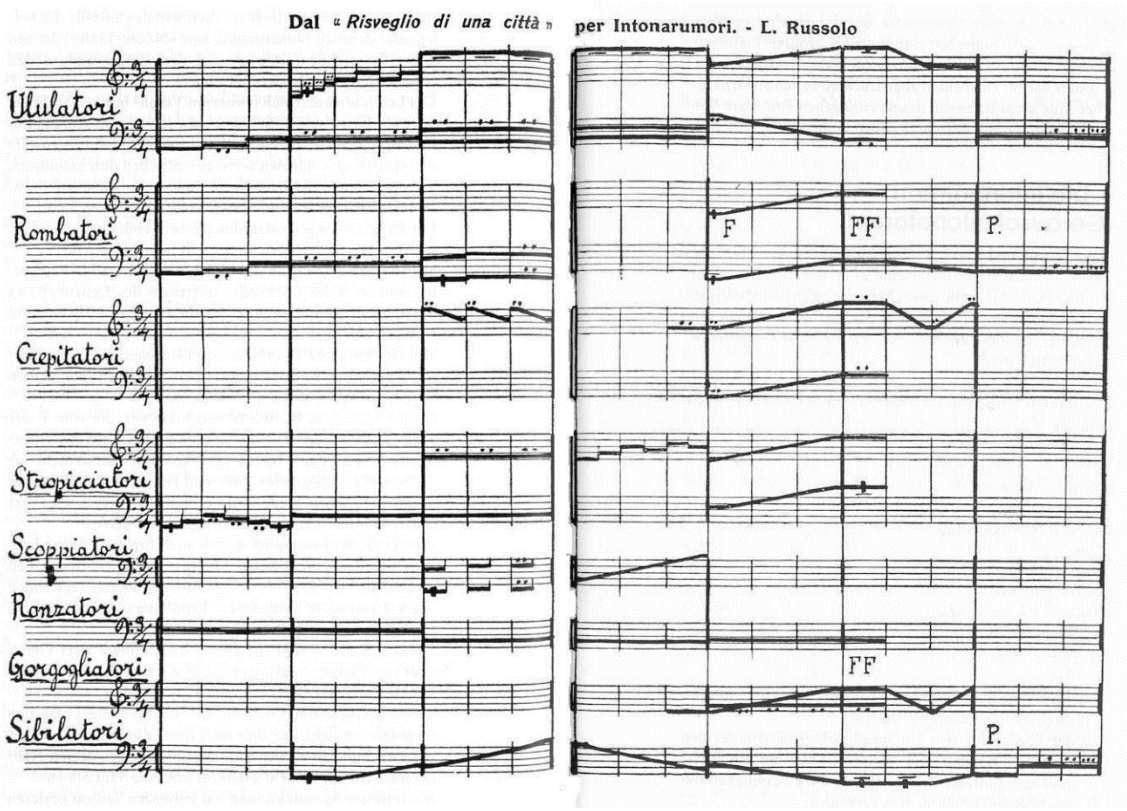
Russolo's answer is not only written in prose but in a series of compositions written for ensembles of *intonarumori* (lit. noise tuners), noise-making acoustophonic instruments that Russolo and his brother Antonio designed to recreate machine, human, and animal noises.[87] His first and most notorious piece for *intonarumori* is *Risveglio di una Città* (1913). The score for this piece (ex. 1) is partially destroyed, but it is representative of his musical philosophy, and the smooth lines across the staves indicate that he was thinking of scales infinitely denser than chromatic. Russolo, in his *Art of Noises*, comments

> I am not a musician, I have therefore no acoustical predilections, nor any works to defend. […] And so, bolder than a professional musician could be, unconcerned by my apparent incompetence […] I have been able to initiate the great renewal of music by means of the Art of Noises.[88]

Here, Russolo snidely comments on Pratella's classical training they both polemicized against. According to Russolo, the ideal futurist music is created by untrained amateurs playing

[85] Luigi Russolo, "Art of Noises," in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 137.
[86] Luigi Russolo, "Art of Noises," 135.
[87] Glenn Watkins, *Soundings*, (New York: Sheimer, 1988): 236.
[88] Luigi Russolo, "Art of Noises," 139.

machines, removing the machine noise from the context in which they sound, and organizing their abstract noises into a piece of music.[89]



Example 1: Luigi Russolo's *Risveglio d'una Cittá* (1913) for 8 kinds of intonarumori. The lines of pitch span between semitones, dividing them into infinity, though they ultimately arrive at a determined pitch. Russolo used two dots to indicate accidentals, above the line to signal a sharp and below the line to signal a flat.[90]

Franciso Balilla Pratella's *L'aviatore Dro*

The most notable futurist contribution to music inspired by aviation is Pratella's *L'aviatore Dro*. Pratella's aviation-themed opera was completed in autograph in 1914, but only publicly premiered in 1920, the same year Marinetti first published mentions of Aero-theater in his manifesto *Beyond Communism*. There is little academic writing about this opera. Most of the secondary information used here comes from an Italian publication, "L'aviatore Dro, di Pratella"

[89] Luigi Russolo, "Art of Noises," 139.
[90] Luigi Russolo, "Risveglio d'una Città" *Sons & lumières: une histoire du son dans l'art du XXe siècle.* Edited by Sophie Duplaix, Marcella Lista, 251, fig. 2.

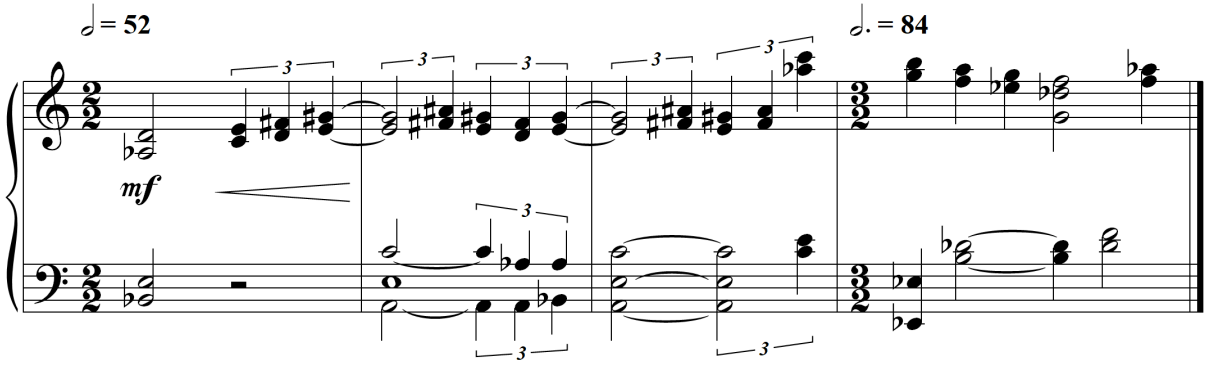
written by Julia Albertario in *Rivista Italiana di Musicologia*.[91] A piano reduction and libretto are available, along with a full orchestrated score of the intermezzo, "Sogni." The libretto clearly harnesses a contemporary attitude surrounding the hero-aviator-engineer, but Pratella expands on it, turning Dro into a dandy figure desperate for love and decadence.[92] The first act involves his rivalry with a character named Rono, to whom he ends up losing his wealth and lover during a gambling match. He is left destitute and "embarks on an ascetic path of poverty and purity" hoping to free himself from mortality.[93] There is an intermezzo near the beginning of Act I entitled "Sogni," or dream. This section is the opera's turning point, in which Dro's insatiable lust for freedom and decadence finally pushes him over the edge and off the ground.

Consistent character markings in the score depict a fitful, discontent night interspersed with nightmares. This scene is a fantastic drug-induced orgy, which feels disjunct in many ways from the rest of the opera. While it is the easiest excerpt to perform in concert because the instruments are all ones commonly found in an orchestra, it is difficult to stage. In it, Dro arrives back at his home and has an orgy with guests in his drawing-room: "women dance in an increasingly excited and sensual manner against the backdrop of fantastic scenery—underwater caves, volcanic passages obscured by dense pink clouds, spring scenery awash in showers of flowers…"[94] The sexual dance is accompanied by a dizzying array of lights projected on stage

[91] Albertario, "'L'aviatore Dro' Di Francesco Balilla Pratella,"179-210.
[92] Albertario, "'L'aviatore Dro' Di Francesco Balilla Pratella," 180.
[93] Some sources mention that *L'aviatore Dro* was inspired by a myth, and it characterizes one, but Albertario also points to a section of Pratella's autobiography in which he tells it differently. According to him, the dandy character Dro was inspired by a news story in his hometown of Lugo about a man who had inherited a great deal of money from his gambling father along with a love for gambling himself. The man was not as fortunate as his father, though, and ended up destitute. Suddenly, he left Lugo and became an aviator in "una grande città." (Albertario, 179). He never was able to return to Lugo, though, because he fell to his death during a flight.
[94] Albertario "'L'aviatore Dro' Di Francesco Balilla Pratella," 179.

and perfumes projected into the audience, a manifestation of the Futurist tendency for synesthesia and *Gesamtkunstwerk*.[95]

The language of this movement is solidly impressionistic, tonally very different from the jolty rhythms of the surrounding acts. It begins with a languid melody based on a whole tone scale that struggles upward and droops quickly back down. Pratella's use of planing and an equidistant hexatonic scale obscure the tonality of this section and indulge his intentions to characterize a dream. Though he changes meters quite often, Pratella's phrasing in the introductory lines obscures any consistent division of time and often subverts barlines (Ex. 2). His obscure and pulseless writing evokes Debussy and other Impressionist composers, even though Pratella was respectfully critical of this stylistic movement in his first manifesto: "For [Debussy] development consists in the primitive and infantile repetition of a brief, poor theme or a monotonous and vague rhythmic moderation."[96] Obscured tonality and pulse extend throughout this entire movement.



Example 2: Pratella: The leading refrain before "Sogni" from L'aviatore Dro, mm. 61-64. Note the whole-tone scale, blurred meter, and the irregular phrasing.

Another element of evocation that Pratella relies on is his descriptive and pervasive character markings. At rehearsal 12, the character mark *Violenza* (violence) contains chromatic

[95] Francisco Balilla Pratella, *L'aviatore Dro: Poema Tragico in tre atti* (Milan: Casa Musicale Sonzogno, 1915): 10.
[96] Pratella, "Futurist Manifesto of Musicians," 76.

dissonance and aggressive rhythms. Harp and winds have upward-directed runs centered around a Bb melodic minor scale. Constant meter changes contribute to the loss of pulse during slow sections and a stutteringly aggressive feeling during fast ones. The next character marking, *piacere-sanguo-fuoco* (pleasure-blood-fire), expands on the minor seconds and syncopated rhythms, culminating into an increase in subdivision density from duples, to triplets, to quadruplets, then trills. A rallentando increases the perceived intensity of the texture before the next character marking, *piacere-spasimo-esasperazione* (pleasure, spasms, exasperation). There is a character mark written on almost every page and though they are usually descriptive of a change in the music's texture and harmony, this is not always the case. Around rehearsal marking 10, Pratella changes the character mark to *spasimo-fascino* (pang-charm) but does not alter the music much, meaning he is concerned with changing meaning through an emotive performance rather than with notes or key.

Act II and III detail flight and present the airplane as secondary to the heroic aviator, not synonymous with him. Fragments of Act II and III are accessible through a recording of the 1996 performance at La Scala and a reproduction by the Pratella Ensemble released in 2022. These recordings feature a piano reduction of the orchestration which Pratella completed in 1915, though Albertario postulates they were completed as early as 1912.[97] In the final two acts, Dro appears to slip into psychosis, hearing "morning voices" greet him and echoes chant his name.[98] Dro decides to become an aviator and begins to fly over the sea, hoping to become one with nature and escape his existential malaise in the "other, overturned sea." Dro then turns his plane to the heavens where the parallel between him and Icarus is fulfilled: his plane fails and they crash into the ground. Though Dro was not able to make it to the heavens, he reaches apotheosis

[97] Albertario, "'L'aviatore Dro' Di Francesco Balilla Pratella," 187.
[98] Pratella, "L'aviatore Dro" 27-28.

through his heroic attempt: he lies wounded on a beach where his blood turns the water and sky red. His rival Rono declares him "worm meat," and as Dro proclaims "I am from heaven / I am the sky / higher higher and higher / sun, fire, joy, serenety, eternity," a mysterious breath blows the lights out and lightning[99] instead illuminates the setting before darkness brings the world "silently back into primordial chaos."[100] In short, nature responds to the impact of Dro's death.

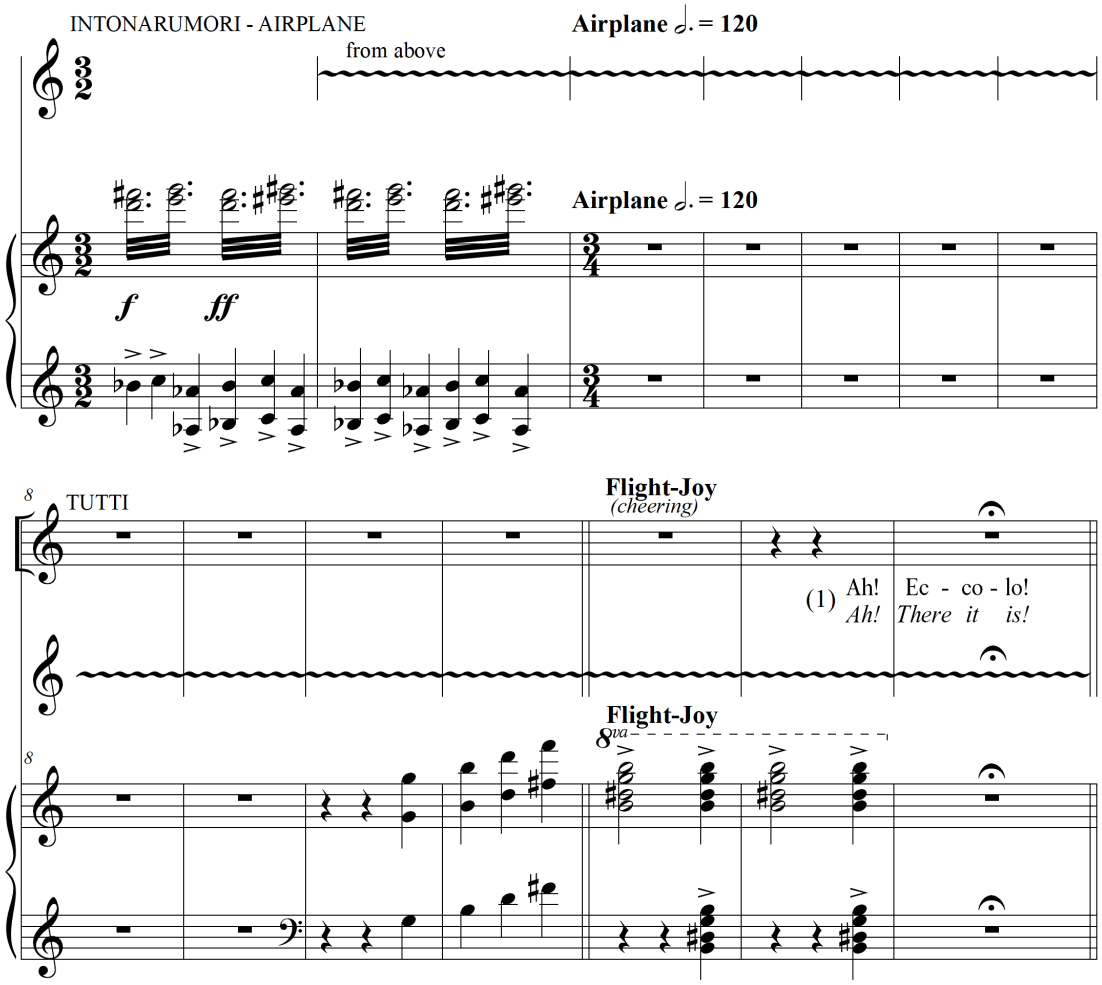
Geometricism in *Dro*

Pratella appears to have only been willing or able to use the intoners as a concrete representation of sounds, hearkening back to his position in his musical manifesto that the orchestra should synthesize the noises of planes, trains, automobiles, etc. Though Russolo's noises influenced schools of musical thought through to the current day, it was Pratella's brand of synthesis that became a feature in aeromusic, though the symbology of the airplane had not yet been filtered through Mussolini's fascism.

The dynamism of flight brings Pratella's writing out to engage with machine synthesis. The first appearance of Dro's airplane (example 3) occurs before the close of the Second Act. When it appears, all instruments cut out, leaving the drone hanging in the sky. The airplane manifests with an ascending G Major seventh arpeggio and the crowd that had gathered around Dro's house in anticipation exclaims in awe. Here, the noise of the airplane is disjunct from its physical presence manifested by the orchestra. Pratella continues representing the body of the airplane as it ascends. Through his joyride, Dro disappears—he is gone from the stage and his voice cannot be heard.[101] The mechanical airplane takes the foreground, represented by a steady

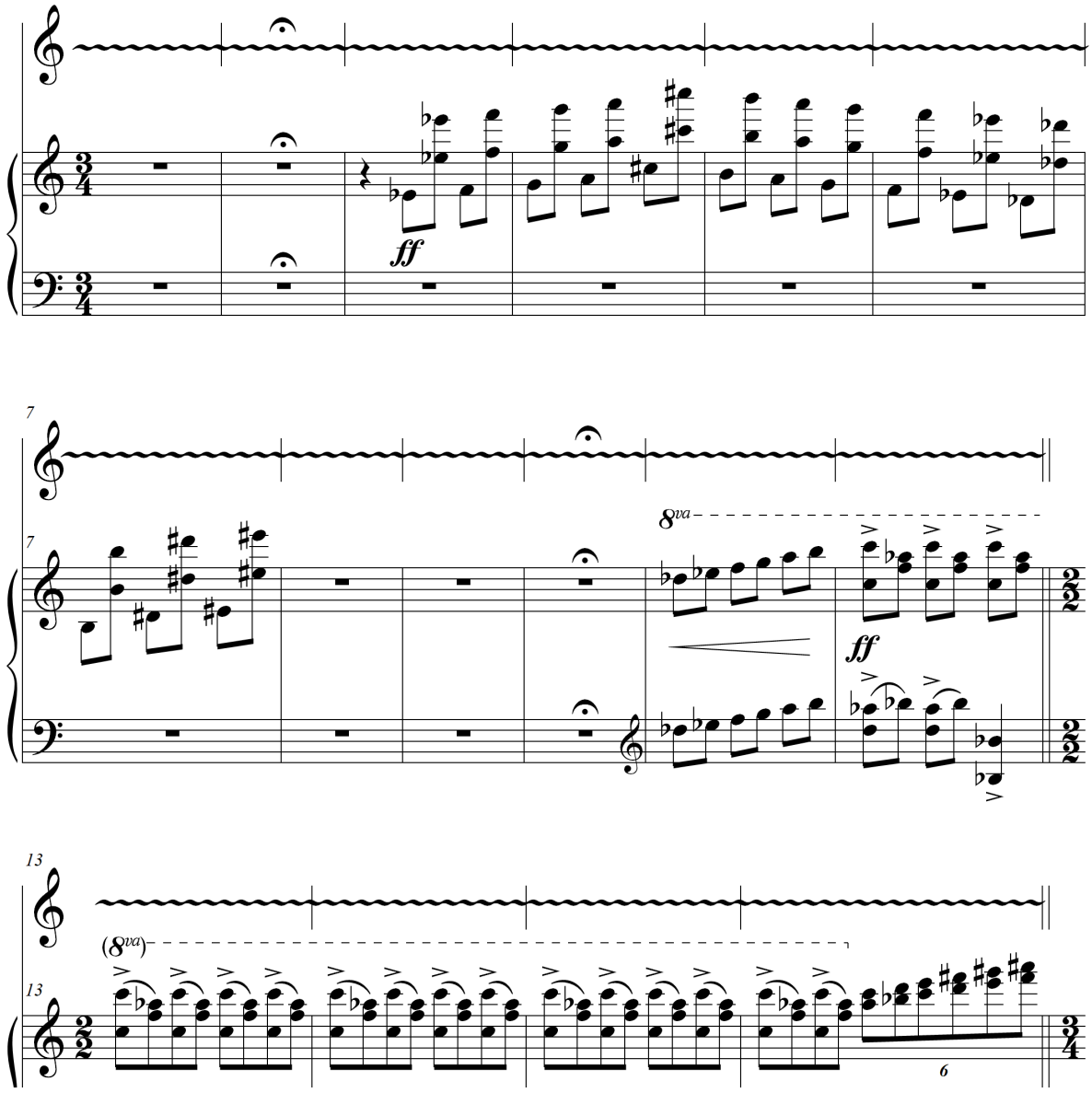
[99] A lighting cue dictates "a huge flash of lightning will suddenly brighten the sky, sea, and land in the grip of a furious upheaval then silently plunge back into primordial chaos."
[100] Pratella, "L'aviatore Dro," 166.
[101] Pratella, "L'aviatore Dro," 142.

drone. In example 5, Pratella uses short geometric blocks of music to supplement the airplane drone with aerial maneuvers, jolting it through the air. The geometric blocks are unique to themselves, each time an attempt at achieving further and further heights, before losing momentum. They are separated by a grand pause that is approached by an increasing number of empty measures, spanning from none in example 3, one and two in example 4, to three in example 5 right before the crash. The airplane is getting exhausted.

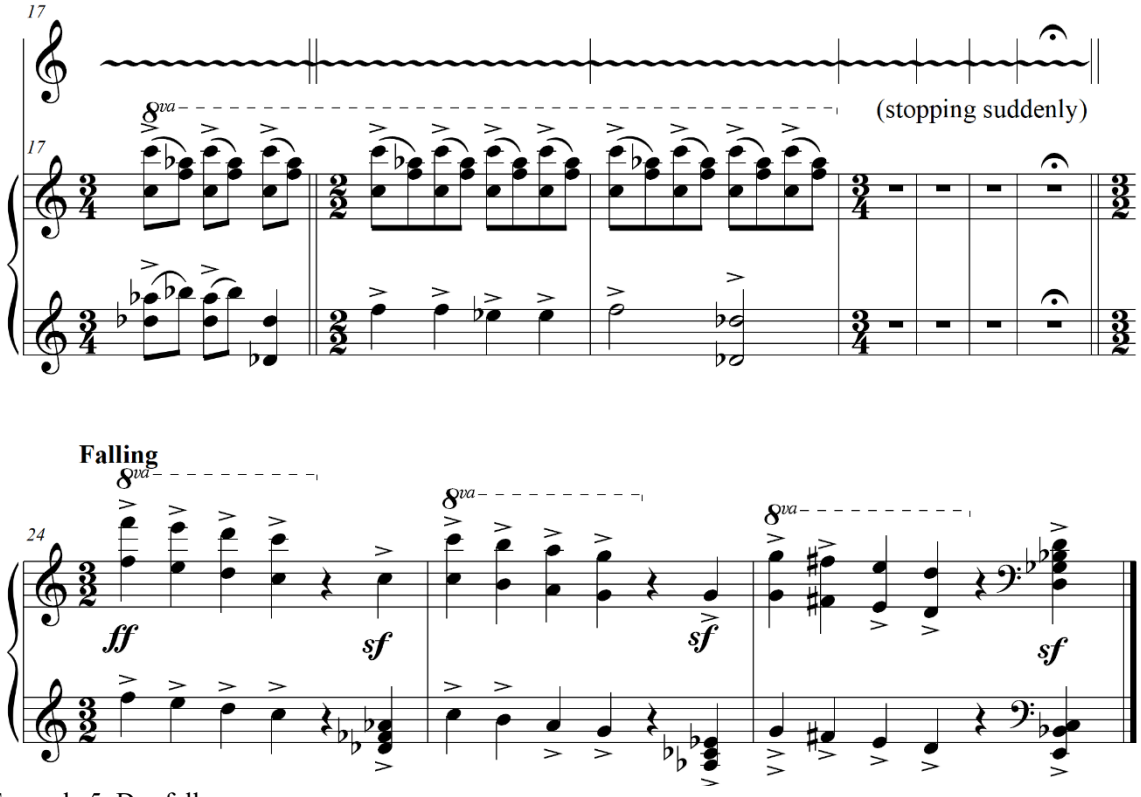


(1): Cries from the crowd. Everyone should attempt the highest note of their range; pitches and durations are indeterminate. Entrances should still be strictly observed.

Example 3: Dro appears, and the crowd that has gathered spots him with excitement. Pratella, in an uncharacteristically progressive moment, anticipates indeterminate music by directing the crowd to shout at their own pitches and rhythms—as long as they begin on beat 3 of measure 13.



Example 4: Dro performs aerobatic maneuvers.

After the third attempt at achieving new heights, the airplane putters out in the air so that the orchestra may swell in and mime a fall (example 6). Like with the rest of the representations of movement in this section, and like the fall in *Le chant de l'aviateur* by P. E. Mesplès, the direction of musical lines mimes the movement of the body. Understood in this context, Pratella's inclusion of the *intonarumori* is secondary to the orchestra's representation of airplane's movement.

Example 5: Dro falls.

Pratella was never confident enough in more avant-garde musical futurisms to break past his traditional writing, but opera is still forward-thinking sonically, even if hardly removed from his contemporaries. The image of the airplane captures the fascinated attitude surrounding flight in Italy and the tragic portrayal of the aviator as a fallen hero..[102] It is an astounding piece of work, but Marinetti's constant endorsement of the opera, even into the 1940's, indicates that he considers it to be an essential piece of futurist music.[103] Pratella's hand in the writing and production of the opera only resolves the mystery a little bit. His dedication to this opera could also be in part due to the limited pieces of music written by Italian futurists, but I propose that, opposed to aeromusic of the 1930s, which represented fascism through airplane imagery,

[102] Pratella, "L'aviatore Dro," 166.
[103] F. T. Marinetti, "Futurist Manifesto of Aeromusic" Translated by Nicolas Slonimsky in *Nicolas Slonimsky: The First Hundred Years*. pp 391-392. New York: Schirmer Books, 1994.

L'aviatore Dro represented the twin spirits of futurism and aeromania: the grassroots anti-gubernatorial social catalyst order of speed and records.

Dro's airplane could be interpreted as the Icarian wing, a tool toward freedom caught in the crossfires of hubris and heat. While *L'aviatore Dro* certainly evokes the Icarus myth, Albertario also suggests Dro may be a decadent Messiah figure, the plane and its outstretched wings a crucifix.[104] The symbolism of the airplane in *L'aviatore Dro* is confused but generally peaceful—its destructive properties at the very least extend only to the aviator-dandy-hero. The scene of the crash has the airplane fail completely—it appears to die before Dro does, and its death is no tragedy, just a fact of amateur flight.

L'aviatore Dro is a profound piece of futurist music and theatre because it captures the mythification of the aviator during a time when heavier-than-air flight was just taking off. Though airplanes are occasionally represented in this ambitious *Gesamtkunstwerk,* Pratella "exalts the figure of the operator, with all the symbolic implications it entails, rather than the machine itself,"[105] The opera is a tragedy because of *his* heroic death. Dro's flight recreates the magnitude of a single heroic flight within the first years of aviation—the first flight in 1903, the flight over the English Channel in 1909, the first bomb dropped by an air force pilot during a battle in 1911.

[104] Julia Albertario, "L'Aviatore Dro di Pratella" 207.
[105] Julia Albertario, "L'Aviatore Dro di Pratella" 207.

Chapter 3

Aeromusic and Geometric Synthesis

Introduction

The Italian Air Force pilot Fedele Azari (1895-1930) took to the skies on April 4th, 1919 to sow copies of his manifesto *Futurist Aerial Theater: Flight as an Artistic Expression of States of Mind* across Milan.[106] In this manifesto Azari proposes that each aviator manifests their personalities through unique flying styles, and that aerobatics—evasive maneuvers developed in war—are a multiexpresive mode of representing or declaiming states of mind or sensations. For instance, he claims "looping denotes happiness and spins denote impatience or irritation while the repeated alternation of wings from right to left indicates light-heartedness, and long falls, like dead leaves, give a sense of nostalgia or fatigue."[107] Azari's fascination with aviation led him to continually implement aviation and arial perspectives as art, even working with Luigi Russolo to create a mechanism that would tune his airplane's exhaust pipes, constructing an airplane-instrument.[108] Azari is also credited with the first aeropainting, *Prospettive di volo* (Flight Perspectives, 1926, figure 2).[109] All of these efforts accurately predict Marinetti's aeroaesthetics of the 1930's. The notion of representing flight and sensation through music, for instance, is a prominent portion of the *Futurist Manifesto of Aeromusic* (1932) written by Marinetti with the help of the composer Aldo Giuntini (1896-1969).[110] One of the key features of aeromusic, as

[106] Fedele Azari, "Futurist Aerial Theatre: Flight as an Artistic Expression of States of Mind," *The Drama Review: TDR* 15, no. 1 (1970): 129.
[107] Azari, "Futurist Aerial Theatre: Flight as an Artistic Expression of States of Mind," 129.
[108] Azari, "Futurist Aerial Theatre: Flight as an Artistic Expression of States of Mind," 130.
[109] Giorgio Di Genova, "Italian Futurism in the Fine Arts" in *Handbook of International Futurism,* Edited by Günter Berghaus. (Berlin: Walter de Gruyter, 2019): 614.
[110] F. T. Marinetti and Aldo Giuntini, "Manifesto Futurista della Aeromusica," 1927 GEN MSS 475, box 132 Slide 5, *"Libroni" on Futurism: Slides*, Beinecke Rare Book and Manuscript Library, Yale University, pg 1, https://collections.library.yale.edu/catalog/10666691.

specified by the manifesto, are blocks of synthesis that convey the sensation of flight—each block representing an aerobatic maneuver, an expressive state of mind.[111] From these synthesized aerobatic maneuvers, Marinetti and Giuntini sought the creation of a "curative music" which will "enable us to live sanely in speed, to fly, and to win the greatest war of tomorrow."[112] That is, aeromusic offers non-aviator musicians a way of achieving the individual multiexpressive freedom of aviation.

Figure 2: Fedele Azari's view from above, Prospettive di volo (1926).

[111] F. T. Marinetti, "Manifesto of Aeropainting" in *Futurism: an Anthology*, edited by Lawrence Rainey, Christine Poggi, and Laura Wittman, (Yale University Press, 2009): 284.
[112] F. T. Marinetti, "Futurist Manifesto of Aeromusic," Translated by Nicolas Slonimsky in *Nicolas Slonimsky: The First Hundred Years*. (New York: Schirmer Books, 1994) 391

In this chapter, I present Aeromusic as a mystical, imaginative music that conveys the sensation of flight and characterized the airplane's ability to warp reality and convey emotion. This is a stark difference to how Pratella characterized his airplane as the dynamic chariot of a hero. In fact, the aviator is gone completely, absorbed entirely into the body of the airplane. Like F. B. Pratella, Giuntini enjoys the honor of having been the first theorist in this period of futurism, but, also like Pratella, his available music is more conservative than his writings. In *Il Macchine* (1933), for instance, Giuntini resorts to mimicking the same machine sounds of the 1910s through minimalist oscillating ostinatos. In *Il Mare Dalle "Sintesi Musicale Futuriste"* (1933), he expertly copies the French impressionist composition style and never touches on the geometric, synthetic spirit that guides aeromusic. I instead focus on three works by another Maceratese composer, Mario Monachesi (1908-1992), as recorded by the futurist scholar and musician Danielle Lombardi (1946-2018).

Fascistizing Aviation

Though militaries were slow to accept that the Wright brother's invention had immediate military applications, the airplane slowly transformed from a backyard experiment into a useful tool and weapon as international tensions exploded and aviation technologies flourished. Italy was one of the first nations to form an air force, and during their colonialist conquest on Libya in 1911, became the first nation to drop a bomb from a plane.[113] Even with occasional use, much of the military assimilation of airplanes was initially spurred on by public support. For example Adam Jungdahl cites the Italian Aero Club of Padua, which in 1912 "proposed a national subscription to secure two million lira in order to purchase 100 aircraft for the government.

[113] Jungdahl, "Public Influence on the Proliferation of Military Aviation," 36.

Within a few months the subscription had collected nearly twice that amount."[114] One of the major militaristic supporters of the airplane was Colonel Giulio Douhet, a military theorist, writer, and poet. Initially a robust prophesier of the use of automobiles in war, around the turn of the century, he turned his sights to aviation in 1912 and became second commander of the air battalion of the Italian army.[115] In 1913, after the war in Libya, during which bombers were frequently used, he celebrated the success:

> Any doubt was silenced, any wavering disappeared in this emergency; spreading their wings the adventurous airway researchers flew toward the unknown. The bent wings of men are passing, Daedalus's large devices, the field machines made of stretched hemp-close and light wood, which will carry man and his dreadful thunderbolt on fragile supports.[116]

His adamant and poetic mythicization of aviation as the next human-evolutionary step again sounds strikingly similar to Marinetti's, and this is not a coincidence. As a poet and novelist, Douhet was very familiar with futurist works, directly referencing them, for example, in a 1914 article entitled "Futurism," in which he eagerly embraces the forward-facing movement of modernity from a militarist's perspective: "We love the futurists," He proclaims, "Yes, we love those impetuous forerunners of tomorrow, because, in them, one finds something true […] The present war cannot be compared to the wars of the past."[117] Douhet is adamant that wartime is not built on the backs of past militaries, but a revolutionized present. This announcement comes before Italy's entrance into the First World War, and before the mass mechanization of war.[118]

Douhet's prophesying turned to criticism as he demanded air warfare as a means of overcoming the bloody and stagnant trenches, only to be met with apparent apathy. According to

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[114] Jungdahl, "Public Influence on the Proliferation of Military Aviation 1907-1912," 32.
[115] Azar Gat, "Futurism, Proto-Fascist Italian Culture and the Sources of Douhetism," *War & Society* 15, no. 1 (1997): 44.
[116] Jungdahl, "Public Influence on the Proliferation of Military Aviation 1907-1912," 32.
[117] Shadow Zimmerman, "Mussolini and Marinetti: Performing Citizenship in Fascist Italy," *Theatre Symposium*, Volume 28, 2020, pp. 42-55.
[118] Gat, "Futurism, Proto-Fascist Italian Culture and the Sources of Douhetism," 44.

Gat, his demands became such a nuisance that he was kept away from aeronautic resources and was eventually arrested for his criticism.[119] Historian Marvin W. McFarland echoes Douhet's frustration from the current day: "Air forces, given eleven or nine or even seven years in which to develop and grow and perfect themselves, might well have prevented the bloodbath that has come to be typified by the positional warfare of lice-ridden trenches."[120] While the argument that using more weaponry would have reduced the total suffering is a speculative claim, his observation that militaries were given enough time to develop, and that with enough training and development, air forces, if they had existed, "could have demonstrated that they had changed the essential nature of war." Eventually, though, the airplane did begin to prove its wartime potential, bypassing the trenched warfront and laying waste to easily accessible cities, returning with stories and tally-marks.[121] As Azari proclaimed in his manifesto of *Aerial Theater* in 1919, mirroring Douhet's glee, "The Italian aviator who defeated the strongest enemy with surprising and impressive maneuvers so created a marvelous, fantastic, and insurmountable style of aerobatics."[122] His description here is a more grounded realization of his maniacal airplane fantasies ten years earlier. And with surmounting war-stories mythologizing flight rather than stories of innovative geniuses, prewar aeromania gave way to a postwar militant aesthetic.

Interwar aviation and the fascist image of Benito Mussolini were inexorably linked. Simonetta Falaska-Zamponi posits that by the time Benito Mussolini came into power in 1925,

[119] The feathers he ruffled did not prevent him from being made general in 1921, and eventually serve alongside Mussolini during his regime.
[120] Marvin McFarland, "When The Airplane Was a Military Secret: A Study of National Attitudes Before 1914." *The Air Power Historian* 2, no. 4 (1955): 81.
[121] A. D Harvey, "Bombing and the Air War on the Italian Front, 1915-1918." *Air Power History* 47, no. 3 (2000): 39.
[122] Fedele Azari, "Futurist Arial Theatre: Flight as an artistic expression of states of mind." *The Drama Review* 15, no. 1 (1970): 128.

the "dynamism, energy, and courage" of aviation served as apparent symbols of fascism. [123] Benito Mussolini as an aviator "automatically represented and promoted those virtues," and their similarity to Marinetti's futurist virtues are not a coincidence.[124] To Falaska-Zamponi, "Mussolini himself became the figurehead of this refashioning of sport as a discipline which could form fascist bodies and minds," and aviation—as wing technology increased, aerobatics—was one of those sports; masculine, fascist.[125] The 1935 book *Mussolini Aviator and His Work for Aviation* by Guido Mattioli is a transparent propaganda piece, depicting Mussolini as not just a commander, but an active participant in war, and the literal answer to Douhet's—and the Wrights'—prophesies.

Visual representations of both Mussolini and arial space were common fascist propaganda pieces as well, especially through futurist aeroaesthetics. Perhaps most famously, in 1930, Alfredo Ambrosi produced an aeropainting of Mussolini's face superimposed on an arial perspective of Venice where he would present speeches (fig 3). This was one of many other forms of art representing the land of Italy from above, and it is an image inspired by arial photography, a common propaganda piece depicting Roman architecture from above. Another common arial photograph subject was that of reclaimed-developed land made "fertile" for Italian use like in Lower Venetia, which was converted from "malarious marsh lands into fertile agricultural country."[126] The arial landscape was one of many symbols used to represent Italy as "heir to a conception of *Romanitas,*"[127] or a mythological justification for modern state control

[123] Simonetta Falaska-Zamponi, *Fascist Spectacle: The Aesthetics of Power in Mussolini's Italy*, (University of California 2023,) 70.
[124] Falaska-Zamponi, *Fascist Spectacle*, *70.*
[125] Federico Caprotti, "Technology and geographical imaginations: representing aviation in 1930s Italy," *Italica* 92 no. 4 (2015): 186.
[126] Great Britain, "Department of overseas trade Report on the commercial, industrial and economic situation in Italy," December 1992.
[127] S. Fadda, "The refiguring of Ancient Rome in Fascist Italy's national imagination," *Nations and Nationalism*. 27 no. 1 (2021): 721–733.

and militaristic expansion. By claiming Italian inheritance to the Roman regime, the fascist party was able to create immediacy in their forward-looking civil "purification" and justify it in the same breath. In this context, the airplane was used both a tool of colonialist propaganda and a means of carrying it out.

Figure 3 *Aeroritratto di Benito Mussolini aviatore*. An aerial view of the Colosseum and the balcony from which Mussolini would give speeches. Note Mussolini's aviator cap, representing future-facing fascism superimposed on the mythologized colonialism and conquest of the Roman empire.[128]

The airplane became a symbol of Italian fascism through the synergy of propaganda and activism, received by a culture that was already primed to adore the new power of flight. Since the first airplane took off, an excited buzz infected the rapidly modernizing cities—and now the skies—across Italy. With the rhetoric put forth by Marinetti and others, the airplane became a symbol for a new world among escalated tensions, born through mechanized man; the airplane

[128] Alfredo Gauro Ambrosi, "Aeroritratto di Mussolini aviatore" 1930. *Art Contrarian*. Accessed April 7, 2024.

being one of the means of achieving this. With the help of futurist rhetoric, Benito Mussolini was able to harness the admiration of the airplane as a symbol that would resonate well with the public and promote his fascist regime and it is soon after his acquisition of power in 1925 that the "aero" label of futurism developed.

Aeromusical Direction

Marinetti's *Futurist Manifesto of Aeromusic* arrived in 1934, later than many of his other aeroaesthetic manifestos, most of which were published 1929-31. In this manifesto, Marinetti describes his perturbing vision for futurist music and preserves the general state of futurist musical output—or the lack of one. He notes that both Stravinsky and Pratella had been "led away from synthesis in an artificial and monotonous primitivism," clearly frustrated that they hand moved on from futurist inspiration.[129]

Marinetti states that the unifying law of aeromusic is brevity and synthesis. He condemns "music for music's sake," claiming it "fetishizes virtuosity;" declares that all song texts should be free-word-syntheses, that other forms and themes, "the kind composers, with their usual incompetence, are fatally bound to choose" were obsolete and are inherently distanced from the music; and condemns the imitation of classical, pop, jazz, and what he calls "negro music."[130] Marinetti, in a couple of French newspapers on 1 August 1937, was willing to carefully criticize Hitler's designating Futurism as "degenerate," and even makes a partial attempt to defend the honor of Jewish artists (mostly as a means of denying Futurism was Jewish in nature).[131] However, his rhetoric clearly falls in step with other racist policies adopted by Italian fascism. It

[129] This would have been during Stravinsky's neoclassical period, for context.
[130] Marinetti and Giuntini, "Futurist Manifesto of Aeromuisc," translated by Nicolas Slonimsky in *Nicolas Slonimsky: The First Hundred Years*, (New York: Schirmer Books, 1994) 392.
[131] F. T. Marinetti, "Response to Hitler," in *Futurism: an Anthology*, Edited by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009) 297.

falls in step, contradicting an earlier manifesto, the *Futurist Manifesto of Dance* wherein he lauded the mechanical rhythm of the African American cakewalk.[132] By denying black musicians from futurist mechanization, he denies them his next step in evolution.

The heart of aeromusic is "synthesis from above," which means the representation of aerial perspectives or events. Marinetti presents a vibrant list of the "types of synthesis" he expects to harvest from aeromusic. Of these are:

> Sonorous block of feelings. Decisive crash. Spatial harmony. Interpenetration of joyful notes […] Triangle of songs suspended at a thousand metres. Musical ascension […] Aerial simultaneity of harmonies. Anti-human and anti-impressionist expression of the forces of nature. Coupling of echoes.[133]

Not only does Marinetti describe the noise of airplanes with his words—and therefore proposing that there should be music that does likewise—he is also eager to represent the joyful sensation of flight. Marinetti would very often take joyrides in airplanes.[134] All this within a duration of less than one minute, as Marinetti specifies.[135]

There are a couple of entries in a draft of Marinetti's *Manifesto of Aeromusic* that did not make it into the final published edition but are instead featured on a rough draft he saved in his *libroni*. In the rough draft, he compares aeromusic to *paroliberi* and specifically contrasts synthesis against tonality, stating

> just as, in surpassing prosody, lyrical verse and syntactical rules, we obtained the synthesis and synoptic simultaneity of a new poetry; so in surpassing polytonality and atonality will we realize a new futurist music which has by law a synthesis-brevity.[136]

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[132] F. T. Marinetti, "Manifesto of Futurist Dance" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 236.
[133] Marinetti, "Futurist Manifesto of Aeromusic," 391.
[134] Günter Berghaus, "Giannina Censi and the Futurist 'Thirties,'" *Dance Theatre Journal* 8 no. 1 (1990) 34.
[135] Marinetti, "Futurist Manifesto of Aeromusic," 391.
[136] Marinetti, "Futurist Manifesto of Aeromusic," 391.

That is, in Marinetti's vision it is not tonality that has any bearing on a piece's analysis; but rather the total image that one may be able to take in at the blink of an eye, or the blocks that construct that image. Daniele Lombardi, a pioneering futurist musicologist, explains it as "essential brevity." For aeromusic, these essential blocks can be understood as Marinetti's types of synthesis. A block only needs a couple notes to produce a "sonorous block of feelings," for instance; so only those notes should be written—or, as developed in another music-oriented manifesto by futurist musicians Mario Bartoccini and Aldo Manita, improvised freely based on the words alone.[137] Later down the missing page, Marinetti professes that the aesthetics of the machine propagated by the Futurists enriched music with geometrism, and lists several examples, the first of which is Pratella's opera *L'aviatore Dro;* twenty years old at this point.[138] His clinging on to this piece as a masterwork of futurist art makes his comment about Pratella's "fall from grace" feel less like scorn and more like heartbreak. Describing aeromusic as being geometricist illuminates the purpose of his elements of synthesis: these are geometric shapes with which one can sonically reconstruct the universe; like with visual works of geometric abstraction these shapes are both material and formal elements. When listening to the scant recordings there are of aeromusic with this framework in mind, one can easily hear the jolty blocks of speedy gestures as both formal elements and melodic components.

Comparing Marinetti's manifesto to the earliest visions of futurist musical theory leads to some interesting results. Firstly, and strictly materialistically, Marinetti is a painter and a poet. He thus approaches composition as an outsider, like Luigi Russolo did in his *Art of Noises,* automatically infusing the practice with an anti-institutional element. As both Pratella and

[137] Mario Bartoccini and Aldo Manita, "L'improvvisazione Musicale in Scrivo Luigi, Sentesi del Futurismo: Storia e Documenti," (M. Bulzoni, 1968): 62.
[138] The other three examples: Casavola's *La Danza dell'elica*, Silvio Mix's *La Cok-tail*, and Honneger's *Pacific 231*.

Russolo specified, futurist music is rooted in the synthesis of mechanical or industrial noises, but Marinetti has moved dramatically away from Russolo's noise music and favors instead the synthesis of noises though the medium of traditional instruments, particularly the piano. Marinetti concludes with an overt reference to Mussolini's reign, predicting that aeromusic will reinforce "the optimistic and active pride of living in the great Italy of Mussolini" which he sees as being "at the head of the Machine Age!"[139] This statement closes the *Futurist Manifesto of Aeromusic* and opens the discussion of his relationship with Mussolini. As discussed in Chapter One, the pair often associated with one another. Though Marinetti was openly critical of many regressive fascist beliefs, as with Mussolini's fondness for the *novecento* movement, he never managed to extricate himself from Mussolini's institution and instead found himself ultimately absorbed into it. Marinetti was made secretary of the Fascist Writer's Union in 1928, and elected into the Academy of Italy in 1929.[140] There are some notable characteristics about his cult of personality and aesthetics that apply when considering the change airplane symbology underwent during the interwar period, particularly in his performance of fascist citizenship.

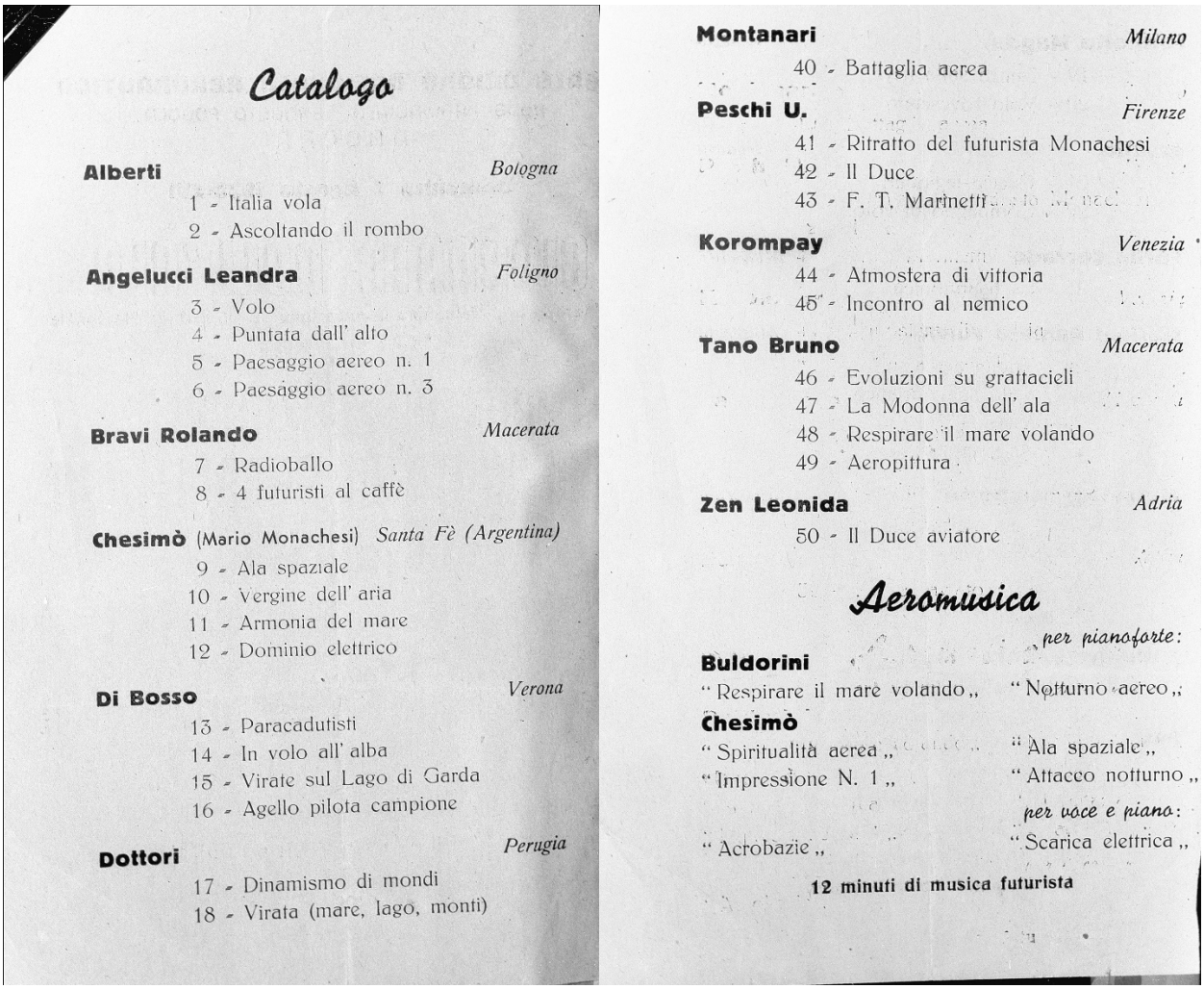
By observing Marinetti's change in citizenship performance and comparing it to Mussolini's, one may be able to observe a stark difference in his citizen-flight-joy as exhibited in his *Founding and Manifesto of Futurism* and the one exhibited in his Manifesto of Aeromusic. Marinetti's presentation of the mechanized man as a *superuomo* (or perhaps more familiarly in German, Übermensch) is present from the beginning of his writings. To him the *superuomo* was a man connected to his machine which gave him the power to exact speed, dynamic movement, and violence unequivocally. When he describes flying in homemade airplanes equipped with

[139] F. T. Marinetti, "Futurist Manifesto of Aeromusic," 392.
[140] Walter L. Adamson, "How Avant-Gardes end—and Begin: Italian Futurism in Historical Perspective," *Rivista Italiana Di Musicologica* 41 no. 48 (2013): 150.

machine guns, "intoxicated by [his] skillful maneuvers, in exhilarating flight, sputtering, weightless, and pitched like a song inviting drinking and dancing," his anarchical spirit is on full display.[141] This is the futurist superuomo, the ideal "citizen," of Italy. Thirty-five years later, he still yearns for those same emotions of freedom associated with flight, but his aesthetic of citizenship changed. While Marinetti's anti-formalist rhetoric still defended avant-garde art from the crusades against it led by Nazis, flight no longer represented non-conformity, but its inversion.

Among the myriad newspaper clippings, autograph manuscripts, photographs, and other futurist memorabllia in Marinetti's *Libroni*, a single Aeromusical program from 1937 listing two composers, Mario Monachesi and Ermete Buldorini (fig. 4). The program in total showcases both aeropaintings and aeromusic, the former receiving more contributions than the latter, as has always been the case—fifty paintings to eight pieces. Though Aeromusic is supposed to be brief, less than a minute long, there is a full 12 minutes' worth of music on the program. There is no information to indicate this, but in following the futurist music tradition, it can be assumed that the music would be played intermittently throughout the art showing as opposed to a discrete concert. Monachesi and Buldorini also had pieces performed a year later *at e Gran Ballo dell' Ala* held at Falconara Marittima airport at the opening of the touring exhibition of Aeropittura futurista on August 7th, 1938.[142]

[141] F. T. Marinetti, "Let's Murder the Moonlight!" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 60.
[142] Lombardi, "Music," 202.



Catalogo

Alberti *Bologna*
1 - Italia vola
2 - Ascoltando il rombo

Angelucci Leandra *Foligno*
3 - Volo
4 - Puntata dall' alto
5 - Paesaggio aereo n. 1
6 - Paesaggio aereo n. 3

Bravi Rolando *Macerata*
7 - Radioballo
8 - 4 futuristi al caffè

Chesimò (Mario Monachesi) *Santa Fè (Argentina)*
9 - Ala spaziale
10 - Vergine dell' aria
11 - Armonia del mare
12 - Dominio elettrico

Di Bosso *Verona*
13 - Paracadutisti
14 - In volo all' alba
15 - Virate sul Lago di Garda
16 - Agello pilota campione

Dottori *Perugia*
17 - Dinamismo di mondi
18 - Virata (mare, lago, monti)

Montanari *Milano*
40 - Battaglia aerea

Peschi U. *Firenze*
41 - Ritratto del futurista Monachesi
42 - Il Duce
43 - F. T. Marinetti

Korompay *Venezia*
44 - Atmosfera di vittoria
45 - Incontro al nemico

Tano Bruno *Macerata*
46 - Evoluzioni su grattacieli
47 - La Modonna dell' ala
48 - Respirare il mare volando
49 - Aeropittura

Zen Leonida *Adria*
50 - Il Duce aviatore

Aeromusica

per pianoforte:

Buldorini
" Respirare il mare volando " " Notturno aereo "

Chesimò
" Spiritualità aerea " " Ala spaziale "
" Impressione N. 1 " " Attacco notturno "

per voce e piano:

" Acrobazie " " Scarica elettrica "

12 minuti di musica futurista

Figure 4 The catalogue of an exhibition showcasing 8 pieces of aeromusic alongside 50 paintings, four of which were Chesimò's. Two other things are of note. First, Ermete Buldorini and Bruno Tano both have works titled Respirare il mare volando, suggesting one was inspired by the other or that they worked collaboratively. Second, Mussolini is the subject of two paintings, one by Umberto Pesci and one by Leonida Zen.[143]

Reconstituting Aeromusic

While many composers joined the futurist ranks during the 1920's, most of them treated it as just a phase in their musical careers, trying out futurist essential brevity for a time before moving on to other styles of composition. Aside from the concert program and a few recordings, little evidence of their aerofuturist works remain, and most of the works fall outside of aeromusic, focusing instead on machine synthesis. Mario Monachesi (1909-1992) is the most

[143] Unknown, "Two pages of a catalogue of a Futurist exhibition with a concert of Aeromusica," 1937, GEN MSS 475, 117, 12, *"Libroni" on Futurism: Slides*, Beinecke Rare Book and Manuscript Library, Yale University.

prominent contributor to the aeromusic concert program in Marinetti's *libroni*, listed under the pseudonym Chesimò.[144] On the program, Chesimò contributes a variety of paintings: *Ala Spaziale*, *Virgine dell'aria*, *Armonia del mare*, and *Domino Elettrico*. *Armonia del Mare* does not feature airplanes (fig. 5), but it features a piano and themes similar to themes in *L'aviatore Dro*: gambling, smoking, and drinking in a decadently escapist way, hinting that those elements of futurist socialization haven't changed. Alongside the paintings, Chesmò contributed six musical works to the concert. The first four of his pieces are for piano*: Spiritualità Aerea, Ala Spaziale*,[145] *Impressione N. 1*, and *Attacco Notturno*. The last two of his pieces are songs for voice and piano: *Acrobazie* (referring to aerobatics) and *Scarica Elettrica* (Electric Shock).[146] There is no available audio recording of any of these pieces aside from *Ala Spaziale*, performed by futurist musicologist Daniele Lombardi in 1999.[147] On this record, entitled *Futuris Music*, *Ala Spaziale* appears beside two others, *Eliche* (propellers), and *Contraeire* (anti-aircraft). My analysis of these three pieces reveals an aeromusical style that challenges the de-humanized pairing of man and machine and instead imbues this pairing with a mystical spirit capable of feeling, reasoning, and dancing.

[144] Marinetti gave him this nickname to distinguish him from Sante Monachesi (Elverio Maurizi, "Il Futurismo nelle Marche," *Palazzo Bonaccorsi*, Macerata, 1979).
[145] The presence of Ala Spaziale on this program, both the painting and the piece of music, may indicate that this program is one from the Mostra Nazionale Viaggiante di Aeropittura from 1938-1939; contradicting the date of 1937 provided by the Beinecke Rare Book and Manuscript Library. However, it could also mean that these pieces were still unpublished.
[146] Unknown, "Two pages of a catalogue of a Futurist exhibition with a concert of Aeromusica."
[147] Daniele Lombardi, "FuturisMusic: Piano Anthology 1 (Digitally Remastered)," Essential Media Group, 2011.

Figure 5 Armonia del Mare by Chesimò. A musician (perhaps the artist himself) smoking a cigarette is sitting at a piano, surrounded by playing cards and a drinking glass, and dreams of the sea as he plays.[148]

There are no available scores for any of Monachesi's pieces, so I have constructed transcriptions of them, sourced through Lombardi's recorded interpretations of them. These transcriptions can be found in the Appendix to this document. In seeking out an understanding of the writing of Chesimò's works, I have encountered three modes of analysis that lend unique perspectives to his synthetic practices. Since there are three available works, I have assigned them each a mode of analysis. For *Ala Spaziale*, I connect the themes of aeromusic with the written notes as closely as possible. This piece differs from the other two in that its form is

[148] Mario Monachesi, 1938, *Armonia del Mare*, Oil on plywood, 28x21cm Museum of Macerata.

functional to understanding it, so a theoretical analysis is the best method for tying this music to broader aeroaesthetic concepts. *Eliche por Due Pianoforti* is the most gesturally diverse. Rendering it as images synthesized from the gestures yields a unique way of observing those gestures and their context simultaneously. The modes of gestural analysis and mapping are focused on the material aspects of aeromusic, but there is a metaphysical side, too—that of spiritual emancipation through flight embodied in an aviator-airplane fusion. The sounds of aeromusic are meant to constitute a sense of flight in the audience, thus making the performer the aviator and the audience his passengers on their unifying boundaryless joyride.[149] The musical imagery is important, but the musical sensation is the guiding principle of aeromusic. The latter is lost when rendered as an illusory projection on paper. To reconcile the absence of sound—thus a muting of this spirituality—I will put the final piece, *Contraerei* through a process of sublimation and let it emerge as *parole in libertà*; Marinetti's own attempt at producing synesthetic noises and mystical experiences through typographic poetry. This process should preserve in some way the spirit of *Contraerei* and thus its synthetic identity. Using these methods in partnership with one another reveal not just the compositional practices of a composer of aeromusic, but an image of the spirits essentialized within.

First on the runway is *Ala Spaziale,* one of the pieces (and the title of one of the paintings) on the aeromusic program from 1937 (appendix entry 1).[150] Lombardi's performance of *Ala Spaziale* is exaggerated and lively, indicating that there were likely myriad character markings as with *L'aviatore Dro.* In my transcriptions, I chose character markings that more-or-less describe Lombardi's playing. A brief survey of this piece reveals Chesimò's writing style,

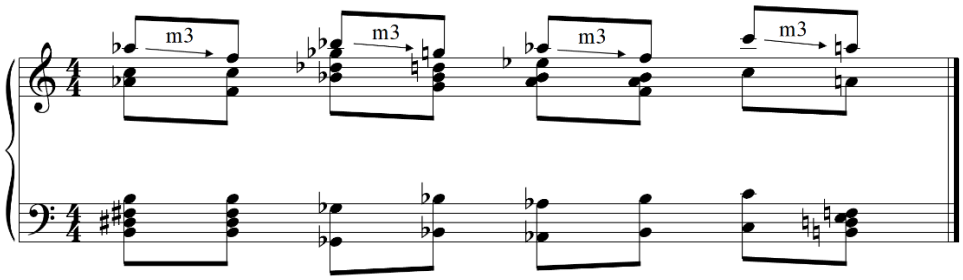
[149] The gendered language is not an anachronism, here. The mechanically multiplied man is expressly male in futurist literature. I will navigate this in the next chapter.
[150] Unknown, Two pages of a catalogue of a futurist exhibition with a concert of Aeromusica."

which exhibits the use of several gestural "brushstrokes" that maintain an identity separate from their neighbors. The strokes appear as essential elements unconcealed by any material that could prove "extraneous," or inessential to the rendering of flight. There are four strokes in total: the habanera rhythm that concludes with a strong cadence, a quick arpeggio in the stratosphere, an upwards leap, and a tremolo rumbling in the depths. Assigning a letter to each stroke respectively yields a form: ABA CAC ADA. Clearly there is a ritornello in use: the conclusive habanera rhythm. The other three strokes permeate the habanera rhythm as discursive elements.

In my letter diagram, spaces separate the sections into larger periods of tonal consistency. Mm 1-3, for instance, begin polytonally between F-sharp major and F minor. The B section operates as a common tone between these keys that begins their convergence, which is fulfilled in m. 3 when the key of F-sharp major dissolves away. The residual key, E-flat, presides over the rest of the piece. Mm. 3-7 reveal that the first appearance of stroke C operates as a dominant, prophesying its second appearance, where it returns as a tonic. Stroke D (mm. 10-14) also sounds dominant, building intensity as it is drawn out for $1/5^{th}$ of the piece's total duration before concluding with an extension of stroke A. What this analysis uncovers, especially the final period which is clearly meant to heighten tension and produce a satisfactory resolution, is that Chesimò draws inspiration from Marinetti and Giuntini's *Futurist Manifesto of Aeromusic*, but he remains loyal to some standard musical principles.

There is an outstanding element of shifting perspective in stroke A (reduced in ex. 6). This stroke is far more complex rhythmically and tonally than the discursive ones, which are made up of a single atom repeated a multitude of times. I have synthesized the beginning and ending chords of stroke A, revealing that the sonorities of the chords change each repetition but there is a unifying element between them in the outer voices of the right-hand chord: an octave

that descends a minor third. The octave acts as an airplane window, through which a plastic-subjective landscape of notes presents itself; the synthetic alternate reality of aeroaesthetics in which "time and space are pulverized by the lightning-swift awareness that the earth is rapidly spinning beneath the immobile airplane."[151] The undulating ground beneath the airplane appears unsurprisingly in the left hand, which may agree (reps. 2-3) or disagree (reps. 1-4) with the view from inside. Through this reading, the non-melody voices of stroke A represent a perspective shift, which is enacted through a maneuver represented in the much-simpler discursive strokes B, C, and D.



Example 6: A rhythmic simplification of the first four repetitions of stroke A. The fifth stroke is identical to the fourth, and thus is unnecessary to include. Octaves have been transposed to increase legibility.

Putting tonal analysis aside, there are textural elements that imbue sensation into the music. The driving rhythm and involved sonorities of stroke A fill it with intensity, an effect corroborated by Lombardi's characterization. The other strokes are simpler, more pleasant, and performed with little extreme emotion. Adding these sensations to my analysis presents *Ala Spaziale* as a dichotomy between the intense, active view from the cockpit and the placid, observational view from the ground.

Eliche por Due Pianoforte (refer to appendix entry 2 for a notated transcription) lasts just under one minute. Marinetti's blocks of synthesis are clear based on a geometric analysis of the

[151] Marinetti, "Manifesto of Aeropainting," 284.

piece, which reveals that formal and gestural elements occur simultaneously. The piece can be broken down into six distinct gestural blocks, marked alphabetically A-F. Each block represents a single character or trajectory[152] and are alienated from the others by a period of silence. Their musical relationship with each other is tenuous due to the separation in character, motive, and mood; though Chesimò shares an upwards-slanting gesture between block C and E and a chromatically plummeting one between D and F. If each of the blocks are abstract syntheses of anything material, it is an airshow: each of the blocks a precise move the partnered monoplanes make. Given the constant representation of aeronautics in futurist art, this is an easy claim to back up.

Appendix entry 3 demonstrates my geometric rendering of the blocks. Duration is not accounted for in this rendering, just the spatial approximation of pitches in relation to others (that is, higher-up shapes denotate higher pitches and lower-down shapes lower pitches), the general shape different clusters and lines create (that is, shapes growing in breadth may indicate an increase in tonal clustering or dynamic intensity), and emotion through color. Each geometric block is contained in a colored box, which serves to distinguish the blocks from each other and indicate an emotive atmosphere, like character markings in a score. Representing blocks as discreet shape arrays represents their differences in new ways. Futurist interest in synesthesia informed me to be directed by the complexity, pitch content, and intensity of a block, gesture, or chord. The triangles are not just triangles, they are yellow triangles; meaning they are bright, triumphant, and shine through the surrounding textures. The stormy green clouds have a similar effect when played each time: tumultuous and rumbling. The containment boxes' colors represent the character of Lombardi's playing. Darker tones mean more intensity, lighter tones

[152] That is, up, down, getting faster, growing larger, etc.

the opposite. More vibrant tones mean more complexity of emotion, muted tones the opposite. Seeing these colors as representational content illuminates the difference of performed material and immaterial content between each block.

Rather than a traditional score transcription, these images provide a better expression of the essential brevity of an art form otherwise confined to being drawn out through time. The shapes themselves are semi-representational; evocative of flight in some blocks (D,F), but merely suggestive of gestures (A) or vague obelisks (E) in others, carrying with my subjective understanding of what each block represents. Ultimately, though, it is up to the performer to imbue them with meaning, to unravel the simultaneous expression of gestures through time; to convey their essential spirit to an audience. This ambiguity is admittedly one of the flaws of this representation, making it impossible to totally replicate what exact notes Chesimò wrote. However, this representation opens the piece up to a thematic exploration and clearly reveals the geometrics within.

Block A, spanning mm. 1-4 is a decisive and firm fanfare repeated twice. The pianos play in a homophonic texture, augmenting the power and spread of the dissonant chords. The rhythmic sputtering synthesizes the sounds of monoplanes starting their engine. Block B, mm. 5-7 splits voices into a terranean rumbling, growing stronger and more stringent; and a crackling in the sky, growing slower and gaining momentum, together cumulating in a sudden A Maj chord. The pianos sound like they work together to achieve that effect, rather than one being delegated to either extreme; each articulating notes with the right hand and sliding around the keys with the left. Though a physical space is created through this synthesis in the separation of sky and land, this block seems more evocative of an emotion, like mounting suspense; or a sound, like the ground-shaking roar as the monoplanes soar close overhead. Block C subverts the directional

stasis of the first two blocks, sending both pianos on opposing trajectories, careening away from each other—a common aeronautic stunt. Also in contrast are the gestures, which are suddenly light, bouncy, and triumphant. Block D introduces a minor third interval that descends chromatically, gaining momentum as it falls toward a reverberating mist played in the lower half of the second piano. Block E recapitulates on the triumphant theme introduced in block C, played over triumphant dominant seventh chords. This block is the closest the piece comes to achieving tonality or development: the two chords played are B-flat dominant seventh chords that resolve into an E-flat, the first note of the final block, which reintroduces the descending motive from block d and extends it, bringing the piece crashing down into the lowest range of the piano. Block F may be indicative of an airplane crash, but auditorily it sounds like the doppler effect of an airplane passing overhead, especially as it gets muddier near the bottom. In the recording, the descending passage slowly unravels in precision; it begins with a staggered minor third figuration that descends chromatically, like in block D, but it becomes more gestural and loses the minor third figuration in the last measure. This is indicative of some sort of improvisation, likely dictated through either text or graphics.

Though this is not how this music was composed, a graphic reinterpretation of Chesimò's sounds can provide another way to interface with the geometry of *Eliche*, showing that Chesimò was consciously separating blocks of unique identity in a way an aerobat would perform different stunts—revival of war-time evasive maneuvers done through sport and performance.

The final piece is *Contraerei*, for which I have chosen to construct a words-in-freedom poem (I will be using the word array in lieu of poem) as a form of analysis and representation. The theory behind words-in-freedom was developed by Marinetti in a quest to synthesize sensation in word form as outlined in the *Technical Manifesto of Futurist Literature* (1913). In

this manifesto, Marinetti challenges literary form by dictating the destruction of syntax, the scattering of nouns at random, the manifestation of "the dynamism of objects" (his definition of noise), and the use of mathematical signs and musical notations (+ - × : = > <) to indicate logic and movement in lieu of any conjunction or punctuation.[153] The arrangement of the liberated words on an array (fig. 6) extends the poetry beyond something merely to be read. It becomes a piece of art to be admired and a graphic score to be performed—a multimodal experience constructed out of sounds, words, and lines of magnitude or direction.

[153] F. T. Marinetti, "*Technical Manifesto of Futurist Literature*" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 120

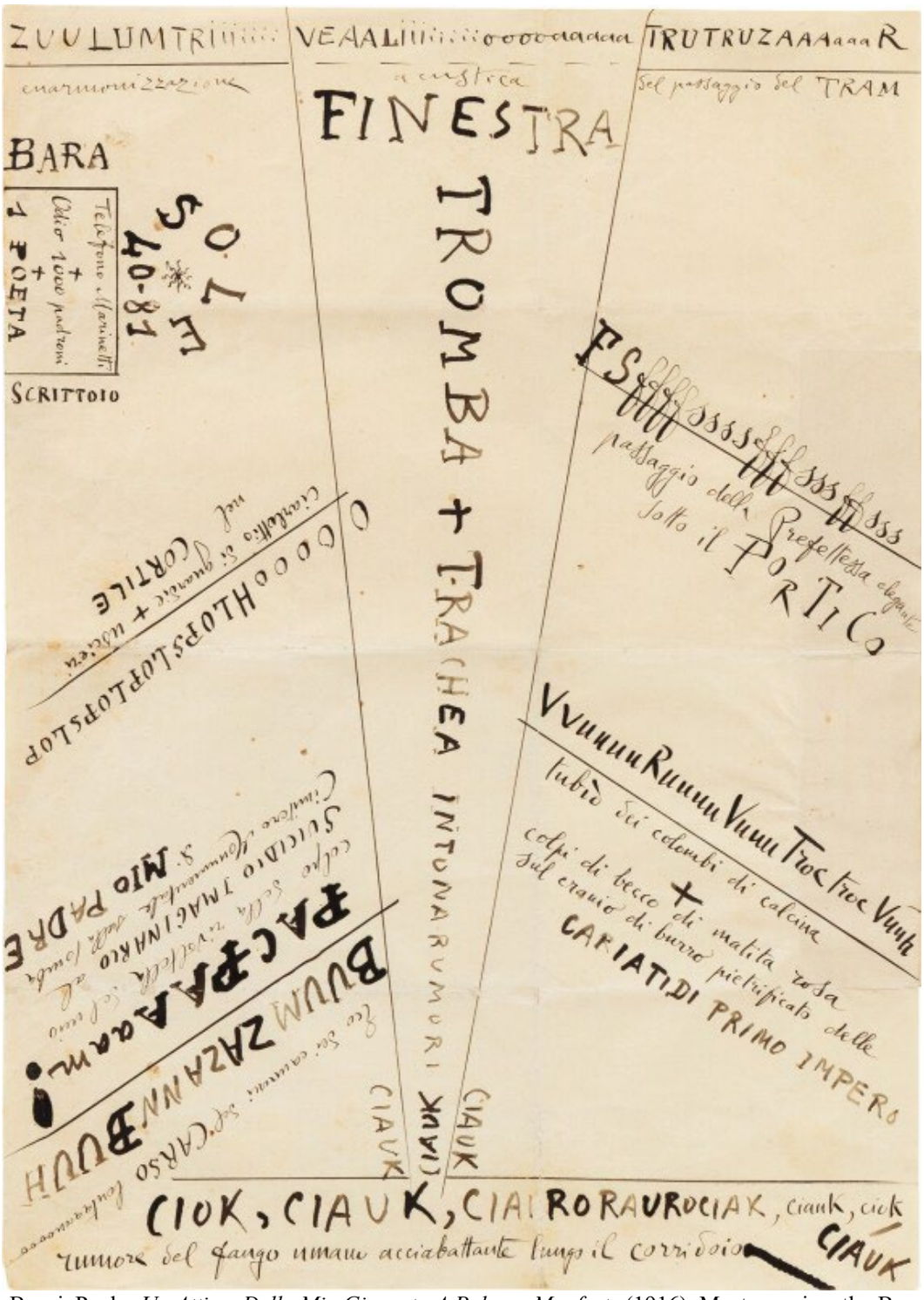


Figure 6: Buzzi, Paolo: *Un Attimo Della Mia Giornata A Palazzo Monforte* (1916). Most prominently, Buzzi creates a crescendo of "horn + windpipe intonarumori" that emulate from the "clok clauck" sound of footsteps on a long, muddy cobbled road. Other noises Buzzi describes are the "Marinetti phone" (upper left, in the box beside the sun) and the "PACPAAaam!" of Buzzi's imaginary suicide on his father's grave (lower-left diagonal line).[154]

[154] Buzzi, Paolo. *Un attimo della mia giornata a Palazzo Monforte*, 1916.

I have chosen to represent this last piece through a words-in-freedom array because of its multimodal power to represent direction, magnitude, sound, and topic. My net-array of liberated words (appendix entry 4) realizes moments of imagery, onomatopoeia, and spatial position as represented in *Contraerei*. The latter quality, spatial position of musical subjects, is uniquely represented using this transcription style. The words-in-freedom array I have constructed is not meant to represent time by any means—that is, in representing the terrestrial and aerial positions of the differing subjects, I forewent an intuitive reading order, encouraging the reader to engage with the piece in a more temporally plastic way; to recognize the blocks of synthesis as discrete timeless elements. To make the pairing of the poetry and the music more evident, here is the text presented in a left-to-right fashion that figures *Contraerei* as it sounds through time:

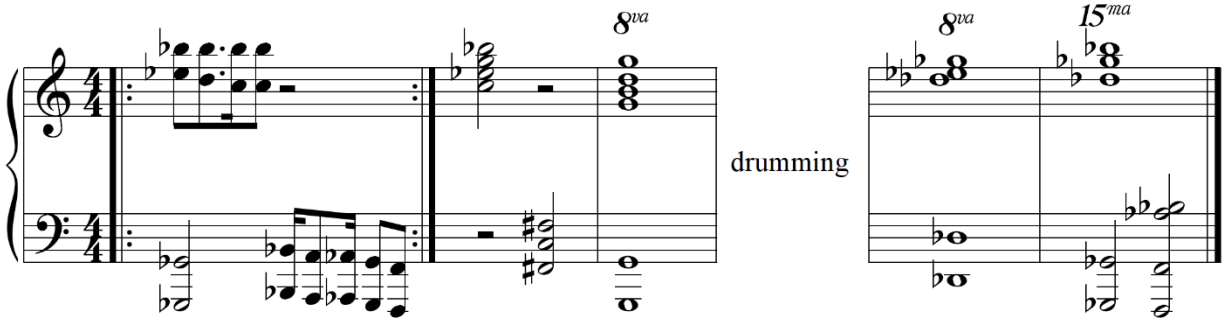
> ANTI- *kakaka-tuuuuuummmmmm grangggg* x5 (bright lithium pangs) heaven-bound bullets chasing catch it make it explode make it pieces *tuuuummm* downward incoming bullets (30 rounds) *kiiiikkk*
>
> AIRCRAFT cakewalk + racing + argument + gnashing interplay + Searing turns pressed through the chair leaping dodging dancing green lights *tuko-tuko-tuko-tuko* (searing red-orange completion) *GRAANGG!*
>
> >*takalakata* (guns 1.4 km off) horizontal metal throat whisper
> *tak-ti-tak-ti-tak*
> *echo-o-o-o* contra-uomini<
>
> VOLLEY = burn-exclaim-saline faster-fuel-smell gunsmoke taste it ÷ agony frustration violent backdrop of grey ÷ completion backdrop of blue bliss bllllast and…

My reading of *Contraerei* reveals that certain synthetic blocks (represented in the poem by different stanzas) appear to represent different topics or emotions. The first stanza (ANTI-), for instance feels driven to destroy while the second (AIRCRAFT) feels more inclined to move around and evade. My reading also attempts to recreate sounds that the piano suggests—like that of distant gunfire in the stanza separated by carrots. In the following paragraphs, I will tie these emancipated words and varying topics to the music.

Contraerei begins with a low shifting rhythmic statement, then a high-pitched burst of discordant sound. I recognize the rhythmic statement to be representative of mechanical movement, perhaps that of a turret being loaded; and the sudden interjection to be representative of sensation, either from the intensity of shooting the turret or from being hit with it while airborne. Represented on the array, the word anti-aircraft appears to shoot "kakakatuum" into the air, resulting in a pang of sensation: "grang!" This happens several times before the next block of synthesis (ex. 7 m. 1) which I interpret as movement, either falling or writhing. There is a conversation between the right and left hand, each playing the same falling habanera rhythm in cannon with one another. The intensity with which Lombardi plays this block also leads me to interpret emotion in the writing, perhaps experienced by a pilot being targeted by the anti-aircraft weapons. It is represented on the array by "searing turns pressed through the chair" and the words attached to it, signifying both the action and the emotion of dodging bullets in the sky. This word-cloud protrudes from the second half of "anti-aircraft," which figures my interpretation of what this block represents.

Measure 2-3 of ex. 7 construct the next block. I have not notated the jerky rhythm with which the right and left hands oscillate in m. 2. Rather, I will point out what that sounds like on my words-in-freedom array: a "TUKOTUKO…" cumulating in a blast of completion in m. 3 that sounds like emotive pangs from the first block, thus their assignment of the word "grang" again.

During this block, Chesimò does something interesting that is not necessarily captured in my words-in-freedom array. While the notes in m. 2 are sourced from a c half-diminished seventh chord, Chesimò splits the tetrad in half and draws out two polytonal voices, C minor in the right hand, and G-flat major in the left. The next measure is totally absorbed in C min, oscillating back and forth between i and viiº/V before resolving to a triumphant V. Chesimò subverts the dominant function of the V chord and lets the anticipation introduce his new block of music: a cadenza of rhythmic drumming on the body of the piano for ten seconds.



Example 7: Four blocks from Contraerei with varying resolutions of representation

After this exclamation, Lombardi drums on the piano lid for a few seconds, a rare moment of piano extended technique in the futurist avant-garde. The V chord hangs over this section making it, too, feel like a section built on a dominant chord. Thus its status as a cadenza makes total sense. As I have previously mentioned, the level of improvisation Lombardi used is unclear. It is therefore represented limply in my partial transcription as "drumming." The words-in-freedom array brings it to life, setting the sounds as far-off gunfire during a quiet moment; representing them both spatially in their position inside a wedge, removed from the scene but still present sonically in it, and materially with the word "contra-uomini."

After the rhythmic drumming—flesh against wood a surprisingly human sound among the mechanical obliterations—Chesimò sets up a resolution in G-flat major through a cadential second inversion (m. 5). The resolution, though, is foiled repeatedly by a b-flat minor seventh in second inversion (m. 6). Lombardi plays this block with increasing frustration—he sounds

determined to end the piece on a tonic note, but resigns himself eventually and ends the piece on the culprit chord. I represent this battle and inconclusively in the bottom section of my array, launching back and forth between emotions and terrestrial/aerial positions, and ends inconclusively, the way the piece does, with an "and…"

As my analyses reveal, Chesimò abandons repetitive mechanical rhythms for less-rigid gestural expressions that enjoy boundless emotional freedom, visiting several emotions-sensations-experiences within a short span of time. His style realizes the futurist manifesto of aeromusic, making it an archetype of the style. Extrapolating style from Chesimò's compositions yields a closer understanding of aeromusic rather than one just extrapolated through the manifesto. Aeromusic as a style extends beyond concrete recreations of mechanical noises with an aviation flavor. It is an abstract style that geometrically represents the spirit, intensity, and perspectives of aerobatics, infusing the airborne cyborg with emotive energy.

Conclusion

By the 1930's, when Marinetti published his manifesto of aeromusic, aeroaesthetics in Italy were widespread. The prefix, denotating themes of aviation or air-travel accounted for all practices from interior design, to poetry, to ceramics, to fashion; usuring in a sort of "second aeromania," this time informed with the promise of social uplift through fascism and the mythology of war heroism. The music produced under this prefix contains themes of wartime, but in some instances hearkens back to a corporealization of flight though aerobatics. The context, though, of the themes that aero-musicians explore, as supported by Marinetti's exaltation of Mussolini in the manifesto itself, aligns itself with fascist symbolism in an indirect way. Along with the futurist themes of strength, intensity, and sport, all of which were harnessed by Mussolini in his regime, the image of an airplane itself was not totally innocent. It would have

been a symbol culturally understood to be distinctly made under Mussolini's regime, and thus representative of the strength, intensity, and sport of Italian fascism. The musical philosophy in realizing these themes hearken back to an earlier futurism—or rather, stay consistent with the original ideas of synthesis as devised by Pratella and Russolo. While consistent in philosophy, the tonal language progresses from either composer's output: away from Pratella's impressionism toward a geometric primitivism, and away from Russolo's micro-chromatic noises toward piano music. The formal organization of the pieces also progressed toward geometricism, divided out into distinct blocks of synthesis not unlike formal practices of Stravinsky and Honegger. The most evidence of aeromusic concerts come from exhibitions organized in reaction against the Nazi label of "degenerate art," a long-standing attempt by Marinetti to instate Futurist art as the national art of fascist Italy.[155] Despite being in Mussolini's ear enough to sway him away from art-censorship, which would ensure the demise of his avant-garde career, Marinetti was never able to stop Mussolini's own progression away from the avant-garde toward realism through the *Novecento* movement.[156] Aeromusic is a fascinating period in futurist art. It is dynamic, bold, destructive, and anti-formalist; a musician's bold endeavor to create freedom-flight during fascist rule.

[155] F. T. Marinetti, "Response to Hitler," 297.
[156] Francesca Billiani, *Fascist Modernism in Italy: Arts and Regimes*, (London: Bloomsbury Publishing, 2021): 31.

Chapter 4

Music-Dance-Sculpture and the Aero-cyborg that Narrates It

Introduction

There are art forms tangential to music that, while functional on their own or when coexisting beside music in multimodality, can be bonded together in such a way that the two unify in a synergistic convergence. Three modalities that best or most often converge with music are poetry, when a performance synthesizes new extraliterary-audible experiences like with Marinetti's *parole libertà*; dance, which while seldom done without music, is near-universally compelled by the presence of it, extending past choreo-musical alignment into synonymity;[157] and film, which can absorb music into it, such as with the avant-garde music-films of the Dadaists. That is, while any of these modalities can contain or exist alongside another—poetry and music as song, for instance—there are instances in which one may become the other or exist in a quantum state between the two.

The futurist painter Enrico Prampolini (1894-1956) was the one to construct the three-dimensional aerial theatre hypothesized by aviator-futurist Fédèle Azari on the more traditional stage, designing the sets and costumes for the two known aerodancers, Zdenka Podhajska (1901–1991) and Gionnina Censi (1913-1995). Little is known about Podhajska aside from her costume design and that she danced to Franco Casavola's (1891-1955) *La danza dell'elica* and some sport-themed conceptualizations. The latter of the two, Censi, dedicated more of her time to aerodance

[157] The Blackfoot term *saapup*˛ for example, is used to describe music, dance, and ceremony as synonymous; music or dance on their own being inconceivable. Lewis, Jerome, 'A Cross-Cultural Perspective on the Significance of Music and Dance to Culture and Society: Insight from BaYaka Pygmies', in Michael A. Arbib, *Language, Music, and the Brain: A Mysterious Relationship* (Cambridge, MA, 2013; online edn, MIT Press Scholarship Online, 21 May 2015): 46.

in particular, spending her time by Marinetti's side developing an aerial-dance practice.[158] It was at Marinetti's behest that she began dancing to his poetry at sixteen, and a unique dance aesthetic soon developed, one that attempted to create musicality out of two modalities tangential to music.[159] She first presented her dances at a futurist *serata* on October 31, 1931, interpreting two of Marinetti's poems and, silently, five of Prampolini's aeropaintings. Four years later, after a torn meniscus and the birth of her second child, she gave up the craft.[160] She would go on to relive her experiences in her own writings, teachings, and in an interview with Gunter Berghaus in 1980.

Intermodal relationships, especially choreo-musical, were suspect to investigation in the modern era as the Wagnerian concept of G*esamtkunstwerk* infiltrated the social conscious. Daviana Caddy describes how early twentieth-century dancers like Isadora Duncan, Loie Fuller, and Valentine De Saint-Point garnered a fascination surrounding them by addressing their relational engagement with music in their own unique ways. Conscious of dance's communicative properties, their dancing to or against music was a "critical and dialectical" process in dialogue with musical embodiment that had bearing on their audiences' reception of the music.[161] That is, the dancer can become a mediator between music and audience, or an aesthetic component to music-dance in synonymity which the audience must interpret—a visualization of musical thought. Each of these dancers consider themselves music-visualizers in a way that extends beyond a mere choreo-beat alignment.

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[158] Anja Klöck, "Of Cyborg Technologies and Fascistized Mermaids: Giannina Censi's *Aerodanze* in 1930s Italy," *Theatre Journal* 51 no. 4 (1999): 395-415.
[159] Berghaus. "Giannina Censi and the Futurist 'Thirties,'" *Dance Theatre Journal* 8 no. 1 (1990): 7, 34.
[160] Katia Pizzi, "From Aerodancing Technobodies to Dysfunctional Machines" in *Italian Futurism and the Machine*, (Manchester University Press, 2019): 244.
[161] Davinia Caddy, "Representational Conundrums: Music and Early Modern Dance," *Representation in Western Music Representation in Western Music*, Edited by Joshua S. Walden, (Cambridge University Press, 2013) 145.

Saint-Point, who is tangential to the dancing of Censi's refers to their dissociated practice as representing "the spirit that informs" the music—or some deeper embodied theme than just what can be heard.[162] Caddy considers these dancers more "'ideas' people, their dances 'a point of view'" that offer a unique insight into the treatment of music.[163] Thus, to only discuss the aesthetics of interwar flight though sound is to only represent the trunk of the elephant—other sounds, textures, volumes are left unaccounted.

More drastically, swathes of musical reception are lost when inconsiderate of how dancers choose to engage with it. Therefore, I will take this final chapter to investigate the spirituality of Censi's aerodances as preserved in interviews, photographs, and recreations. Censi's dances represent the "spirit that informs" aeromusic's fascination with geometry and sensation. Thus, by discussing her choreographic language, I can present a more cumulative understanding of the aeromusical culture in the third period of futurism.

Futurist treatment of choreomusical relationships was first theorized by Pratella in his manifesto of futurist music, wherein he described dance rhythms as "monotonous, limited, decrepit, and barbarous," ordering them to be "considered as possible elements within free rhythm" as long as their use is not chronic, "just as the rhythm of the hendecasyllable can be an element within the stanza in free verse."[164] Pratella also orders a break from metered poetry when setting text, and the result of singing unmetered lyric-music and dancing arhythmic music are the same: the "polyphonic wave of human poetry finds all the rhythms, accents, and modes needed to express itself freely."[165] By choosing free verse to set to music, Pratella believes the

[162] Leslie Satin, "Valentine de Saint-Point," *Dance Research Journal* 22, no. 1 (1990): 3.
[163] Caddy, "Representational Conundrums: Music and Early Modern Dance," 145.
[164] F. B. Pratella, "Futurist Music: Technical Manifesto" in *Futurism: an Anthology*. Edited by Lawrence Rainey, Christine Poggi, and Laura Wittman. (Yale University Press, 2009): 81.
[165] Pratella, "Futurist Music: Technical Manifesto," 81.

singer will be granted a new world of expressive possibilities just as in removing what he calls "dance rhythms" from music will grant a dancer more expressive choices in aligning with or representing the music.[166] Or, as is the case with futurist dance, when music and dance are symbolically interrelated though physically disjunct, it is up to the audience to find the rhythms, accents, and modes spiritually imbued in the pairing.[167]

The symbolic pairing of music and dance is exemplified best by Valentine De Saint-Point's *Métachoric* dances. Saint-Point briefly danced as a futurist before forsaking "that advanced cult because of its scorn of the female sex."[168] She published four manifestos between 1912 and 1916 containing her futurist dance theory, the most important of which was *Métachorie*, or beyond-dance, in 1914. In this manifesto she sought to unify dance, music, painting, poetry, architecture, and sculpture as a single artistic practice; a common futurist compulsion. Her dances were "cerebral," an attempt to ignore the instincts of the body as much as possible in favor of a purely "ideistic" dance. That is, a dance based on logical thought regarding a theme rather than the bodied compulsion to represent music.

To create this dance, Saint-Point represents a theme, as uncovered in poetry readings or music, as a discreet geometric shape that dictates her movements "just as music is constrained by the mathematics of counterpoint."[169] Her Métachoric dances were performed with a veiled face against a backdrop of colorful lights to music and poetry—the poetry conveying the idealistic theme she was geometrically consigned to. Rather than visually aligning with musical rhythm or pitch, Saint-Point instead chose to represent a deeper logical truth through geometry, lights, poetry, and music working in "psychological synchronism through the simultaneous

[166] Pratella, "Futurist Music: Technical Manifesto," 83.
[167] Satin, "Valentine de Saint-Point," 3.
[168] Satin, "Valentine de Saint-Point," 1.
[169] Satin, "Valentine de Saint-Point," 1.

perception."[170] The audience must bear their beholder's share if they are to recognize the logic. It is this notion of a cerebral-dance unified with music or poetry by a single imbuing spirit-theme to be interpreted that informs futurist dance practices in the 1930's.

Censi's aerodances were based on a performance practice, not discreet choreographies—they were improvisatory, and the poetry or music she danced to were often improvised as well, being based on their own sets of performance practices. Thus, there is no single performance to study that best emblemizes her dancing, though her 1931 *serate* performance set the tone of the aeroaesthetic movement and appears to be the one she recalls most often.[171] Rather, researchers of Censi's work, like those of Fuller's and Duncan's turn to her writings and photographic representations of her dance practices.

There are a couple noteworthy sources of these. Firstly, her interview with Berghaus in 1980 where she recounts much of her young life as a futurist, providing a lucid view of a movement so obscured by polemic and posturing. Secondly, some videos of aerodance recreations provide a meaningful way to imagine Censi's practices, like those performed for the documentary *ArtLife: Futurist Revolution*.[172] There are two clips from this documentary available on Vimeo. "Futurism - Aerodance Lapse" is edited with a chronophotographic effect to create a unique representation of the dance's dynamism. However, this one is accompanied by a primitivist piece for drums and orchestra that is best left muted. The second clip, "Futurism - Cinema Extraits," synchronizes the same dance with geometric piano music that sounds similar to Chesimò's; though this is problematic too, as Censi most often danced to poetry.[173] The inappropriate music

[170] Satin, "Valentine de Saint-Point," 1.
[171] Berghaus, "Giannina Censi," 34.
[172] Marco Genone, "Futurism - Cinema Extraits," 2013. AbsoluteFilm for Art Life: the Futurist Revolution. Accessed April 5, 2024, https://vimeo.com/84475976.
[173] Marco Genone, "Futurism - Aerodance Lapse," 2013. AbsoluteFilm for Art Life: the Futurist Revolution. Accessed April 5, 2024, https://vimeo.com/85434357.

(and the lack of evidence for what the dancer is interpreting) calls into question the nature of the dance represented: if the dancer is not representing the aerial spirit of anything but instead merely demonstrating a sort of airplane-pantomime, it should only be used as a sort of codex to imagine some of the language of a real aerodance.

Though not digitalized, thus inaccessible to me for now, there are video tapes of Censi's dances archived in the *Archivio del '900* at the Italian museum MART, along with much of her writings. Most usefully, MART has digitized a collection of Censi's dance photographs that invite a descent into a consideration of far more than just her dance practice.

Photographs capture Censi's dances for promotion offering some insight into her dance style, which was not otherwise captured on film. Photography contains its own "aesthetic experience before the existence of the photograph that is its product," meaning the ways a photographer and dancer have chosen to represent the dance are conscious efforts, the evidence of which is the product itself.[174] That is, the photography of Censi's dance is beyond a mechanically reproduced scene objectively documenting her techniques, but an aesthetical contribution to her aerodance practice. The conscious aesthetic choices can be observed in order to more wholistically recreate Censi's music aestheticization and to weigh Marinetti's involvement with the fascist regime.

Musicological research of Censi's aerodances will reveal that in setting a body into motion over a warscape as represented by Censi's dancing and Marinetti's *paroliberi*, the aerofuturist aesthetic once again makes itself useful to fascist absorption, which Marinetti took advantage of out of self-preservation. This revelation most effectively lies in Censi's performance of *Aerodanza* and the publicity materials that were made for those performances,

[174] Richard Shusterman, "Photography as Performative Process," *The Journal of Aesthetics and Art Criticism* 70, no. 1 (2012): 67–77.

but I will use examples from her other dances, namely *Simulatnina* and *Tereodanza* to supplement my philosophical exploration of aerodance's obscured interaction with music.

Costuming and Visual-Static Aesthetics

Publicity photos for Censi's *Aerodanza* (fig. 7) reveal an incomplete image of her aero-costume. In the photos, Censi poses wearing a metallic leotard and flight-cap designed by Prampolini. Revealed in her interview, the rest of the outfit completed her transformation from woman to airplane by adding on metal tubes and an ephemeral scarf that trailed behind her. These additions were apparently too cumbersome to keep on for too long, and they obscured her movements, making both moving and dancing in them tricky.[175] Their unique aesthetic is an obvious mechanization of her body which transforms her image into that of a female cyborg—something in literary critique is most often connotated male, especially in Marinetti's literature. Donna J Haraway conceptualizes the cyborg in *Simians, Cyborgs, and Women*: a creature "simultaneously animal and machine, who populate[s] worlds ambiguously natural and crafted."[176] This concept applies to Censi's visual costuming quite well, morphing her body into a mechanism while maintaining her organic face. Beyond costuming, Censi's movements represent mechanical motion, but they convey emotion too, meaning this cyborg can feel—something which Haraway's conception of the cyborg does not do.[177] By representing the emotion and sensation of flight, Censi creates an incomplete cyborg that maintains some piece of her humanity.

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[175] Berghaus, "Giannina Censi,'" 34.
[176] Donna J. Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" in *Simians, Cyborgs, and Women*, (New York, 1991): 149. The rest of this chapter, Haraway combines cyborg theory, class-consciousness, and feminism together to rewire a cyborg as a powerful, driven, individualistic, and partial entity-force that regenerates and is unattached to what it regenerated from; upon which she concludes "though both are bound in the spiral dance, I would rather be a cyborg than a goddess" (Haraway, 181). It is well worth reading.
[177] Haraway, "A Cyborg Manifesto," 181.

Figure 7 Censi boldly poses in the base of her costume. She poses one-dimensionally with a dynamic stance like a Roman frieze. Her face is stoic and self-confident.[178]

Testimant to the apathy of the cyborg, Ivo Pannaggi conceptualized a motorcycle driver as a mythical centaur in his 1931 painting Centauro;[179] what would later go on to inspire his 1963-68 polemic against western classicism, *The Rape of Europa* (fig. 8).[180] This painting illustrates the cyborg concept: a man and a motorcycle becoming a third mythical character through their fusion. In this case, the mythical beast represents Zeus in the form of a bull, who is

[178] Unknown. *Aerodanze 1*, 1931, Photograph, 150x105mm. Fotografie di soggetti vari e di spettacoli interpretati da G. Censi, Il Mart, Rovereto.
[179] "Centaur" is another conceptualization of a cyborg. (Pizzi, *Italian Futurism and the Machine,* 64).
[180] Pizzi, *Italian Futurism and the Machine, 125.*

dragging Europa westward. The countless extrapolations one can make from the painting and its multilayered representations aside, I want to focus on how Zeus is represented as a cyborg with a human head: the boundaries between human and machine are blurred in representing the spiritual, only the driver's head is left discreet representing the cyborg's rationality, creativity, and ability to do war. This is the futurist cyborg and it is what Censi in part embodies with her revealed, expressive face and mechanical body.

Figure 8 Panaggi, *Il Ratto d'Europa*. Zeus's horns are the motorcycle bar and the driver has grabbed them and stolen Europa, claiming Roman lineage and harnessing mechanization to achieve a new regime.[181]

Aerodances

In her interview with Berghaus, Censi describes transforming her classical training into "aerial movement" and her body "into an airborne plane."[182] That is, she evolves into a spiritual embodiment of flight-sensation (in all of its emotion, action, speed, and altitude) from a tradition of "dances based only on steps," steps which corresponded to the accompanying music, steps

[181] Ivo Pannaggi, "Il ratto d'Europa," 1963–68. In *Italian Futurism and the Machine* by Katia Pizzi (Manchester University Press, 2019). Oil on canvas and mixed media. Figure 0.1.
[182] Berghaus, "Giannina Censi," 34.

which indicated action or sentiment through over-familiar gesture, steps which merely expressed "attitude."[183] Censi manifested the sensation and shape of flight through these actions, simultaneously presenting her body as an airplane and herself as a pilot thrust about by the undulating force of aerobatics. The duality of dynamic machine and spiritual woman made her dances complex and dynamic. Near the end of her interview with Berghaus, she danced for him briefly, recalling the now-50-year-old dance practice:

> (Here Censi got up and performed some wild, angular gestures that ended in poses similar to the ones in the photo-graphs.) You see, this is the end of a movement, when the plane has landed. And this (pointing to another photograph) is when it soars up into the sky. The plane then has to fight against the storm, it is thrown up and down, like this (another wild gesticulation follows). But you cannot photograph this.[184]

What this interview reveals is that aerodance is a practice based in some way around synthesizing images through geometric pantomime and energetic dynamism. These concepts hearken to Saint-Point's dance theory, developed around the time Censi was born.

Two of the movements Censi performed for Berghaus were tied to a couple dance-photographs. I chose two from the MART digitization efforts that appeared most similar to the ones she described in the interview; my choice was supplemented by captions on the photos provided by Mart that vaguely described what was happening in them: "corkscrew" (fig. 9) and "landing" (fig. 10). In these photographs, Censi is clearly static, posed. In "landing," her feet are not traversing the ground, nor is she balanced on one foot to imitate movement; this is a stable position, the finishing pose. In "corkscrew," her pose is meant to symbolize movement, and she wears it across her body. Her body now characterizes the movement of a stunt-plane across time as it twists through the air.

[183] Satin, "Valentine de Saint-Point," 3.
[184] Berghaus, "Giannina Censi," 34.

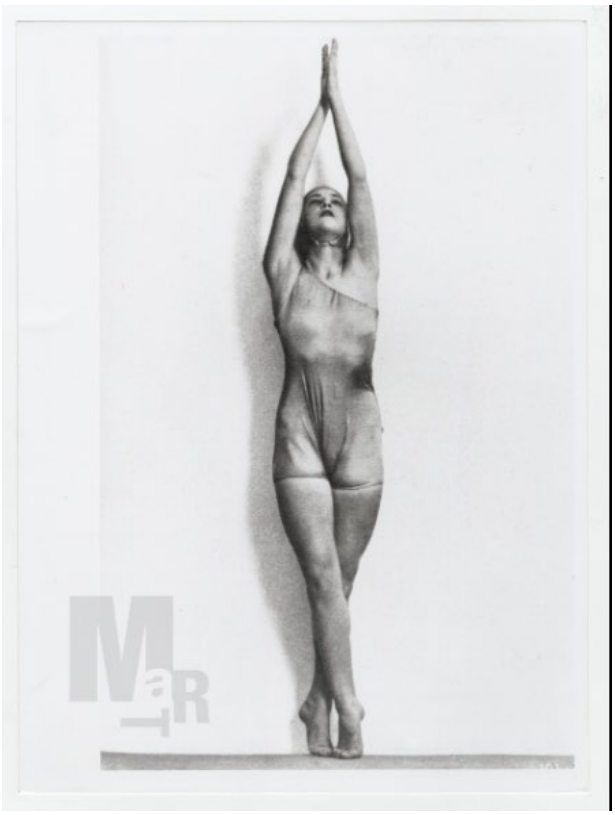

Figure 9 The airplane corkscrews through the air. Censi's body has transcended physicality, no longer representing the material airplane, but the dynamism of the aerobatic stunt. Her expression is intense and strained.[185]

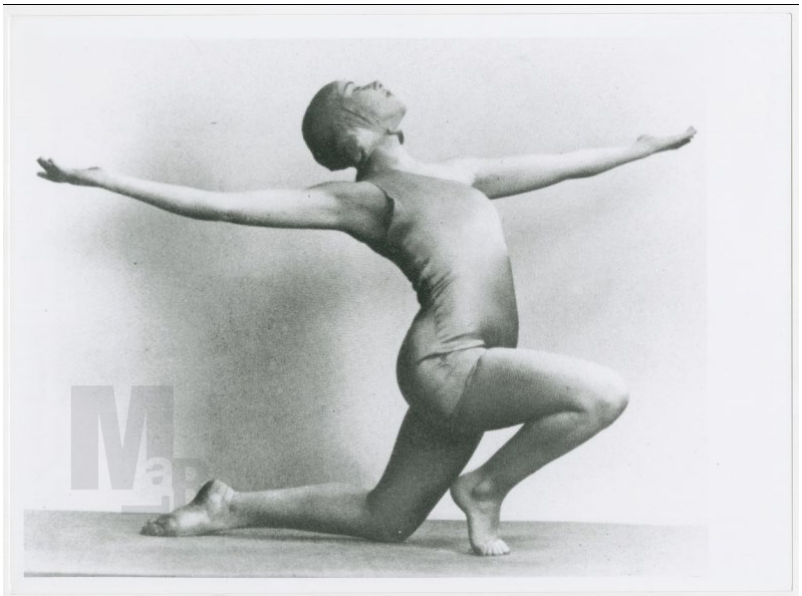

Figure 10 The starting and ending position of any airplaine: on the ground. Censi's arms are outstretched to imitate wings, her knee the nose of the plane, and her face looking to the sky in anticipation. Her expression is serene.[186]

[185] Unknown, *Aerodanze 9: trivello verso l'azzurro*, 1931, Photograph, 240x180mm. Fotografie di soggetti vari e di spettacoli interpretati da G. Censi, Il Mart, Rovereto.
[186] Unknown, *Aerodanza 11*, *Decollo di un aeroplano*, 1931, Photograph, 180x240mm. Fotografie di soggetti vari e di spettacoli interpretati da G. Censi, Il Mart, Rovereto.

Censi performs a third movement that she is careful to note renders photography meaningless—this is where the notion of dynamism particularly arises. When reassessing his interview with Censi, Berghaus characterizes her dance movements as "impulsive, energetic, jerky and uneven […] an impression of aggressive dynamism."[187] His comments manifest Marinetti's specifications as documented in his Manifesto of Futurist Dance: "anti-harmonic ill-mannered anti-gracious asymmetrical synthetic dynamic free-wordist."[188]

Censi's interview reveals a bipolar dance that both geometrically represents through stasis and plastically represents through dynamism. What merges these two polarities is a unique feature to aerodance among other futurist dances: making expressions with her face, "conveying what a pilot feels like while flying acrobatically."[189] Saint-Point famously covered hers for her Métachorie to further distance her dance from human instinct, but Censi did not "veil her eyes" nor deprive herself of the "vivifying element of imitation."[190] Including facial expressions in her dance meant that Censi was able to more wholistically synthesize the theme of flight and its elements of trajectory, shape, sensation, and 3-D space.

Choreographing Poetry-Music

With the movements and concepts understood, it is time to interpret aerodance's relationship with music—but where is the music? Censi's first performance in 1931 was to Marinetti's poetry or Prampolini's paintings. There were pieces of aeromusic written at the time, ready to be represented like Cassavolla's *Danza de l'Elica*, but Censi seldom danced to aeromusic, favoring

[187] Berghaus, "Giannina Censi," 34.
[188] F. T. Marinetti, "Manifesto of Futurist Dance" in *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 237.
[189] Katia Pizzi, "From Aerodancing Technobodies to Dysfunctional Machines," 235.
[190] F. T. Marinetti, "Manifesto of Futurist Dance," 236.

Marinetti's poetry. Marinetti, never the most eager to accept or promote musical futurisms, outright denies it in the manifesto of futurist dance: "Music is fundamentally and incurably passéist, and hence hard to deploy in Futurist dance."[191] He instead recruits Russolo's noises (referring to them as noise-art, not music) as the background against one must dance to. Prampolini fulfilled this specification, choreographing an aerodance for a Wy Magito show accompanied by Russolo on rumorharmonium.[192] Censi, however, never did dance to Russolo's music.

A discussion of dance is important when understanding the treatment of music within a culture, but it becomes convoluted when dance and music are by their nature opposed to one another by the jurisdiction of that culture. In synchronizing *paroliberi* and gesture, Censi and Marinetti both acknowledge the noise-musicality of Marinetti's spirited onomatopoetic performances. Censi received Marinetti's declamations as music. Prophesized by Valentine De Saint-Point's cerebral choice to include poetry readings at her dances, Censi most often danced to readings of Marinetti's poetry, but Saint-Point included music alongside the poetry. Choreo-poetic representation was therefore part of aerodance's DNA from its inception. Censi recalled her first aerodance, done to Marinetti's recitation of *Bombardata su Adrianopoli* which she described as "often devoid of any sense but sounding wonderful." Censi's reception of Marinetti's poetry-readings as musical allows her to represent the imbued musical spirituality within it, cementing its status in an actively participating audience. Listening to a recording of one of his recitations reveals jerky rhythms, long, drawn out sirens, and aggressive theatrics—their senselessness accentuated to me by my deficiency in understanding spoken Italian. The effect produced is something between rhythmic sound effect, impassioned political soliloquy,

[191] F. T. Marinetti, "Manifesto of Futurist Dance," 236.
[192] Pizzi, *Italian Futurism and the Machine*, 81.

and a sporadic *sprechstimme*. Though static on the page, *Bombardamento su Adrianopoli* is still full of life:

> Furia affanno orecchie occhi narici aperti! attenti! forza! che gioia vedere udire fiutare tutto tutto taratatatatatata delle mitragliatrici strillare a perdifiato sotto morsi schiaffi trak trak frustate pic-pacpum-tumb pic-pac-pum-tum bizzarrie salti (200 metri) della fucileria…[193]

Which, translated in *Futurism: an Anthology*, appears as:

> Fury torment ears eyes nostrils open! straining! force! What pleasure to see to hear to smell everything everything taratatatata of the machine guns to squeal breathless under bites slaps traack-traack lashes pic-pac-pum-boom oddities leaps height (200 meters) of the rifle-fire … [194]

Though the English translation likely loses some of the rhythm, the madly scattered words are still brimming with energetic clamor. Sown throughout the *Bombardamento su Adrianopoli* are references to music: "madmen beat the orchestra musicians these badly beaten up to play to play Grand clangings not to cancel to be precise reshaping them noises." There are also descriptions of speed that the translators chose to keep in Italian, "lento double time" and "presto," for example, which suggest tempo markings.

Though Marinetti's were her favorite, Censi describes dancing to *parole in libertà* by other poets. When done well, the result, like those of *Escodame* and *Gioia*, would produce a similar effect: "a wonderful rhythm [that] contained very evocative onomatopoeic sounds, which fully replaced the music traditional dances were always based on."[195] Censi represented the fiery wartime spirit of Marinetti's poetry through her dances as well as she did the freedom of flight.

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[193] F. T. Marinetti to Luigi Russolo, 1912, Quoted in "L'arte Dei Rumori," *Sintesei Del Futurismo: Storia e Documenti*, Edited by Luigi Scrivo, (Rome: Mario Bulzoni, 1968): 70.
[194] F. T. Marinetti to Luigi Russolo, 1912, Quoted in "The Art of Noises," *Futurism: an Anthology* ed. by Lawrence Rainey, Christine Poggi, and Laura Wittman (Yale University Press, 2009): 136.
[195] Berghaus, "Giannina Censi," 34.

Futurist music theory supports the musical reception of Marinetti's poetry as well, and dictates vocal music to sound like his readings. For example, Pratella requests the representation of machinery in his music, but, as discussed, he does not resort to noise-making. However, he lists the three forms he deems as most futurist to be the symphonic poem, the work for voice and orchestra, and the opera. For the latter two forms, Pratella provides specifics for vocal performances, requesting that his vocalists:

> sing as we do when, unconscious of time or place and seized by a deep impulse to swell and dominate, we instinctively burst out in essential and riveting human language. Song that is natural and spontaneous, song without measured rhythms or intervals, those artificial limits to expression that almost make us regret the power of words.[196]

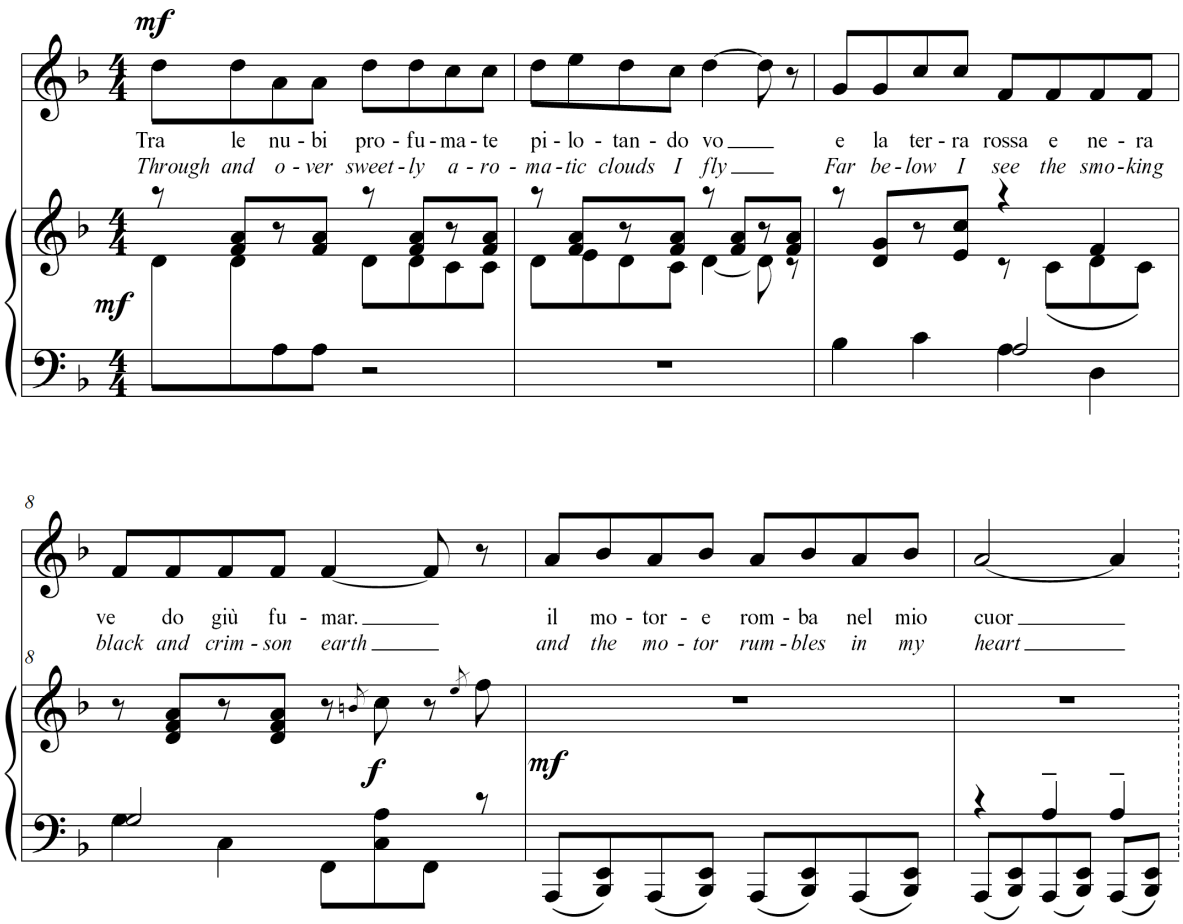
In the vocal practices of Pratella's folk-futurism, group vocals can be dramatically spontaneous, almost random—characteristics which are heavily featured in *L'aviatore Dro*. Marinetti's *parole libertà* feature this effect too, to the point of almost completely losing its meaning among the onomatopoeia and free-word assembly.

In the *Art of Noises,* Russolo states: "Let us therefore invite young musicians of genius and audacity to listen attentively to all noises," of course referencing his own and those of the city.[197] Russolo's noise-intoners, though, represented the same sonic masses as Marinetti's noise-synthesis, both creating noise-art worthy of being listened to. Marinetti almost explicitly suggests it in his dance manifesto, "Noise […] has become by means of onomatopoeia, one of the most dynamic elements of Futurist poetry. Noise is the language of the new human-mechanical life. Futurist dance, therefore, will be accompanied by organized noises…"[198] The "organized noises refer to Russolo's, but it would be short-sighted to not recognize that Marinetti's onomatopoetic

[196] Pratella, "Futurist Music: Technical Manifesto," 82.
[197] Russolo, "The Art of Noises," 135.
[198] Marinetti, "Manifesto of Futurist Dance," 236.

syntheses are also noises organized. When performed, they too are capable of infusing a cyborg with the language to dance.

Marinetti's *parole libertà* fulfill both musician's aesthetic desires in the synthesis of noise (the dynamism of objects) through words and in Marinetti's own powerful oration style. While *parole in libertà* poetry was a perfectly sufficient suitor for Censi's dancing, there were later efforts that included music. During the intermission of Marinetti's 1931 opera *Simultanina: Divertimento futurista in 16 sintesi*,[199] Censi performed to music by the radio-composer Carmine Guarino (1893-1965). Only one *canzone* for the opera survived the Second World War, meaning the music Censi danced to is not preserved, but the *canzone* (ex. 8) reveals particularities that align it with the machine-geometricisism of futurist music:[200] rhythmic machine oscillation, exploration of lower registers, and brief, directional gestures (characterizing "fumar" in m. 8). Though this song is only representative of one recitative-style synthesis and not the dance portion, the rhythm of what Censi would have danced to is preserved: a mechanical oscillation and a simple vocal melody.

[199] An opera that faced a severe enough anti-fascist protest that performances were guarded by police. Censi in her interview with Berghaus mentions that during their month-long tour, audiences were harshly critical, rioting, jeering, and throwing vegetables. She attributes their poor reception to the avant-garde nature of their performances only.
[200] Though not, in fact, aligned tonally. The entire song is disappointingly diatonic, only changing keys to A major, the dominant key, halfway through.

Example 8 mm. 5-10 from Simultanina: Canzone di "Simultanina" by Maestro Guarino.

Music like this may appear on the page as easily danceable, if simply moving to the pulse is the focus. There is a consistent meter with a clear beat pattern throughout this excerpt. This reaction neglects, however, the dissociated practice of modern dancing that seeks not to represent beats nor mechanical rhythms, but the imbued spirit of themes and "poetic ideas."[201] Guarino's machine in *Simultanina* is a soulless thing, oscillating along dutifully without cerebral ceremony or geometric color, aligning more with Haraway's conception of the complete cyborg that "would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning

[201] Leslie Satin, "Valentine de Saint-Point," *Dance Research Journal* 22, no. 1 (1990): 2.

to dust."[202] Censi's cyborg keeps its soul, face, and femininity and thus it can hardly find this music danceable.

Aeromusic has a soul in it, encapsulating flight-spirituality in short synthetic blocks that are meant to convey direction, momentum, emotion, and sensation—topics Censi's dances express. The fatal flaw lies in a far simpler matter: aeromusic pieces were primarily written in the second half of the 1930s, especially around 1938, and Censi's airplane was permanently grounded in need of maintenance in 1934. They simply never saw each other in the sky.

Images of the dancer Gionina Censi

Just as Sant-Point's dances were important demonstrations of futurist plastic dynamism, Censi's dances were influential within Marinetti's aerofuturist exploits. Her influence expands beyond that too, spilling into the broader Italian culture. In the 30's, women faced tightening restrictions on their bodies and actions. To dance scholar Patrizia Veroli, "It is significant that […] Censi's Futurist poses were portrayed as an example [for fascist women] to follow, whilst at the time she found no disciples at all in the domain of dance."[203] The example extends beyond just her physical nature—that is, strong but still elegant, flexible for motherhood, subversive in surprising ways but safe and unproblematic for the fascist regime. Giuseppe Poggi-Longostrevi considered her to be the ultimate result of his "canon of female movements,"[204] a blending of eugenics and gymnastics that he believed would mold female bodies into ideal fascist mothers. Poses of her in her costume imitating Greek friezes and statues indicate that the *superdonna* should be Italian, born from the myth of Roman inheritance. This is another reason for the extraordinarily static poses of figs. 9 and 10, which look more like Adolf De Meyer's

[202] Haraway, "A Cyborg Manifesto," 149.
[203] Patrizia Veroli, "Dance" in *Handbook of International Futurism ed.* Günter Berghaus (Berlin: De Gruyter, 2019): 138.
[204] Veroli, "Dance," 138.

photography for *Afternoon of a Faun* and less like the dynamic chronophotography of Depero that had come to be a key feature of Futurism. These were not aesthetic representations of futurist dance, but realist reproductions of a fine anatomy.

Figure 11 Censi in her Aviator leotard imitating the pose of a Discobolus.[205]

Anja Klock in "Of Cyborg Politics and Fascistized Mermaids" points out that the gender of Censi's airplane both disrupted the "binaries of woman/nature/reproduction and man/technology/production" and fulfilled Mussolini's fascist ideal of woman as "piloting a lot of children;" or that women were themselves something to be piloted.[206] The way Censi recalled her performance at the 1931 *serate* supports this: "when watching Censi's aerodances, 'pilots were happy' she contended, 'because they felt they were inside me.'"[207]

[205] Mauro Camuzzi, *Danza euritmica*, 1930, Photograph, 230 x 170 mm. Fotografie di soggetti vari e di spettacoli interpretati da G. Censi, Il Mart, Rovereto.
[206] Klöck, "Of Cyborg Technologies and Fascistized Mermaids," 414.
[207] Pizzi, "From Aerodancing Technobodies to Dysfunctional Machines," 241

Censi, by representing a physically-modified airplane-pilot cyborg—one superior to typical citizens not only in her appearance but in her capabilities and composition—adopted the image of a *superdonna*. But unlike the Zeus-man-machine trinity, her form was female. A teleological outcome of the exploitation of her figure and dances reveals a harnessing and suppression of the female body. Per Donna J Haraway, "the cyborg is a matter of fiction and lived experience that changes what counts as women's experience in the late twentieth century."[208] Censi represented a strengthened woman, but fascism still maintained its control over her by distributing her photos as anti-feminist propaganda; placing her freedom on the back of a motorcycle and whisking it away.

Conclusion

Gionnina Censi's dances developed at the beginning of aeroaesthetics and were thus influential in the mystical spirituality of futurist aesthetics in the 30's. Her performance in 1931 predated by a month the inauguration of the "Exhibition of Aerial Painting and Futurist Scenography," wherein the futurists "celebrated this first showing of futurist paintings that […] focused on the concept of aeropittura (aerial painting) as a major shift in their practices of representation and self-representation."[209] Hence, Censi's flight-dances and their expressions of freedom and mobility were initial pieces of the framework of aeroaesthetics as it operated under the censorship and restriction of fascism.

Censi's performances represented the sensation and dynamism of flight through facial expressions and a bipolar dance form that swung between stasis and plasticity. As her body changed from that of an airplane at rest to a multiplied body inhabiting duration and space,

[208] Haraway, "*Simians, Cyborgs, and Women,*" 149
[209] Klöck, "Of Cyborg Technologies and Fascistized Mermaids," 402.

Marinetti rattled off his war-poetry. Sometimes violent, often serene, Censi would multiply over these war-scapes, not moved by them but implicit in them—the way a bomber overhead is not moved by the sound of gunfire below.

Adopting the customs of other early-modern dancers, Censi's representation subverted her own body to characterize the themes of her backdrop, though never directly interacted with them. Her fused image never exhibited fascist instinct. Instead, it represented a woman strengthened by technology who used her powers of flight to remove herself from objectivity and duty. It was hi-jacked and used as fascist propaganda that inverted her feminine power; re-coding her circuitry from a free woman to a well-trained one.

Though they never occurred simultaneously, aerodance does represent the impulses and instincts of aeromusic. They are both syntheses of flight; they both seek out embodied freedom under a regime increasingly antagonistic to futurist expression; they both use the fascist symbol of an airplane to barter for legitimacy as a national art.

Conclusion

The Artistically Mediocre Contrail of Futurism

The thesis of *Music in the Sky Like Bombers* is distilled through four smaller arguments I make in discreet chapters. I observe in Chapter One that the political nature of Marinetti's art followed the dramatically shifting political landscape of his time, spanning the chasms between anarchism, socialism, and fascism, ultimately leading him to a couple official positions in the Italian fascist government in the late '20s. While in these positions he simultaneously found himself in ideological agreement and artistic disagreement with Mussolini, and pressured *Il Duce* to distance himself from Nazi fabrications like degenerate art and accept futurist art as a national style. In the next two chapters I observe the representations of airplanes in pre-war and interwar futurist music to note a stark difference in their treatment. Doing so not only reveals a marked change in how the airplane was represented between the two time periods, but also what it represented. Prewar, the airplane satisfied futurist virtues of self-determination, individualism, heroism, violence and destiny. In the 30's, the airplane adopted a metaphysical air, doing away with heroism and destiny, and evoking evasion, ideological freshness and inconsistent perspectives in their stead. As demonstrated in Chapter Four, futurist violence and bad taste became more subdued, but the individualistic spirit remained palpable, physically represented on stage as a single aviator-pianist—or aviator-dancer.

Taken as a whole, then, this work is a simultaneous profile from several perspectives of a self-critical fascist art style. I have crafted this profile in hopes of encouraging more engagement with this aesthetic period of futurist art. There are a lot of loose ends in aeromusic history that I would like to see tied up—or at least more concisely collected—and so in that respect my work takes on a curative aspect of its own, in the sense of preservation. As a composer, I quickly fell

in love with Chesimò's short pieces, for instance, and hope one day to hear Buldorini's. Anticipating this, I have done my best to connect as many names and places as possible so that this work may serve as a runway for research to take off from in the future.

In a broader scope, studying aeromusic offers a unique insight into the avant-garde musics produced under Mussolini's rule. There were other futurist aesthetics in music as well: as with Aldo Giuntini, there were still machine-era composers, for instance, but aeromusic was an avant-garde curated to vie for Mussolini's attention and respect. It is thus a useful example of artistic tension under the Italian fascist regime.

In his futurist historiography in the *Handbook of International Futurism*, Günter Berghaus postulates that the thirties and forties constituted the "artistically mediocre tail-end" of Italian futurism.[210] He projects this opinion onto the general post-war Italian public to create a juxtaposition between their "living memory" of futurism during the 1930s and 1940s and the movement's exuberant "heroic phase" during the 1910s and 1920s.[211] While a significant difference can be drawn between these two paradigms considering the difference in ideology and methodology of provocation, this opinion feels like political statement interested in using aerofuturist art to support an "artistic decline in Mussolini's Italy" as a condemnation of fascist rule.[212] While futurism's provocation and brutality was certainly weakened by fascism's oppression, Francesca Billiani presents a less-mediocre picture. She claims that by 1940, futurism was "the only avant-garde movement still existing on its own terms" in Italy, citing that in 1938 and again in 1940, "the value of artworks sold raised over one million lire, almost

[210] Günter Berghaus, "The Historiography of Italian Futurism" in *Handbook of International Futurism,* Edited by Günter Berghaus, (Berlin: Walter de Gruyter 2019): 3.
[211] Günter Berghaus, "The Historiography of Italian Futurism," 8.
[212] Günter Berghaus, "The Historiography of Italian Futurism," 3.

reaching the levels of the pre-statalization levels of the 1920s."[213] With most of the value in the 1940s being supplied by industrialists who specifically sought out Italian futurist art, futurism was still a meaningful movement to the Italian public, even during an artistic decline.[214] The compromises that Marinetti made to keep his movement relevant paid off in this respect.

Aeromusic, in all its brevity, is the sound of a complex and poised compromise for legitimacy and freedom made by an avant-garde that had outgrown itself; flown too high, and crashed down onto the beach below to be plunged into primordial chaos. When Marinetti died in 1944, the futurist movement in Italy slowly fell apart, having relied on the impresario's charismatic leadership for cohesion. Though futurist techniques like noise-making and synthesis continued to inspire composers globally, it was then that the mythology of futurism was fulfilled, in the penultimate stage of myth-making: death and apotheosis.

[213] Francesca Billiani, *Fascist Modernism in Italy: Arts and Regimes*, (London: Bloomsbury Publishing, 2021): 208.
[214] Billiani, *Fascist Modernism in Italy: Arts and Regimes*, 209.

Appendix: Transcriptions and Visualizations of Aeromusical Examples

1. Chesimò, *Ala Spaziale* (1937) 91

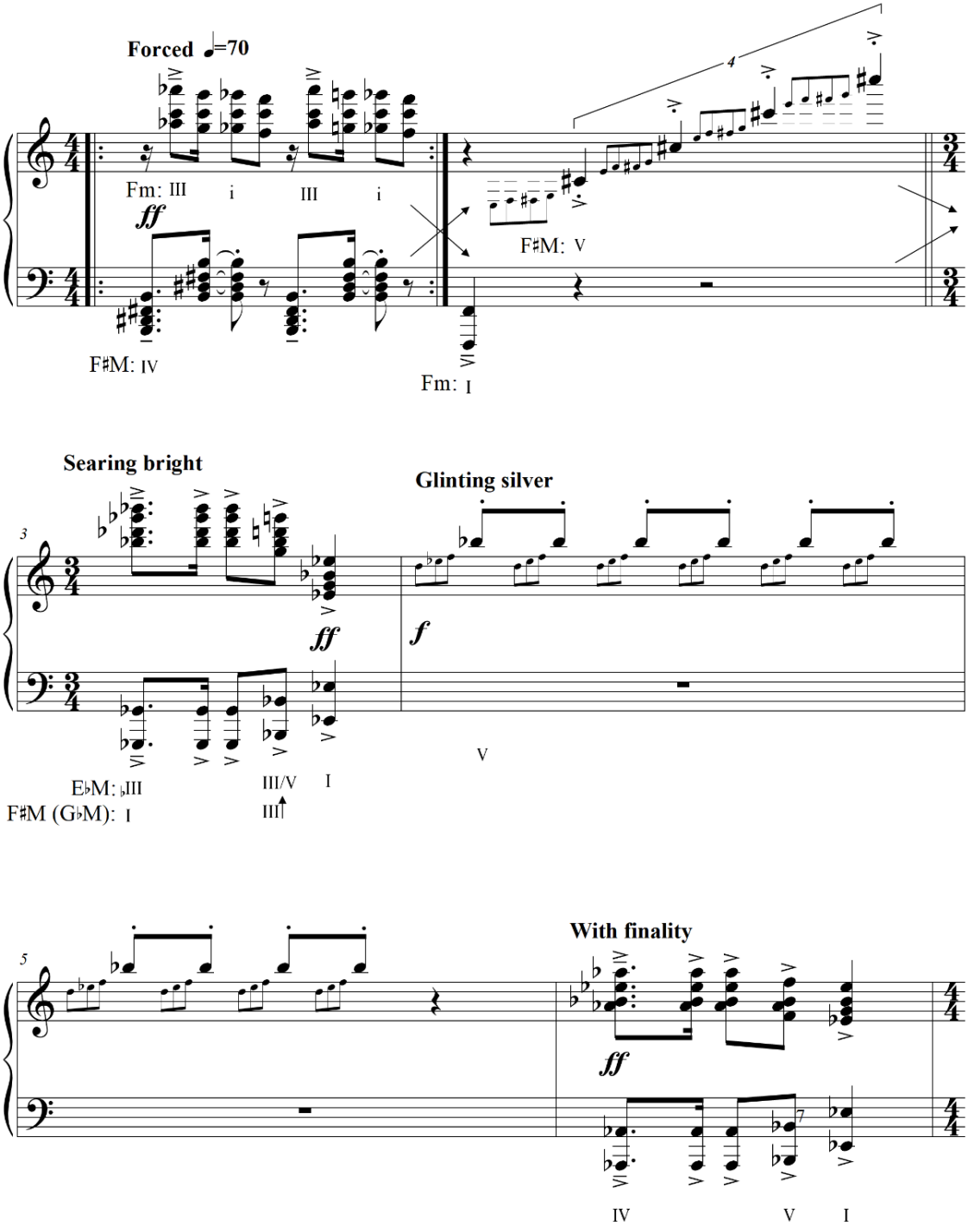
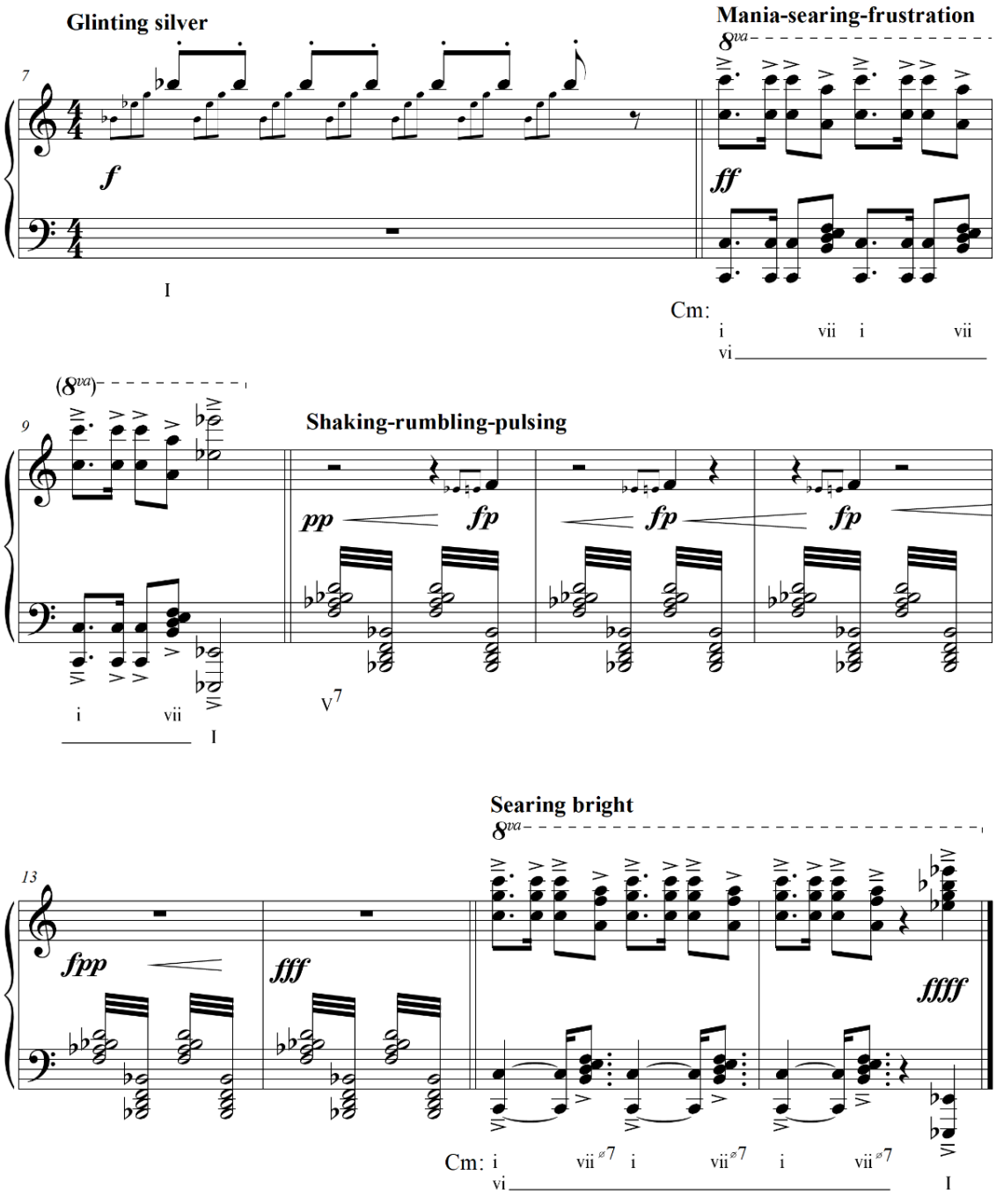
2. Chesimò, *Eliche por Due Pianoforti* (1937) 93

3. Cooke, Graphic Representation of Eliche's *Geometries* 97

4. Cooke, Interpreting *Contraerei with Parole in Libertà* 98

Ala Spaziale

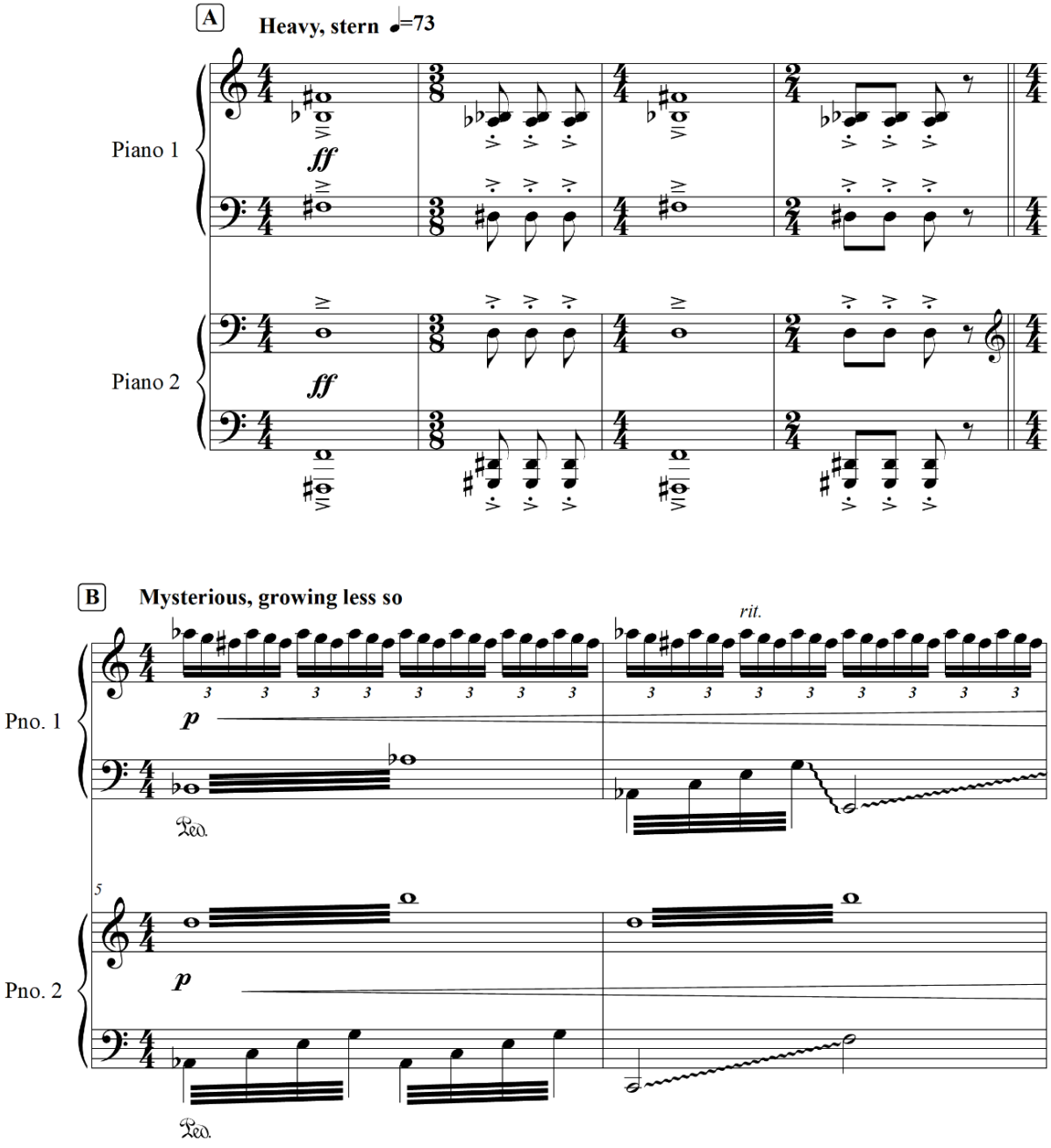
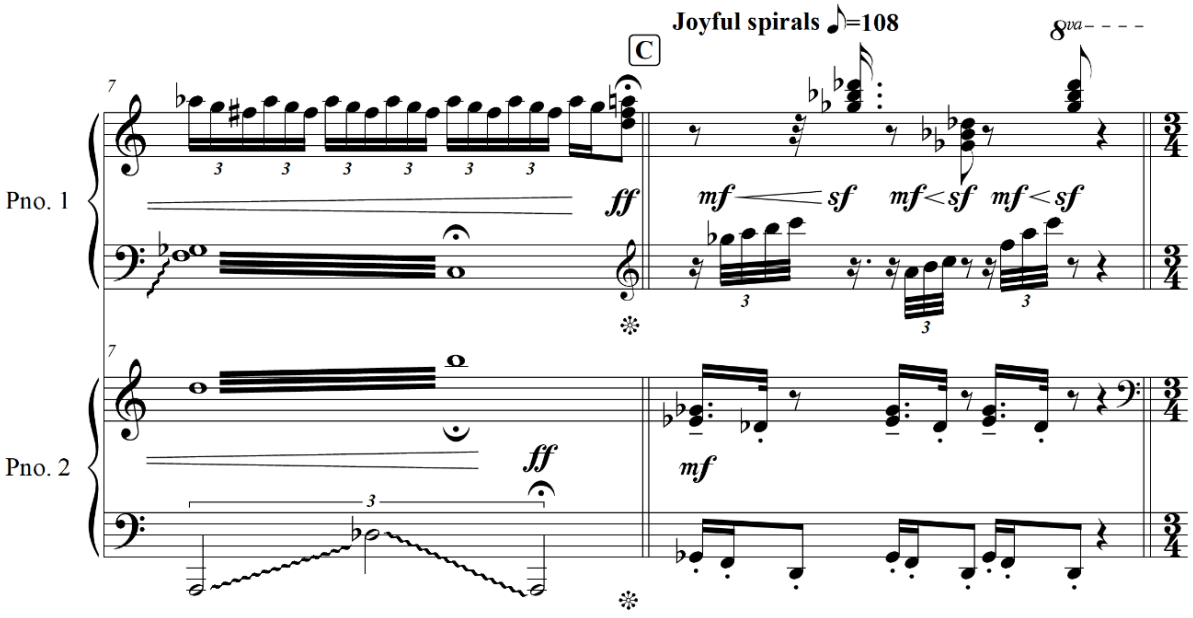
Chesimò

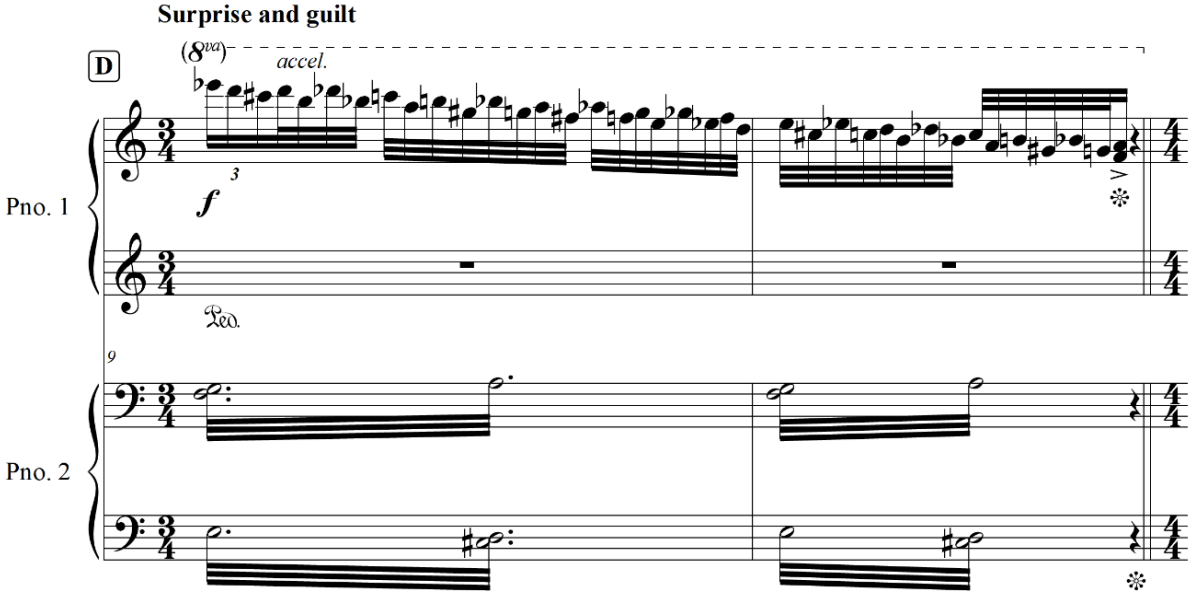
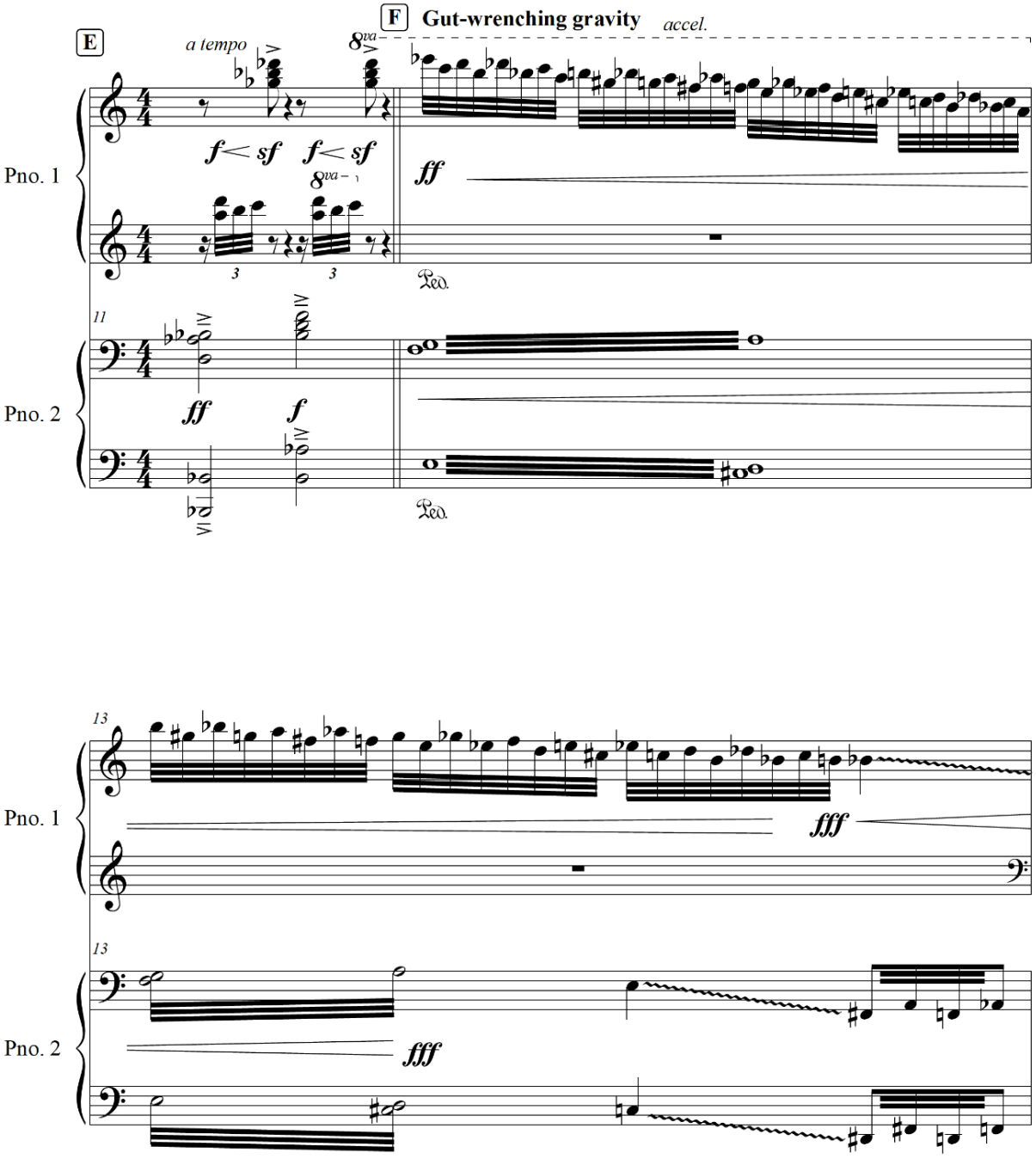
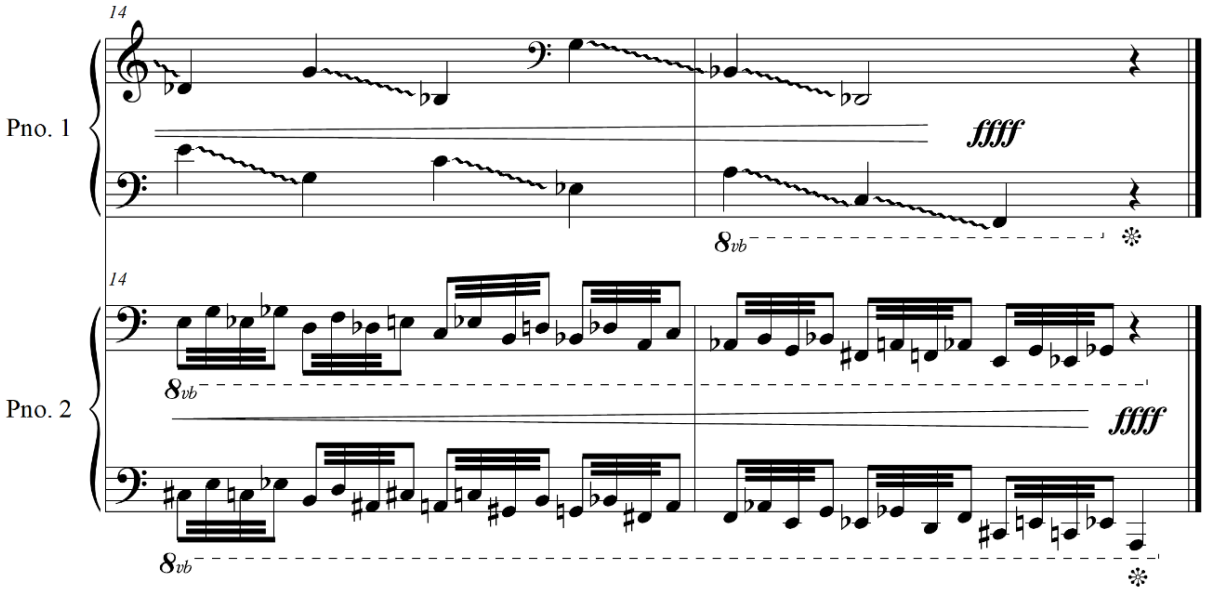
Trans. W. E. Cooke as perf. by Daniele Lombardi

Glinting silver
Mania-searing-frustration
7
f
ff
I
Cm:
i vii i vii
vi
(8va)
9
Shaking-rumbling-pulsing
pp
fp
fp
fp
i vii
I
V7
Searing bright
13
fpp
fff
ffff
Cm: i vii ø7 i vii ø7 i vii ø7
vi
I

Eliche

por due pianoforti

Chesimò

Trans. W. E. Cooke as perf. by Daniele Lombardi


Joyful spirals ♪=108
C
8va
Pno. 1
Pno. 2
ff
mf
sf
mf < sf
mf < sf
mf < sf
ff
mf


Surprise and guilt
D
(8va)
accel.
Pno. 1
Pno. 2
f
Ped.

E
a tempo
F
Gut-wrenching gravity
accel.
Pno. 1
Pno. 2
f sf f sf
ff
ff
f
fff
fff
Ped.
Ped.
8va
8va
11
13
13

14
Pno. 1
ffff
8vb
14
Pno. 2
8vb
ffff
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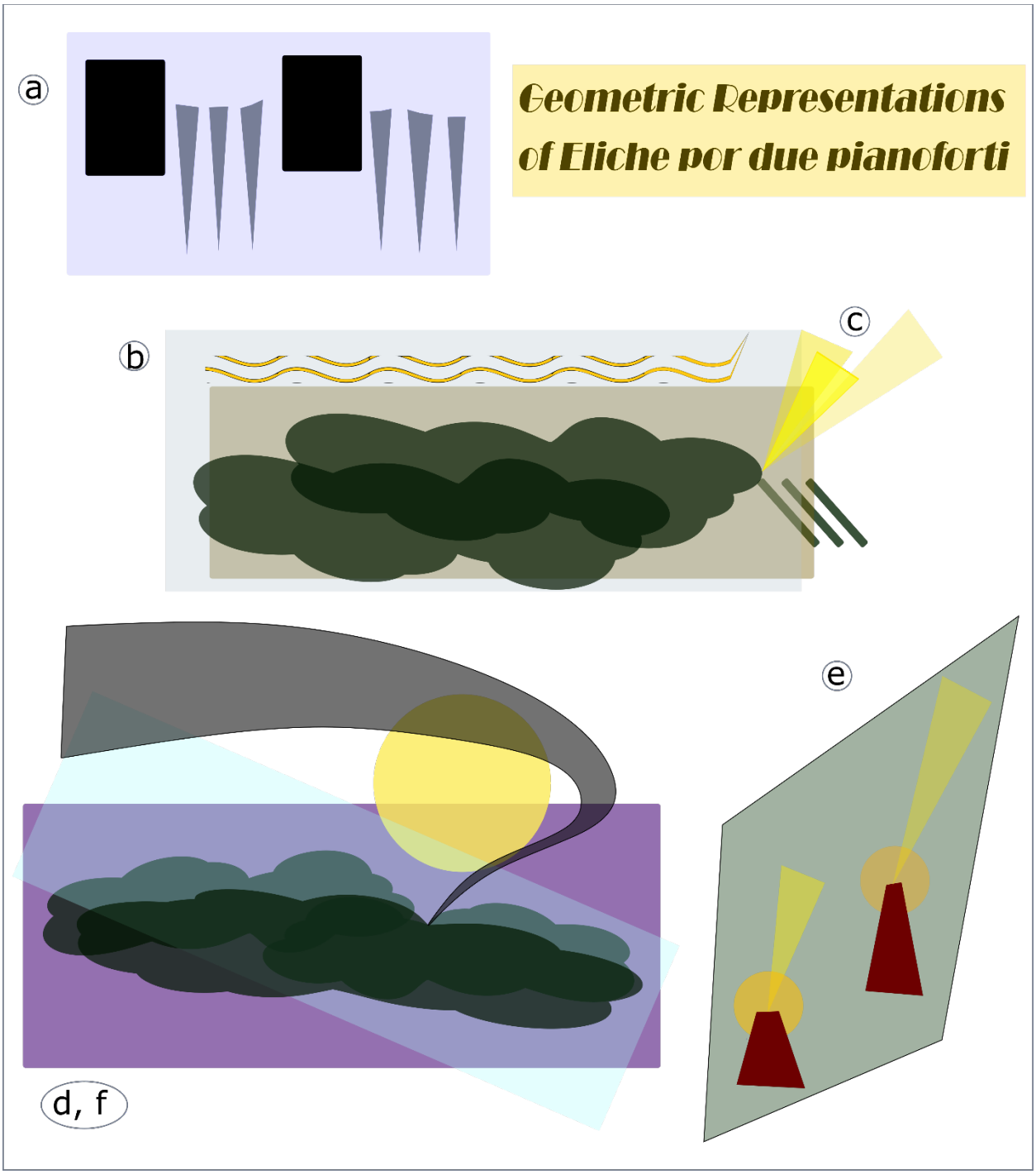
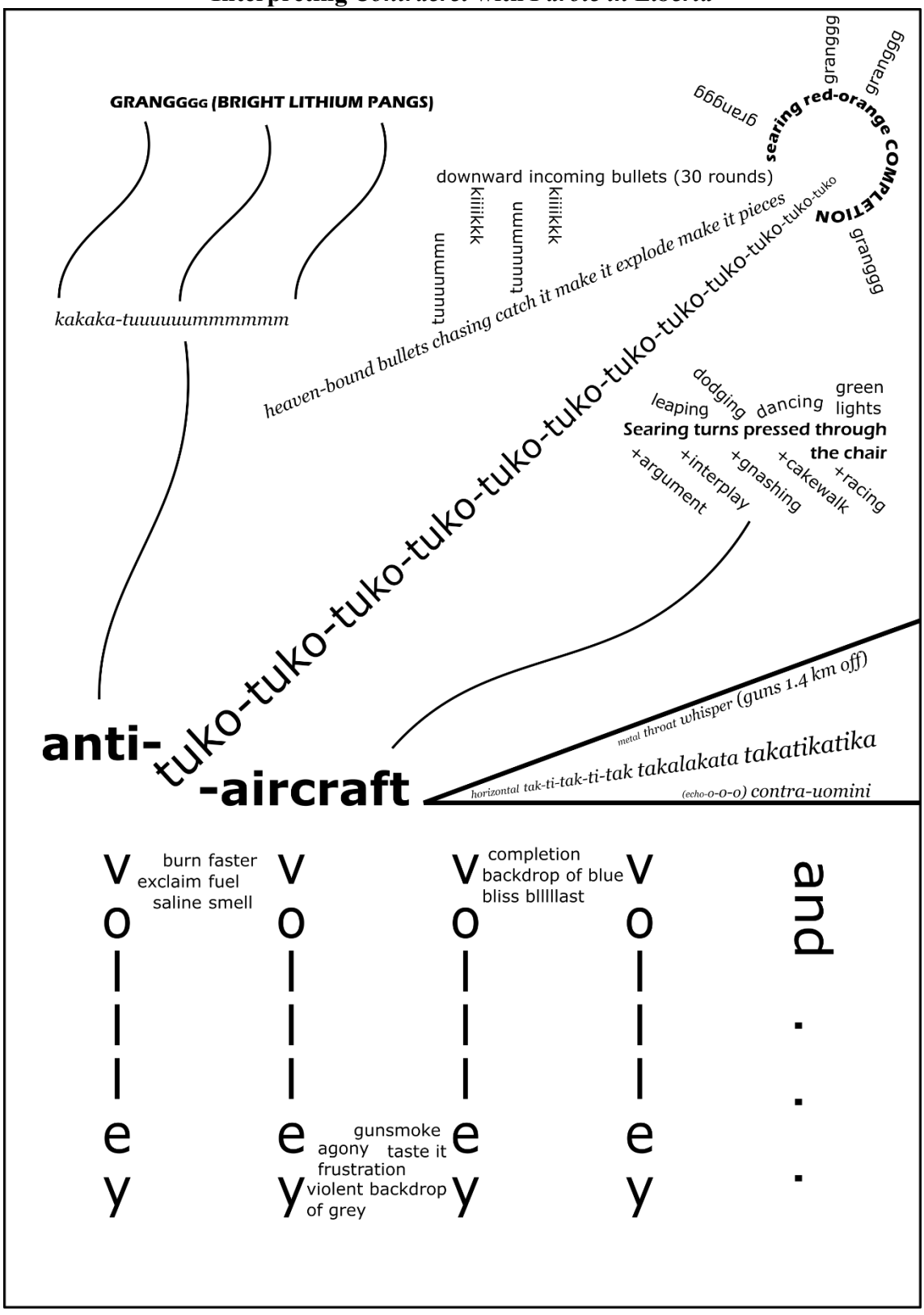

a
Geometric Representations
of Eliche por due pianoforti
b
c
d, f
e

Interpreting *Contraerei* with *Parole in Libertà*



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