“Faces, Men, and Pain: Gaspare Tagliacozzi and Early Modern Surgery”

In 1597, the Bolognese physician and anatomist Gaspare Tagliacozzi published a two-volume book on reconstructive surgery of the mutilated parts of the face, and especially noses. The technique the book described at length consisted in grafting skin taken from the upper region of the arm onto the patient’s defective nose. It was a long and painful procedure which had been invented in the fifteenth century, and continued to be hotly debated by surgeons, writers, and philosophers throughout the seventeenth century.

My dissertation explores the social and cultural history of early modern surgery by focusing on the history of this specific technique. I show how Italian and European surgeons moved between the two poles of a continuum constituted by health and beauty, and how the patients’ gender shaped the surgeons view on the human face and of the public appearance of the body. In this way, my dissertation maps the birth and the shifts in the culture of surgery and the culture of the face in the early modern period. I have approached the history of early modern reconstructive facial surgery from a variety of perspectives, making use of both archival sources and printed. My dissertation combines the methods of cultural history, microhistory, historical epistemology, and gender history to describe in the broadest possible terms the relevance of a practice and of several kinds of practitioners considered to be at the periphery of the central changes happening in the age of the “Scientific Revolution.”

Studying Tagliacozzi’s surgery in context means to correct widespread views on the birth of plastic surgery. By placing this technique in broad chronological and geographical perspective – from fifteenth century southern Italy to seventeenth century northern Europe – this project shows that the history of what we call “plastic surgery” has its roots in rituals of
male honor and in deep conceptual shifts concerning the natural and the artificial. This
history extends its ramifications well into the nineteenth and even the twentieth century,
when plastic surgery lost its association with military practices and became an elective
aesthetic practice.
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LIST OF ABBREVIATIONS

ASB  Archivio di Stato di Bologna
BUB  Biblioteca Universitaria di Bologna
BCAB Biblioteca Comunale dell’Archiginnasio di Bologna
ASP  Archivio di Stato di Piacenza
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Le bon historien, lui, ressemble à l’ogre de la légende. Là où il flaire la chair humaine, il sait que là est son gibier

– Marc Bloch
INTRODUCTION

A man with his book (fig. 1). Gaspare Tagliacozzi (1545-1597) is elegantly dressed with a long robe and sports all the symbols of the College of Medicine of Bologna. He holds a book in his hand, while another one stands on a pile of closed volumes. The two open books show the key phases of an operation he is known for, the reconstruction of mutilated parts of the nose. The book has been written by the sitter, who is so proud of it that he chose to have it in the portrait.

This portrait has not been dated with precision, and its author has not been identified with certainty. The Federico Zeri foundation attributes it to Bartolomeo Passerotti (1529-1592) and/or his school, while other scholars attribute it to Tiburzio Passerotti (1575-1612), the eldest son of Bartolomeo. Bartolomeo and Tagliacozzi knew each other well. They were part of a circle of physicians, anatomists, artists, and naturalists that gathered at the museum of Ulisse Aldrovandi (1522-1605), one of the most famous naturalists and collectors of naturalia of his times. Bartolomeo must have observed dissections practiced by Tagliacozzi several times.


Now, by the second half of the sixteenth century portraits of scholars were not uncommon, and their subjects were most often represented with books or instruments. However, this portrait of Tagliacozzi strikes the viewer because the physician is the author of the book shown in the painting. This was highly uncommon. For example, Bartolomeo Paserotti’s portrait of the famous mathematician Ignazio Danti (1536-1586) shows the sitter as appropriately reading Ptolemy’s *Almagest* (fig. II). Lavinia Fontana (1552-1614) portrayed in Bologna the eminent physician Girolamo Mercuriale (1530-1606), professor of theoretical medicine there from 1587 to 1592 and Tagliacozzi’s colleague, reading *De humani corporis fabrica* by Andreas Vesalius (1514-1564); Mercuriale also hads a pile of books by classical authorities such as Hippocrates, Galen, and Avicenna (fig. III), as he wanted to be remembered as someone equally fluent in the new and the classic discourses of medicine. But Tagliacozzi wanted to be identified so closely with his book on facial reconstructive surgery that he pushed the author of his portrait to break these stylistic rules.

The book on reconstructive surgery came out in 1597. One of the best candidates as the author of the painting, Bartolomeo, died in 1592. This circumstance could of course mean that Tiburzio, who died in 1614, is in fact the author of the painting. But one detail can make us doubt about it. In fact, besides the fact that the two illustrations reproduce quite faithfully those we can find in print (fig. IV), Tagliacozzi’s books are here clearly in a manuscript form. We know that a letter sent by Tagliacozzi to Mercuriale, in which the former described

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4 Jerome P. Webster has noticed that the copies of the book represented in the painting are thicker than the actual ones, and hypothesized that they were luxury “presentation copies”, of which three exemplars survive. He does not take into account their manuscript form; see Jerome P. Webster, “Some Portrayals of Gaspare Tagliacozzi,” *Plastic & Reconstructive Surgery* 41, 5 (1968): 411–426, p. 411.
in detail the surgical procedure, was printed in the latter’s *De decoratione* in 1587. So by that date at least, Tagliacozzi was known already as an expert on reconstructive surgery. We could speculate that a manuscript of the book – or of some parts of it – circulated well before 1597, even before 1592, accompanied by illustrations. The hypothesis that Bartolomeo is the author is not absurd. If this is the case, the image of a learned physician, anatomist and surgeon wanting to be immortalized as the author of a book on facial surgery which was not even in print yet appears all the more clear. Also, with this portrait, Tagliacozzi stressed the fact that he was the first one to write the procedure down.

What is missing from the portrait are the surgeon’s patients; conversely, the illustrations in the book only represent patients, and never the surgeon at work. This dissertation is about why Tagliacozzi desired so much to be remembered as a “plastic surgeon,” and how medical knowledge mediated this desire with the patients’ wish to have their faces restored to their original beauty and dignity.

In order to answer these questions, this dissertation takes up the traces and clues in Tagliacozzi’s book and tries to look at what the author left out of it by turning to archival sources, medical books, and cultural history. Tagliacozzi’s book is a unique example of a hybrid between the humanistic medical treatise and the technical surgical manual. Tagliacozzi there focuses exclusively on the surgical procedure of reconstructing mutilated parts of the face – lips, ears, and especially noses. The author describes a procedure of grafting. It consists of cutting and preparing a skin flap on the upper region of the arm,

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5 Girolamo Mercuriale, *De decoratione liber* (Frankfurt: apud Ioannem Wechelum, 1587).

6 While the etymology of “plastic surgery” points to molding and malleability of body parts, I prefer to use reconstructive surgery or facial surgery throughout my dissertation. I believe “reconstructive surgery” is preferable for two reasons: it is more faithful to what the actors themselves were thinking in the early modern period; and it avoids easy anachronism and slippage into modern conceptions of cosmetic surgery, thus helping the appreciation of historical differences.
making it adhere to the defective nose by keeping the two parts bound together for about three weeks, severing the flap from the arm, shaping the new parts of the nose, and finally making sure that the outcome would last by using special molds. The procedure has to take place in a well-illuminated room, and at least two strong assistants have to hold the patient. The best season in which to perform it is the spring, but it can be done in the summer too, when the weather helps the natural heat of the body attaching the flap. The best patients are strong young men ready to undergo such a demanding operation. Finally, Tagliacozzi also devises a set of surgical tools and a special vest with a hood and bandages that kept the arm fixated to the face, of which he is very proud (fig. V-VII).

*De curtorum chirurgia per insitionem* was published in two volumes in Venice in 1597 and immediately had a pirate edition in Florence. The year after, another unauthorized edition was published in Frankfurt with the title of *Chirurgia nova de narium, aurium, labiorumque defectu*. The first volume is the longest. It consists of 23 chapters approaching the human face from a wide variety of points of view, all reflecting the erudition and the humanistic culture of the author. Tagliacozzi discusses the medical and literary tropes concerning the face and each of its parts; physiognomy and the art of reading character through facial features; a natural history of the human face; the history of grafting; a review of the most painful procedures in the history of surgery; the difference between cosmetics and reconstruction; and the relationships between beauty and health. The second volume is the technical one and focuses on a detailed description of the major steps of the operation. It

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is accompanied by twenty illustrations of the procedure and of the new instruments necessary to perform it.

Tagliacozzi’s version of the operation was a very specific one, since by the late sixteenth century different opinions and descriptions of it circulated throughout Europe. It was well known that the procedure was perfected by two families of “empiric” surgeons from Southern Italy, the Branca in Sicily in the fifteenth century, and the Vianeo in Calabria in the sixteenth century. Nonetheless, Tagliacozzi was the first one to put on paper the details of the procedure, and therefore historians of medicine and surgery have long time celebrated him as the father of “plastic surgery.”

In fact, the artisanal and the learned dimensions of surgery are strictly intertwined in the history of facial reconstructive surgery. This dissertation explores this intertwined history by emphasizing that early modern surgeons and other kinds of surgical practitioners had to deal with the appearance and the health of their patients’ bodies. But my work is not a history of a secret empiric practice traveling in space and time to become rationalized. Rather, the focus of this dissertation is on how, why and when a textual printed tradition concerning this practice emerged. Rather than treating Tagliacozzi as the solitary genius who invented

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“plastic surgery,” the present work tries to explain how and why this practice became the subject of a learned monograph in the last decades of the sixteenth century in a city like Bologna, the second most important city of the Papal state. This is the only partial exceptionality one can find in the history of reconstructive surgery, and concerns the historical conditions of possibility for the coming into being of a monograph on this technique at a particular time and in a particular place.

Tagliacozzi decided to write about such a difficult, daring, and spectacular operation not because he invented a new field of surgery but because he was living in his own times. For several reasons – such as time, cost, length, uncertain outcome, risk of infection – the procedure itself was not practiced many times. Tagliacozzi came to be perceived by his contemporaries as a specialist of the human face in general, as someone capable of treating several kinds of surgical and medical facial issues. Nonetheless, he chose to write about this particular procedure. This was a conscious decision: he desired to be remembered for this operation. This is not to say that this surgical procedure was merely a literary topos or, worse, that all that matters for the present work are textual representations. It is not by chance that Tagliacozzi and the other learned surgeons and physicians who wrote about the operation mentioned only cases regarding men and duels, since in this period the ideology of noblemen centered precisely around this ritual. Such a decision can be understood only by exploring the ideology of honor and duel proper of the aristocratic classes of the courts of the Po valley and the Papal state in the sixteenth century. It is true that this operation became visible only when integrated into a textual tradition, the subject of a published monograph authored by a learned surgeon and physician in one of the most important medical schools of medieval and early modern Europe. But I anchor this emergence of texts within multifarious social, political, cultural, and medical contexts. The present work explores how a fluid oral tradition transmitting a “secret” solidified into a public textual tradition, which in turn became the point of departure for another history of practices and receptions.
I have envisioned it as a kind of “total history” pulling together such various threads and methodologies as political history, social history, intellectual history, microhistory, and historical epistemology in order to track down the many facets of a practice and a discourse. The roots of what we still call “plastic surgery” lie not only in the ingenuity of a surgeon but also in a series of interactions between different historical phenomena. Specific academic settings, the dynamics of early modern state building, shifts in scientific concepts, gendered perceptions of male and female beauty and public roles, practices of manipulating natural forms, the evolution of genres of medical writing, the art and rhetoric of pain management, the encounters between the ways of living of different social classes, and the anthropological, theological, and aesthetic meanings attributed to the human face are all factors that figure in this total history. At first sight, this might seem like a list of haphazard topics. The task I gave myself is to give these topics an order and a coherence, in order to see the early history of reconstructive surgery through a magnifying glass.

Historians of “plastic surgery” – both surgeons-historians in search for professional origins and, more recently, cultural historians – seem to agree in suggesting that after Tagliacozzi the procedure fell into oblivion for two centuries. In the seventeenth and the eighteenth centuries Tagliacozzi’s methods would simply have become the object of ridicule and satires, becoming attached to a story of noses grafted from slave-donors which would fall down when the donor died. Among other causes added for the disappearance of Tagliacozzi’s method are the fact that the practice became associated with syphilis, and the opposition of

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9 From its original formulation by Annales historians, I adapt the meaning of “total history” as the attempt to write a relatively short chapter of the history of medicine which goes well beyond the field of medicine itself to embrace a wide variety of contexts.

10 For the metaphor of the magnifying glass see Carlo Ginzburg, “Microhistory: Two of Three Things that I Know about It,” Critical Inquiry 20, 1 (1993), 10–35.
Counter-Reformation church to aesthetic procedures. Others insisted on the limited circulation of *De curtorum*, on the early death of Tagliacozzi, on theological-religious opposition, and above all on a general European decline in the art of surgery at the end of the sixteenth century.

Twentieth and twenty-first century historians have taken up this theme of the oblivion and bad reputation of Tagliacozzi’s method from the supposed re-discoverers of plastic surgery of the nineteenth century. These early historians of plastic surgery claimed that the oblivion was due to the paucity of cases of such wounds; to the fact that European civilization was all too advanced to allow for the legal practice of punishing people by cutting off their noses; to the lowly origins of the practice among the semi-barbaric peoples of Southern Italy; and finally to the fact that the operation was too arduous and demanding for the patient. It has been argued that the oblivion and bad reputation were ended by an anonymous report from the Indian colonies published in 1794 in the *Gentlemen’s Magazine* describing the so-called Indian method (fig. VIII). This report supposedly spurred a renewal of interest in the “Italian” method as well. In a way, it lies at the origin of modern historiography of plastic surgery. From this passage, nineteenth-century European surgeons – especially German surgeons – would have slowly but firmly placed Tagliacozzi’s technique within modern rational and scientific method, which was still practiced to treat the damaged

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faces of World War I soldiers coming back from the trenches. My dissertation aims at correcting many of these historical explanations.

I had to ask again: why the stage of Renaissance plastic surgery is late sixteenth century Bologna? And what motivated Tagliacozzi, a man who graduated in medicine, a man coming from the middle class with hopes of climbing the social ladder, to embrace such a shaky, artisanal, oral tradition of surgery?14

First of all, Tagliacozzi was involved in a debate around Galenic ideas concerning the relationship between health and beauty that went on in the last decades of the sixteenth century among a group of professors of anatomy, surgery and medicine in Bologna and Padua. These two cities were also the places where surgery as an academic tradition had taken root earlier. Indeed, between the late thirteenth century and the first decades of the fourteenth century surgery was already taught in academic settings in Bologna, in the same period in which what Michael McVaugh called “rational surgery” flourished.15 Contrary to what happened north of the Alps, in Bologna, learned graduate physicians could specialize in surgery and still be part of the medical elite that gathered in the College of Medicine. Only in such an academically friendly space someone like Tagliacozzi could write a learned monograph on one single surgical operation. Also, the professional boundaries between surgeons, barbers, and empirics were not as clear cut as one might think, and a large spectrum of practitioners of the body dealt with both health and appearance.

But one of the core arguments of the present work is that the emergence of a textual tradition of facial surgery is to be seen as one of the many fruits of an encounter between the

14 Tagliacozzi’s biography has been narrated in detail by Teach Gnudi and Webster in their monumental study of 1950, which is surely outdated from a medical history viewpoint, but still valid for biographical purposes.

needs, desires, and ideological mindset of the noblemen, and the social ascension of the sons of the lower classes who used the operation as a means of attracting fame, cultural capital, wealth, and patronage. Noblemen wanted their public appearance restored, surgeons wanted to be able to offer this service.

Facial disfigurement took a peculiar turn in sixteenth century Italy, when it became firmly associated not only with traditional imagery of punishments for female adultery and political treason, but with the culture of honor and duel of the aristocratic classes too. It is not by chance that the courts of Piacenza, Ferrara, and Mantua keep appearing in this history. Patrons and patients looking for Tagliacozzi’s skills came from these places and sought out that wondrous surgical operation that restored noble noses lost in duels. Moreover, the Po valley courts of this period became the centers of the elaboration of a subtle literature on the rules of honor and of duel, considered as the quintessential activities and cornerstones of the lifestyle of the noble class and the masculine identity of its members.

At the same time, in this period the noble classes of the Po valley courts and the Papal state found themselves in a predicament. The late sixteenth century lords, popes, and government officials were looking for ways of establishing a more certain rule by centralizing authority and creating a new class of civil servants different from the noble class. Male aristocratic responded by elaborating a renewed isolationist culture centered on rules and rituals which had to escape secular justice systems. Authors began to assert forcefully that the way of living of the former ruling classes had to be placed above the state apparatus and the social discipline of the reformed state. How could people coming from the middle classes dare to inflict punishments to noblemen in a court of law? Even if this process of statalization and centralization of the Papal territories were far from complete and successful, phenomena of noble violence can be read as a response to this new political climate.

Bologna was in the middle of this process; it was governed together by the Legates of the pope and by the most powerful patrician families who gathered in the Senate. Bolognese
noblemen of ancient aristocratic families were in part co-opted through the Senate, and in part, when they exceeded in violence and unruliness, were punished. Tagliacozzi built an entirely male world in his printed works, leaving out the cases in which he operated on women’s faces. In this respect, the emergence of reconstructive surgery is part of both political history and gender history. It was the concrete relationships between different kinds of men and their ideas about masculinity which fueled this emergence. History of men, gender history, and masculinity are not confined in a separate chapter in the present work, but rather they are diffused throughout the whole dissertation. The life, bodies, and careers of men are placed on an equal footing with ideas about what it was the ideal masculine identity of a nobleman. The encounter between different men in the context of Bologna’s political life, with its gendered distribution of power and status, also explains why Tagliacozzi tried to appeal to this kind of aristocratic audience in several ways. One of these ways was a strong moralization of bravely bearing pain in surgery as the quintessential mark of higher-class masculinity. The complex of social, political, and technical prescriptions about pain management is what I call the moral economy of pain.

But the surgical procedure, based on skin grafting and taking its model from agricultural practices, also had a scientific relevance of its own. The emphasis on grafting is linked to the crisis of the boundaries between the natural and the artificial in sixteenth-century culture, of which Tagliacozzi’s book was both an effect and a contribution to. Just as trees, human faces and beauty itself could be natural or artificial. This was a heavily gendered distinction since in Renaissance culture “artificial” beauty was associated with women. In the course of his elaborate reflection on grafting Tagliacozzi lost track of the epistemological grounding of the distinction and ended up talking about hybrid faces. It is not possible to understand Tagliacozzi’s book without understanding the complex culture of the face of the sixteenth century, namely the system of materially inscribed meaning connected to the dignity and the infamy of human faces. This rich culture made of medicine, physiognomy,
gender constructions, theology, and the law was not just a background for Tagliacozzi and the reconstructive surgeons, but their living and breathing environment, the space in which they could think and act.

In chapter 1 I start by telling the history of plastic surgery through the cases histories of facial surgery that circulated in a period that goes from the fifteenth century to the early seventeenth with special attention to patients’ social standing. I then analyze two previously unknown cases that I have found in the criminal court of Bologna in which Tagliacozzi served as medical expert. These are cases of female disfigurement.

Given that no great amount of information can be found on these patients, in chapter 2 I try to reconstruct their culture, namely the culture of the male elite. I then briefly sketch a picture of the social and political stratification of late sixteenth-century Italy with special attention to the culture of the duel and honor in the Papal States. The chapter then explores what was it like to be a learned surgeon in sixteenth century Bologna. I describe the career paths of Tagliacozzi and a group of learned surgeons in the late sixteenth century. I argue that the emergence of a textual representation of reconstructive surgery is partially linked to the specific social and political conditions of Bologna, to the great prestige that surgery and surgeons enjoyed at that University, and to the encounter between middle class men who became “graduate surgeons” and the noble class of the papal State and the courts of northern Italy.

Chapter 3 is a cultural history and historical anthropology of the human face in sixteenth century Italy. It deals with attitudes toward the dignity, honor, and integrity of the face as it appears in medicine, law, literature, and the Christian theological tradition. I follow Tagliacozzi’s text and highlight three components of reconstructive surgery: the Renaissance revival of classical notions of beauty, proportions, and integrity of the human figure; the growing importance and influence of physiognomy; and the great reputation and cultural
salience the human face enjoyed in that period. I show how this particular culture of the face
was organized along the gendered and moral lines of the distinction between the natural and
the artificial, and what were the relationships between the face and the self in the sixteenth
century.

In chapter 4, I approach the theme of the relationships between the natural and the
artificial from the point of view of medical debates around beauty, cosmetics, and
reconstructive surgery. I describe the debate around Galenic notions of health and beauty that
developed in the second half of the sixteenth century. Then I discuss the care of appearance
in the writings of the so-called “professors of secrets” – who targeted both women and men –
and in the printed works of barber-surgeons – who took care of those external parts of the
body that were located in a liminal space between ornament and health. Then I go back to
Tagliacozzi’s way of dealing with the distinction between “true” and “false” beauty, showing
both the gendered nature of this distinction and the contiguity between health and appearance
as represented by the concept of politezza – which meant at the same time physical and moral
cleanliness – that ran across professional distinctions between barber-surgeons and learned
surgeons.

Chapter 5 focuses on grafting as it was thought about and practiced across a range of
different disciplines in the early modern period, and argues that grafting must be put in close
connection with the conceptual transformations of the “Scientific revolution.” By following
the history of a practice – grafting – rather than a discipline – surgery – I approach
Tagliacozzi’s text from the point of view of ontology and epistemology. First, I briefly
describe the classical distinction between art and nature in the Renaissance. I then discuss the
many contradictions and oscillations concerning the natural vs. artificial opposition that are to
be found in Tagliacozzi’s book. I argue that these difficulties were linked to the practical
example he chose as the main guide for the operation itself: grafting. I then move on to
discuss classical and contemporary practices and theories of grafting that were in place by the
late sixteenth century. Finally, I discuss further and clarify the main epistemological and ontological issues in Tagliacozzi’s book.

Chapter 6 explores the methodological stakes of writing a history of pain and sketches a history of techniques of pain management in early modern surgery. I treat pain not as a subjective feeling but as a social event historically determined by the distribution of power, gender, and medical techniques. I introduce here the concept of “moral economy of pain” to account for the social and political dimensions of the epistemological and “clinical” encounter between surgeons and patients in the old regime.

Chapter 7 offers a conclusion in the form of a history of the reception of Tagliacozzi’s book and, more generally, of the reconstructive technique, in the seventeenth and the eighteenth century. I argue that Tagliacozzi’s book was not at all neglected by his contemporaries and immediate followers, but rather that it became the subject of a complex and fragmented reception. First, I underline the deep resonances of reconstructive surgery and Tagliacozzi’s method in two important branches of seventeenth-century medical and natural philosophical culture: teratology and the debate around mechanism and empiricism. Then I show that in the seventeenth century this surgical method was present in two distinct kinds of medical writings, or “epistemic genres.” The first is that of collections of observationes, especially in the German-speaking lands; the second is the alchemical literature on sympathies and magnetism, especially in England. In this way I am able to sketch map of the geographic spread of the technique of reconstructive surgery between the fifteenth and the seventeenth centuries.
CHAPTER 1
PATIENTS AND CASES

Gaspare Tagliacozzi described very few case histories of patients whose faces he reconstructed. In this chapter I try to understand why and to find some remedy to the scarcity of information about them.

I describe the patients’ identities and culture as they appear from the few cases circulating in early modern Europe from the fifteenth to the seventeenth century. Patient stories and culture – which I reconstruct mostly indirectly, since almost no direct, first-person patient account of the procedure survives – provide a first point of entry into Tagliacozzi’s book and the context in which it came into being. First, I describe the history of facial reconstructive surgery through these cases histories. I then put into question a widespread historical narrative associating the success of plastic surgery with the ravages of the French disease, and prove that the known cases concern male patients wounded in duels or war. Finally, I analyze two previously unknown cases that I have found in the criminal court of Bologna in which Tagliacozzi served as medical expert on disfigured women. From these cases it emerges that the world of reconstructive surgery was a men’s world, from which women were deliberately removed. The popularity of facial reconstructive surgery in early modern Bologna is specifically linked to an encounter between learned surgeons and upper class men.

PATIENTS

In the literature on facial reconstructing surgery, either in the pre- or the post- Tagliacozzi versions, I have been able to find 14 case histories. However, I use here the term “case history” in a rather liberal way – perhaps case “stories” would be a better definition for a modern reader. In fact, these cases include episodes in which the physician advised patients
not to undertake the procedure, and cases in which we do not even know whether the procedure was performed or not. Moreover, in many instances, we even lack the names of the patients, for reasons that will be discussed later in the chapter.\textsuperscript{16} Almost all of these \textit{historiae} are either short anecdotal narratives embedded in larger discourses, or fragments of a bigger whole. I say “anecdotal” and not anecdotes because however fragmentary, brief, and isolated from their context these narratives might be, in most cases they still retain the function of connecting one single instance to a set of rules, or norms.\textsuperscript{17} Moreover, all these cases were \textit{historiae} in the early modern sense of the word, in all their broad range of meanings, which went from compilation from learned sources to direct observation, or a combination of the two, from the valorization of firsthand experience to a new sense of the specificity of time and place.\textsuperscript{18}

Procedures of surgical reconstruction of mutilated parts of the face – noses in the first place – have a rather long and global history.\textsuperscript{19} The earliest mentions of a procedure of

\textsuperscript{16} I have left out of the count the stories concerning “sympathetic noses” and donors, discussed in chapter 7.

\textsuperscript{17} This is the definition of the case narrative proposed by literary critic André Jolles and taken up for historians of medicine by Gianna Pomata, “The Medical Case Narrative: Distant Reading of an Epistemic Genre,” \textit{Literature and Medicine} \textbf{32}, 1 (2014), 1–23, pp. 1-7. It must be noticed that such short narratives of remarkable cures, often written for the purposes of self-advertising, had been part of surgical literature since Middle Ages, but in the sixteenth century individual cases and particulars attracted the attention of medical and surgical writers with greater intensity and in new ways. The value of descriptive narratives and the importance of first person accounts and their trustworthiness greatly increased. See Chiara Crisciani, “L’individuale nella medicina tra Medioevo e Umanesimo: i ‘Consilia’,” in Roberto Cardini and Mariangela Regolosi, ed. \textit{Umanesimo e medicina: Il problema dell’individuale} (Rome: Bulzoni, 1996), pp. 1-32; Nancy Siraisi, \textit{The Clock and the Mirror: Girolamo Cardano and Renaissance Medicine} (Princeton: Princeton University Press, 1997), pp. 195-213.


\textsuperscript{19} See note 6 in the Introduction.
surgical reconstruction of facial disfigurements are to be found in the classic ancient Indian text of the *Sushruta Samita*, written around the fifth century BCE. This text described a method for covering up nasal mutilations through skin flaps taken from the forefront. A very similar method was described by Celsus (c. 25 BCE-50 CE) in the first century CE in his *De medicina*, which circulated in fragments in the Middle Ages and was published in its entirety only in 1478. While Lanfranc of Milan (c. 1250-1306), Henri de Mondeville (c. 1260-1320), and Guy de Chauliac (1300-1368), three of the “rational surgeons” of the Middle Ages, all addressed issues of nose loss and repair, none of them actually described a technical procedure for reconstructing missing portions of the nostrils and the soft parts of the nose.

Treating facial wounds was also part of the empiric tradition and of vernacular texts on surgery. For example, in a fifteenth-century anonymous Italian manual there appeared a long chapter on the “wounds of the nose caused by swords and arrows” which detailed a complex typology of wounds and the relative ways of treating them with unguents and manual manipulation of skin, flesh, cartilage and bones.

The first mention of a technique similar to that described by Tagliacozzi came from the first half of the fourteenth century, when members of the Branca family were practicing surgery in Catania, Sicily. Surgeons of the Branca family were licensed “empiric” surgeons,

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21 See Michael McVaugh, *The Rational Surgery of the Middle Ages* (Florence: SISMEL/Edizioni del Galluzzo, 2006), pp. 120-23. Henri de Mondeville told a story about miraculously attaching a severed noses. The French surgeon reported having seen a patient who had his nose almost completely severed, attached to the face only through a little piece of cartilage. While many lay people and one physician told him to just cut it off and to throw it away, his teacher Jean Pitard cut the head of a chicken and let the blood fall on the ill nose for a long time and with great care. Then the master applied the half-cut heart of the chicken on the wounded part, until it cooled down. Finally, Pitard sutured it. The same operation was repeated with a second chicken. The day after the nose had a better color, and after proper treatment it healed. See Henri de Mondeville, *Chirurgie*, ed. Edouard Nicaise (Paris: Félix Alcan, 1893), pp. 345-46.

22 BUB, 811, *Practica chirurgica*, fol. 30r: “De la ferita del naxo per spada opur per sayeta.”
without university training, as the family-related nature of their trade attests. In particular
Antonio, the son of Gustavo, who had received a license from the King of Aragon in 1412, is
credited of having invented the technique of taking the skin flap not from the forefront but
from a more discreet, virtually invisible site: the upper interior of the arm.\textsuperscript{23} As the court
historian of the Aragonese king Bartolomeo Fazio (1410-1457) wrote in the mid-fifteenth
century, “whereas his father had taken the flesh for the repair from the mutilated man’s face,
Antonius took it from the muscles of the man’s arm, so that no distortion of the face should
be caused. On the arm that was cut open and into the wound itself, he bound the [site of the]
mutilated nose so tightly that the patient might not move his head at all. After fifteen days or
sometimes twenty, little by little with a sharp knife he cut away the flap which had become
attached to the nose; finally he severed it entirely from the arm and shaped it into a nose with
so much ingenuity that it was scarcely possible with the eye to detect the flap that had been
added, since the deformity of the face had been entirely removed.”\textsuperscript{24}

Antonio Branca’s technique was known by a German nobleman and surgeon with the
Prussian Army in the 1460s, Heinrich von Pfolsprundt (c. 1415-1465), who described it in a

\textsuperscript{23} According to the evidence provided by the Bishop of Lucera, Pietro Ranzano (d. 1492).

\textsuperscript{24} Santoni-Rugiu and Skyles, \textit{History of Plastic Surgery}, pp. 175-76; Corradi, “Dell’antica
autoplastica,” p. 265. Many hypotheses have been made regarding where the Brancas might
have learned the technique, whether from Arabic sources or from Persian ones via the
Sushruta, but no plausible explanation has been advanced. The two families, and especially
the Vianesos, are the object of a Italian-language literature written mostly by local historians.
See Manfredi Greco et al., “The Primacy of the Vianeo Family in the Invention of Nasal
Reconstruction Technique,” \textit{Annals of Plastic Surgery}, 64, 2010: 702–705; Franco Rombolà,
\textit{La chirurgia plastica in Calabria nei secoli XV e XVI: I fratelli Vianeo} (Cosenza: Galassia
1997). The detail concerning the “muscles” that had to be excised from the arm would be
repeated several times in the sixteenth century and would then be corrected by Gaspare
Tagliacozzi, who greatly emphasized this difference with respect to the empiric surgeons’
technique. By this time the Brancas were famous enough to be remembered in a dialogue of
the humanist, diplomat and courtier of the Aragonese Giovanni Pontano (1492-1503). In his
\textit{Antonius} (1487) one of the characters, Compater, says that “the Catalans” have brought many
vices to naples, and among them the “daggers,” namely the habit of fighting; “nor is anything
sold more cheaply than a man’s life, and if your Branca, a second Asclepius, had not arrived
to heal them, you would see the majority of the citizens with their ears and lips cut off, or
with their nose mutilated.” See Giovanni Pontano, \textit{Dialogues}, tr. Julia Haig Gaisser
manuscript published only in the nineteenth century. In this work, the German surgeon made reference to an Italian family of surgeons from whom he had learned the technique.\textsuperscript{25}

Traces leading to the actual performance of such an operation on one specific individual come from the fifteenth century. In the 1950s, Ladislao Münster found in the State Archives of Milan a letter sent by Federico I Gonzaga (1441-1484), marquis of Mantua, to the duke of Milan’s commissioner for Piacenza, dated 31 January 1470. With this letter, Fererico Gonzaga intended to defend one of his soldiers, named Antonio Terzo, who had been arrested for a brawl with members the Milanese troops. Federico Gonzaga mentioned that Antonio was passing through Piacenza en route “to have his nose re-made (\textit{per farsi rifare lo naso}).” In another letter, this time sent directly to the Sforza duke of Milan to ask for the release of Antonio, Federico Gonzaga said that his protégé was in Piacenza with the Bolognese surgeon Gaspare Speranza Manzoli (c. 1410-1475), who “was re-making his nose anew, which had been cut off in a brawl (gli stav\textit{e facendo lo naso da novo, che per questione gli fu tagliato}).” Unfortunately, the letters do not go into any further detail about the procedure. Besides appearing once as a medico-legal expert in a 1471 trial, nothing has been found about the surgeon Manzoli, but nonetheless this scant information reminds us that the art of making noses was practiced in Bologna in the late fifteenth-century, and that the Gonzaga and the Sforza families were well aware of that.\textsuperscript{26}

In the same year 1470 a young woman, Catilina García, was disfigured for unknown reasons by a nobleman’s gang in Cuidad Rodrigo, in the Kingdom of Castile. Years after the assault, Catilina went to Portugal, where an anonymous surgeon performed a Branca-style rhinoplasty on her, using the skin from her upper arm. The story as it can be understood from


\textsuperscript{26} Ladislao Münster, “Un precursore bolognese quattrocentesco della chirurgia plastica,” in \textit{Atti del Convegno medico dell’amicizia italo-svizzera} (Bologna, 1953), 1–5, pp. 3-5.
the trial document – as in the previous example, I am hesitant to call it a case, since these two stories had no medical circulation – is full of mysteries. Nonetheless, we have here the rare case of a woman, and we know that by the second half of the fifteenth century this procedure was known in Portugal, Castile, and Germany.27

Humanist physician Alessandro Benedetti (1450-1512), professor of medicine at Padua, discussed the method, properly crediting Antonio Branca, in his 1502 anatomy book. Even if he never practiced it, Benedetti is the first author who made the technique enter the stage of learned medicine. Benedetti gave a very interesting and detailed description of the procedure, and claimed he witnessed the operation:

some ingenious minds (ingenia) taught how to correct (to make gracious again) the deformities of the nose (narium deformitatem cohonestari docuere): several times we have seen (saepe visum est) that after having cut a little piece of flesh (carunculam) from the arm, they fashioned it in the shape of the nostrils and attached it to the mutilated nose (trunco naso). Indeed, they separate the skin of the arm with a little razor (novacula); after they have made that wound (facto vulnere), they scrap the nostrils again, or they cut them anew, they tie the head to the arm in order to make the two wounds to adhere (ut vulnus vulneri cohereat). Once the wounds adhere to each other, they cut with a little knife only the part which is necessary from the arm: the little veins of the nose nourish the little piece of flesh take from the arm. Finally, they cover (superinducitur) the nose with the new skin: sometimes, given the arm's nature, a few hair grow on the nose. Through this method they fashion new nostrils with admirable zeal, dominating nature with the power of their daring minds (audaci ingenio naturae imperantes). The added part (additamentum) can barely can withstand cold weather, and patients must be very careful because if they touch their nose at the beginning of the procedure, it is likely to fall down.28

This account is interesting for two reasons. Benedetti uses the language of nature vs. art (a challenge apparently won by art); and he describes the same shortcomings of the procedure Tagliacozzi would stigmatize almost a century later.


In the meanwhile the empirical tradition of reconstructive nasal surgery continued in Southern Italy, specifically in Tropea, Calabria, where the Vianeo brothers Pietro and Paolo famously practiced it through the second half of the sixteenth century. Several witnesses left accounts of their practice, including Ambroise Paré (1510-1590) and Leonardo Fioravanti (1517-1588). Fioravanti described two cases. In his self-portrait as a medical secret-hunter, *Il Tesoro della vita humana* (1570) he recalled that in 1549, while on his way to Naples from Messina, he stopped at Tropea, where the Vianeo brothers were performing that marvelous procedure. In order to induce the Vianeos to tell him all about their secret, Fioravanti invented a story. He told the brothers that he was a “Bolognese gentleman” and that he wanted to talk to them because “I had a relative who had his nose cut off while fighting the enemies at the battle of Serravalle, in Lombardy, and he wanted to know whether he had to come or not.” The lie proved successful because there was indeed a Cornelio Albergati in Bologna who had been de-nosed at the battle of Serravalle “by a Stradioto [a Balkan mercenary] & they [the Vianeos] had heard about him from a letter already.” Fioravanti wrote that while he was pretending to wait for Albergati he regularly went to the Vianeos’ workshop, and finally one day, when they had five rhinoplasty procedures scheduled, he got the chance to see them performing it. He then described the very same procedure Tagliacozzi would make famous later in the century.\(^{29}\) This case of Albergati has been overlooked by historiography, but it looks quite important to me, since it could provide evidence of a direct contact between the noble classes of Bologna and the Southern empiric surgeons performing the procedure.\(^{30}\)

\(^{29}\) Leonardo Fioravanti, *Il Tesoro della vita humana* (Venice: appresso gli heredi di Melchior Sessa, 1570), fol. 47r: “io havea un parente che alla rota di Serravalle in Lombardia gli era stato tagliato il naso, combattendo co i nemici, e che desiderava sapere se dovea venire si o no […] d’un Stradioto, & costoro già ne havevano avuto nuova per lettere.”

\(^{30}\) Cornelio, from the very powerful Senatorial Albergati family, was born in 1523; he later became Senator, and served as one of the ten officials who formed the small council of war of Bologna. The battle of Serravalle was indeed a quite important episode in the Italian wars:
Fioravanti connected his ability to master the reconstructive method to other cases, even if he mentioned only one, which was actually the account of a rather different procedure. In May 1551, Fioravanti left Naples with Charles V’s army as the physician of Don Garcia, son of the viceroy of Naples Don Pietro de Toledo. In Egypt he once treated “a Spanish gentleman” called “Andres Gutiero”, aged 29, who one day while walking through the camp “started a fight with a soldier, and they took out their blades, and that soldier cut off Mr Andres’ nose with a backhander, and the nose fell in the sand.” Fioravanti peed on the nose to clean it from the desert sand, and then attached it to the gentleman, healing it in just eight days.

The third case comes from private correspondence. When in Tropea in 1561, the Neapolitan nobleman, jurist, lawyer, and historian Camillo Porzio (1526-1580) wrote a letter to his friend Cardinal Girolamo Seripando (1493-1563), one of the five papal Legates representing Pius IV at the council of Trent, describing how the Vianeos had restored his nose. He said that he suffered greatly but that it was absolutely worth it, and complained about the fact that no one published a description of the procedure yet, which deserved to be publicly available for the benefit of the whole mankind. The cause of this missing nose is unknown.

the Spanish Imperial army won the battle against the French and the “Italian” army (supporting the French) led by the famous Florentine condottiero Pietro Strozzi, and with that victory Charles V extended his power over Lombardy. See Pompeo Scipione Dolfi, Cronologia della famiglie nobili di Bologna (Bologna: G.B. Ferroni, 1670), p. 33. Unfortunately, I have not found any traces of this episode of nose loss, neither in the correspondence of the Albergati family, nor in some of the city chronicles.

31 Fioravanti, Il Tesoro, fol. 60r.

32 Fioravanti, Il Tesoro, fol. 64r: “venne a parole con un soldato, & messero mano alle armi, & quel soldato con un man roverso tagliò il naso al Signor Andres, & li cadette nella arena.”

A fourth case was narrated by Ambroise Paré. The French surgeon discussed “the making of an artificial nose” in his book on prosthetics (finished in 1575, but some of the material dates back to 1561), correlated with the case of a man he calls the “Cadet de Saint-Thaon.” This was a young knight who had his nose cut off in battle and came to him to show his remade nose, claiming that it was a procedure he had underwent in Italy, performed by some unnamed Italian surgeon (probably one of the Vianeo brothers). Paré’s description of the method is the one that circulated most frequently before Tagliacozzi, and the one that the Bolognese surgeon most harshly attacked. In this version, the procedure lasted forty days, and it included the use of the muscles and the flesh of the arm, not just the skin. Paré expressed several kinds of doubts on it. He argued that those who had lost their noses needed to have someone make an artificial one for them, be it “silver, or made with paper and glued pieces of cloth, of the same figure and color as the natural nose” (fig. 1.1). Paré believed that “this operation is not impossible; however, it seems to me very difficult and too demanding for the patient, as much as for the trouble (peine) of keeping his arm tied to the head, as for the pain caused by cutting the healthy parts [of the arm] and by removing it for shaping the new nose.” Moreover, the temperature and appearance of the flesh of the arm was nothing like those of the nose, and the result could not be aesthetically satisfying. This is a very interesting passage, in which Paré seems to imply that it was ethically disturbing and epistemologically ambiguous to wound the patient in his healthy parts, thus inflicting patients a great pain, given that the outcome would be ugliness anyway. One thing was to cut near the wound to directly treat it, or to cut for extracting a bladder stone which clearly impaired the normal course of life. Another one was to wound a healthy arm once the wound to repair was already distant in the past, and for the sake of a dubious outcome.


35 Ibid., pp. 605-06.
In the second half of the sixteenth century several authors claimed, implicitly or explicitly, to have seen, heard, or read about the procedure. The French physician and learned surgeon Etienne Gourmelain (d. 1594) cited in his 1580 *Chirurgicae artis* a letter written by the Roman poet Elisio Calenzio to his friend Orpianus, first printed in Rome in 1503, and therefore referring to the Branca of Sicily and not to the Vianeo of Tropea. In this letter, Calenzio praised the art of remaking noses, and mentioned the fact that a slave could serve as a donor of the skin flap. Likewise, Girolamo Mercuriale, Gabriele Falloppio (1523-1562), Pseudo-Vesalius or Prospero Borgarucci, Johannes Schenck von Grafenberg (1530-1598), the Spanish physician Dioniso Daza Chacon (1510-1596), and Fabrici d’Acquapendente (1533-1619) all mentioned the procedure, usually with marked skepticism and insisting on its difficulty and painfulness.

It appears that Giulio Cesare Aranzi (1530-1589), eminent surgeon and anatomist in Bologna and Tagliacozzi’s teacher, had bettered the method of nasal reconstruction by correcting the view according to which the muscle of the arm had to be incised, and had claimed that only the skin of the arm should serve as the flap to be attached to the nose. The only evidence of this is provided by a Polish physician who had studied medicine in Bologna in the 1560s, Wojciech Oczko (1537-1599).

Tagliacozzi himself cited no more than six cases. In the letter to Girolamo Mercuriale, dated 22 February 1586, the Bolognese surgeon resplied to Mercuriale’s description of the

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37 Teach-Gnudi and Webster

38 See Teach Gnudi and Webster, *The Life and Times*, pp. 133-34; Raffi Gurunluoglu, and Aslin Gurunluoglu, “Giulio Cesare Arantius (1530-1589): A Surgeon and Anatomist: His Role in Nasal Reconstruction and Influence on Gaspare Tagliacozzi,” *Annals of Plastic Surgery* 60, 6 (2008): 717–722. In any case, there could have been many ways in which accounts of the technique had reached Tagliacozzi’s attention, and this work is not concerned by origin stories or controversies on primacy, but on the social and cultural history of reconstructive surgery.
reconstructive method in the first edition of 1585. Tagliacozzi named here four patients, whose noses he restored. “For there have been several gentlemen – among whom Messer Segismundus Barianus, a noble, Messer Alexander Visintinus, also a noble, both of Piacenza, whose noses were cut off while they were dueling, Octavius Facinus, also of Piacenza, and a Fleming, Messer Henricus von Banesghem of Antwerp.”\(^{39}\) Here, Tagliacozzi claimed that in all four cases he restored the noses so perfectly that they really resembled natural noses. I have not been able to found any information about these patients. Teach-Gnudi and Webster found an affidavit for Barianus written by Tagliacozzi in the State Archives of Milan, dated 26 February 1586, stating that there had been some problem in the cohesion of the parts of the nose caused by “a discharge of bad humors,” and so Barianus “will be obliged to come to Bologna from about the end of the month of March next at least throughout the month of May, during which time he will have to remain in Bologna constantly, if he does not wish to lose what he has regained with so much effort and loss of sleep (laboribus et vigilii).”\(^ {40}\) Two things are remarkable: Tagliacozzi called back his patient in the spring, the period deemed ideal for grafting, since maybe he wanted to redo the whole procedure; and he mentioned the discomfort and painfulness of the procedure, to be repaid by having a whole face again.

Despite the fact that in one passage of *De curtorum* Tagliacozzi mentioned the “multitude of patients”\(^ {41}\) he treated, he presented no specific cases in his main opus. In fact they are only two of them, brief and scarcely significant. The first one was mentioned within a passage in which Tagliacozzi listed all the kinds of nose injuries one can suffer and how they could be treated with his method. The most serious and difficult one was when “the hollowing out of the middle of the nose is excavated and [there is] the cutting of the top of the dorsum. This happens sometimes when a sword plunges into the flesh of the nose and,

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39 Translation by Teach-Gnudi and Webster, *The Life and Times*, p. 139.

40 Teach-Gnudi and Webster, *The Life and Times*, p. 140.

41 Tagliacozzi, *De curtorum*, p. 171 (2:53).
like a forceps, tears some of it away… This type of injury is fairly rare, I myself have only encountered it twice… In fact, during the time when I was concentrating my thoughts on this defect, a certain knight of Malta came to me, having sustained this very injury, coincidentally, in a duel (monomachia).”\textsuperscript{42}

The second one sounded like a moral or cautionary tale, had no names attached, and aimed at teaching his readership and potential clients that they had to be open to the novelty of such a procedure. It was the story, allegedly reported by an unnamed but “very important” physician, of “a young nobleman whose nose [the physician] was in the process of restoring. They happened to have some business to deal with a Cardinal, who noticed that the young man’s nose was covered. The Cardinal asked if the nose was indeed new and made from flesh. The young man replied in the affirmative, and the Cardinal added that he would be most interested in seeing the nose uncovered, as he had never seen anything like it before. When the young man excused himself to uncover his nose and clear the secretions from it, the Cardinal shouted at him, ‘Make sure your nose doesn’t come off!’”\textsuperscript{43} The skepticism of the Cardinal was recalled here to highlight the wide diffusion of wrong ideas about this practice. Moreover, skepticism also showed a general diffidence and suspiciousness towards novelty and once again how incredible was that even the smartest men could be so easily blinded by prejudice.

Case number eleven is very important. Fabry von Hilden (Hildanus, 1560-1634) in his best seller Observationes et curationes chirurgicae, more specifically in the second edition dated 1614, mentioned the only woman patient I have been able to track down in this

\textsuperscript{42} Ibid., p. 108 (1:87).

\textsuperscript{43} Ibid., p. 179 (2:59): “Fuit enim cum nobili adolescent cuidam nares restauraturus ut is ad unum ex purpuratis Rom. Ecclesiae proceribus negotii causa accederet, qui aspiciens eius nares tectas dixit: nunquid sunt nares restitutae, & ex carne factitatae? Aseverat nobilis adolescentis. Tune rogavit si liceret eas detergere: libentissime fore ut detergeret, & à fordibus nares expurgaret: ei clamavit purpuratus: cave ne sequantur.”
literature. The episode took place in 1590, during a war waged by the Duke of Savoy against Geneva. A nun called Susanna N. fell prisoner of the Piedmontese soldiers, who had all intentions to rape her, but could not because of her fierce resistance. Completely mad by rage, the soldiers cut off her nose. Two years later – and this detail is important – she went to Lausanne, where the surgeon Jean Griffon was living: Griffon undertook the treatment and remade her nose so beautifully that he earned the praise of the whole town. Hildanus, who had studied with Griffon in Geneva, where his teacher served as surgeon at the general Hospital, commented that he himself saw this nun several times at the house of a noblewoman. The nose looked good, except that in the winter it turned a bit bluish. This girl lived in Lausanne until 1613, and her nose remained in good shape throughout her whole life. Hildanus said that Griffon received a first preliminary instruction by some Italian who had his nose remade by Tagliacozzi in Bologna passing thorough Lausanne, but then he perfected the method by himself. Actually, Griffon was Italian himself: a native of San Miniato in Tuscany, he had moved to Geneva in 1582 after he converted to Protestantism. Griffon thus performed the operation in 1592. Another mention of the case can be found in a letter from Bruxelles dated 20 March 1603, in which Hildanus wrote Griffon that he had seen the girl, and urged him to send drawings of the instruments he had used in the procedure.

In his 1602 book on the physiology of the human beard, Paduan physician Marco Antonio Olmi (?) mentioned a case – the twelfth in my sample of cases – he himself had


46 Hildanus, *Observationum*, p. 150.

treated in Montechiari, in the countryside of Brescia (Venetian territory). He said that he was helped by his sister’s husband Giacomo Zenaro, most likely an empiric surgeon. However, no names and no further details about circumstances were mentioned. “Incidentally, we have performed the nasal surgery quite successfully in Brescia, and so in the town called Montechiari. This is well known to physicians of Brescia and other learned men, and many nobles. We were among the early cultivators of this art, and on the eleventh day we separated the skin flap from the arm, since it had completely united with the mutilated nose, and once in the middle of winter, for it was Saint Lucia’s day [13 December], and we informed Gaspare Tagliacozzi of this case. But in performing this operation I always used the help of Giacomo Zenaro, to whom my parents gave my sister Francesca to wife, for he was an excellent surgeon.” Notice that the crowd of physicians, learned men, and noblemen points out to a situation in which the treatment was showcased as a public demonstration of a wonderful and new procedure; and also that Olmi showed his competence by modifying the length of the operation. Once again, Tagliacozzi was at the center of this network of surgeons.

Tomaso Minadoi (1549-1615), professor of “practical medicine” in Padua, pupil of Mercuriale, and member of the Paduan-Bolognese connection that lies at the heart of the renewal of the medical interest on beauty in the late sixteenth-century, wrote a very

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48 Very little is known of this physician. In 1598 was trying to get the chair of medicine that had been left vacant at the University of Bologna: see ASB, Senato, Lettere, Serie I, 20, fol. 226v.

interesting and really singular case (the thirteenth). Minadoi’s story changed the geographical setting, since it took place in Syria. Even if he confessed that he had observed the reconstructive operation first-hand very few times, Minadoi was full of praise and admiration for Tagliacozzi and his method. Like Tagliacozzi, he justified the painfulness of the procedure by highlighting the importance of the outcome for personal, civil, and political life. Brave men in need of a restored face needed to be able to endure this effort. But then he surprisingly told the story of a patient whom he advised not to undergo the procedure, even if he was asking for it.

One day Minadoi decided to purchase some silk and started to browse the markets of Damascus. In one of these markets he met “Mustachius,” whose upper lips had been disfigured by an unspecified wound. Mustachius was wearing a prosthetic mask attached under the nose, with fake mustaches hiding the disfigurement. Once Mustachius understood that Minadoi was a famous physician from Europe, he invited him to his place with the excuse that his daughter was sick. As soon as they arrived there, he explained that there was no sick daughter and that he wanted the physician to perform the reconstructive operation he had heard about. Mustachius confessed that in private he put off his mask to eat and talk with his family, but in public he was forced to show another kind of ugliness to his fellow citizens:

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51 Tomaso Minadoi, De humani corporis turpitudinibus cognoscendis et curandis (Padua: apud Franciscum Bolzetam, 1600), fol. 122v: “Nos vero in praesentia eam operationem sic paucis complectimur.”

52 Ibid., fol. 122r.
that of lying by wearing an artificial face. Minadoi described in detail the mask and praised it as bringing a delicate and gracious beauty to the merchant’s face. At this point, Minadoi recalled that he persuaded Mustachius not to undergo the operation, explaining that it was very dangerous and painful, and not to despise his prosthesis, which was an honest and decent remedy to his disfigurement, as showed by Paré and Vesalius.  

One can speculate about the possible reasons Minadoi refused to perform or to recommend the procedure, besides the fact that this prosthetic mask seemed particularly well made to him. Perhaps as a Syrian, Mustachius was imagined as someone who was not able to suffer through the torments of the procedure like a Western nobleman, by definition a braver, and morally stronger kind of man.  

The last case I want to describe (the fourteenth) has been briefly presented Giovanni Battista Cortesi (1552-1643), a graduate from Bologna, in the first pages of his Miscellaneorum medicinalia (fig. 1.2). In Sicily, during the second part of his long career, he performed the procedure on several patients but he mentioned only one of them, the most illustrious. “With God’s help I became an expert in this discipline, and I have helped many patients, both in this most flourishing Kingdom of Sicily and elsewhere, among other the most Illustrious Don Federico Ventimiglia from Palermo, whose cut-off nostrils I have beautifully restored, so that even after many years in the same city he still sports a more than decent nose on his face.” There are no further details, but clearly Duke Ventimiglia lost his  

53 Ibid., fol. 121r-v.  
54 See fig 6.2 and 6.4. In this case, the interpretation would be supported by the images decorating the final pages of Giovanni Andrea Dalla Croce’s (1515-1575) surgery manual, showing a Christian knight tolerating pain and a Turkish soldier in a rather unseemly posture, unbecoming for the iconographic standard of a Christian soldier. See chapter 6 for a deeper discussion of these images and the politics of pain management.  
nose in an accident involving sharp and cutting blades, as the use of the word “sectas” attests: once again, a case of duel or battle.

These cases have three things in common. With two exceptions, and despite the fact that de-nosing women had a long history as both a formal and an informal punishment, patients are all men. Despite the lack of details we know that – except Catilina, Susanna N. and Mustachius – they were all noblemen or at least upper-class men. Virtually all of them were injured in the context of fights, duels, or war, and there is no mention of disease as the cause of disfigurement.

WHAT ABOUT THE FRENCH DISEASE?

Several historians of plastic surgery, most prominently Sander Gilman, have argued that Tagliacozzi’s procedure became immediately popular but short-lived and even despised in the seventeenth and early eighteenth centuries, because it was associated with the French disease, or syphilis. Gilman argued that this procedure served as a corrective technology for one of the main symptoms of the French disease: the corrosion of the cartilage and bones of the face, causing to nose to be “eaten away” as the illness advanced. But evidence simply shows that this was not the case.

Besides the fact that in its sixteenth-century form the procedure of facial reconstruction pre-dated the first outbreaks of the French disease, no plastic surgery case history circulating in early modern Europe referred to that disease. More generally, textual references to the “great pox” were very scarce in the literature on plastic surgery, while

nares ita concinne restitui, ut multis ab hinc annis absque villa labe nasus in decora facie decentissimus apparet.”

56 Gilman, Making the Body; Cock, “’Lead’em by the Nose;’” Nicholas L. Tilney, Invasion of the Body: Revolutions in Surgery (Cambridge: Harvard University Press, 2011), pp. 103-05; Valeria Finucci, The Prince’s Body: Vincenzo Gonzaga and Renaissance Medicine (Cambridge: Harvard University Press, 2015) mentions syphilis as one “major motivation for the preoccupation with nose reconstruction” but correctly adds that there is no evidence of performing such an operation on syphilitic patients.
references to duels and other forms of more or less ritualized violence among noblemen abounded. There are only two partial exceptions. The first is the Polish physician Woiciech Oczko, cited above. Oczko connected the procedure with correcting the most hideous symptom of the French disease, but presented no cases. The second concerns Vincenzo Gonzaga (1562-1612). Historians still debate whether Vincenzo, Tagliacozzi’s patron, had contracted the French disease or not, but it is sure that Tagliacozzi never performed any surgical reconstruction on his face.57

Tagliacozzi mentioned the French disease only when he discussed the preliminary conditions of patients who were about to undergo the procedure, insisting on the fact that they needed their bodies to be purged and cleansed. Among the most difficult conditions to clear out he listed “the French disease” and the “cacochymic state.” The cacochymic state was a bad bodily disposition, characterized by an abundance of bad humors. This disposition had deep roots in the body and it was very hard to eradicate quickly. It was often associated with “the venereal plague, or French disease,” and it had to be treated with special remedies.58 The reference to syphilis was incidental. Tagliacozzi was merely contemplating the possibility of having to perform the procedure on someone who currently had or had had the French disease. About the syphilitic patient properly, Tagliacozzi first declared that the surgeon had to carefully evaluate whether the outcome could be successful, given the seriousness of the disease; then, if the disease was in an advanced state and “the poison has crept deeply into the bones causing obvious erosion of other parts, there is only one course to take. The physician must try to mitigate the savagery of the disease so that the power of the

57 On this debate and in general on the relationship between Tagliacozzi and Vincenzo Gonzaga see Finucci, The Prince’s Body, pp. 62-72; Teach-Gnudi and Webster, The Life and Times, pp. 165-82. It has been suggested (Cock, “’Lead’em’ by the Nose”) that Tagliacozzi’s dedication to Vincenzo was a maneuver to cover up the fact that the procedure was mostly intended for treating patients with the French disease, but this suggestion should be rejected in light of a complete lack of evidence.

58 Tagliacozzi, De curtorum, p. 121 (2:5).
poison cannot be restored, causing it to infect the graft or to provoke the formation of malignant ulcers.”⁵⁹ In such cases, a four-month-long treatment was due, involving medicaments, diet, sweating, and phlebotomy combined with guaiacum wood and sarsaparilla. Here, Tagliacozzi referred to the possibility that the syphilitic poison infected the grafts, but it was not clear whether he was talking about treating the damage caused by the illness or not. Given the context of the chapter, readers are more inclined to conclude that he was talking about purging the syphilitic body of a patient with a face that had been injured for other reasons before starting the procedure.⁶⁰ This would make sense, since such a procedure was so demanding and patients needed to be in their most perfect bodily state in order to endure it.

Tommaso Minadoi wrote that there could be two distinct groups of causes of mutilations: the actions of a corrupted internal disposition, and violent external blows. Among the internal causes, one of the most frequent was the French disease: patients mutilated by the great pox were indeed particularly “hideous” and “very hard, or rather desperate cases to treat.”⁶¹ And that was it. The collection of medical consilia put together by the German physician Joseph Lautenbach (?) mentioned the case of plastic surgery. Among the required conditions for a successful operation, the author said that, first of all, the physician had to be “diligent, patient, prudent and very much dexterous;” second, the patient had to “have a healthy habit … not be affected by the Gallic illness, and be eminently obedient and patient.”⁶²

⁵⁹ Ibid., pp. 125-26 (2:8-9).
⁶⁰ In his famous 1816 account of a nasal reconstruction, Carpue describes how he had to make sure that his patient with a missing nose did not have syphilis; see Santoni-Rugiu and Skyles, A History of Plastic Surgery, p. 201.
⁶¹ Minadoi, De humani corporis turpitudinibus, fol. 119v.
It is true that the French disease was perceived as dishonoring and shaming, and that Tagliacozzi and others might have wanted to protect their patients’ identity. But this does not seem to be a very compelling objection, since the French disease was widely and openly discussed in the medical literature of the time, and often physicians named names. A quick look at the two-volume collection of writings on the French disease edited by Luigi Luigini in 1566 would testify to the fact that all the symptoms of the venereal disease were abundantly discussed by European physicians, including facial mutilation and disfigurement, without particular moral problems (fig. 1.3). 63

Girolamo Fracastoro (ca. 1476-1553) famously wrote in _De contagione_ (1546) that in some cases in patients sick with the French disease “the lips, or nose, or eyes were eaten away, or in others the whole genitals.” 64 But reading through Luigini’s collection, the impression is that corrosion of noses and mouths was not the most common symptom. Moreover, it was a rather late-stage symptom, indicating a very advanced stage of the disease. Therefore, the suggestion most frequently given by surgeons and physicians was to surgically remove the corrupted parts of bones and cartilage, and then treating them like regular wounds. 65 Gabriele Falloppio went beyond this, and proposed the use of prosthetic devices of his invention, much like those described by Paré, to correct excessive defects of the bones of the palate, but only in extreme cases in which the faculties of speaking and drinking would be impaired. 66

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63 Luigi Luigini, _De morbo Gallico omnia quae extant apud omnes medicos cuiuscumque nationis_ (Venice: G. Ziletti, 1566-67).

64 Fracastoro in Luigini, _De morbo Gallico_, vol. 1, p. 173.

To counter the argument on the need of preserving the patients’ identity secret, I believe that references to duelling and the culture of honor would not have been a safe topic either. As we will see, books on duels were officially placed on the Index of the Holy Office of the Inquisition in 1596, and duels were outlawed in many Italian states by the middle of the sixteenth century.

Corrosion of the nose was described as one of the most horrifying symptoms of the French disease, but it does not appear to have been the most common, nor the most striking for the contemporaries. Observers of the disease appear to have been more shocked by the so-called syphilitic gummatae, and genital sores, especially by the late sixteenth century, when the disease was about one century old. In any case, there was no silence surrounding the French disease at all. Surgeons and physicians, like Falloppio, openly talked about remedies for this heinous condition, and there was no reason for Tagliacozzi to keep it secret had his method been useful to treat such a horrifying symptom. Plus, why would a physician try such a demanding surgical procedure on a patient so weakened?

Missing or severely damaged noses were all over the place in sixteenth-century Italy, and carried several negative meanings. Stigmatization of the French disease was certainly one of them, but there is very little evidence that this played a particularly significant role in the success of facial surgery in the late Renaissance.

A MEN’S WORLD

My research in the records of the criminal court of Bologna – the so-called Torrone – brought to light two new cases concerning Tagliacozzi acting as medico-legal expert and

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physician in cases of a certain relevance.\textsuperscript{68} Attacks damaging the face are often mentioned in the records of the court, and there is ample evidence that disfiguring faces and cutting off noses continued to be a form of punishment in sixteenth-century Bologna, both for condemned criminals (more rarely) and for adulterous women or for women involved in issues of male honor.\textsuperscript{69} The following cases involved disfiguring injuries inflicted to women. These cases show that Tagliacozzi was part of the complex culture of noblemen I will describe in the next chapter, and that he deliberately avoided talking about women in his printed works.

The first case involves a modest artisan, Fausto dal Lino, cloth weaver from Modena, his family, and a community of Modenese citizens doing business in Bologna. Several important characters of Modena, including lawyers and the “chaplain” of the Cathedral, gave their deposition, since the crime in question happened in broad daylight in the main square, in front of the Duomo in Modena. On 7 September 1584, Fausto had been seen injuring with a knife his mother-in-law Caterina Dossi, a seller of “veils” in the \textit{piazza}. The aggression

\textsuperscript{68} The \textit{Tribunale criminale del Torrone} of Bologna represented the extension of the sovereign power of the Pope, and operated from 1531 to 1796. In its archives there are about 10,400 volumes of trial records and documents. Each volume contains traces of about 100 cases and complaints. The trials of the Torrone only rarely ended with an official condemnation, or a final sentence. Very often they ended abruptly with no apparent reason, with an acquittal, or with the indication of some kind of peace or composition. As I have noted above, the vast majority of cases concerned the artisanal classes of the city, since noblemen thought they were above the State justice system. In the archives of the Torrone there is no thematic index, so it is extremely hard to make representative surveys. See Giancarlo Angelozzi and Cesarina Casanova, \textit{La giustizia criminale in una città di antico regime: Il tribunale del Torrone di Bologna, secc. XVI-XVII} (Bologna: CLUEB, 2008). Luckily, one notary (notaries wrote down all the details of interrogations) called Girolamo Marino wrote a rather complete list of the cases he dealt with from 1584 to 1589, both in the countryside and in the city, with indications of the volumes in which records have been transcribed: see ASB, Torrone, 1674/46 (thanks to Ottavia Niccoli, who mentioned this precious source to me).

\textsuperscript{69} For the former see Giacomo Rinieri, \textit{Cronaca 1535-1549} (Bologna: Studio Costa, Fondazione del Monte di Bologna e Ravenna, 1998); for the latter, Giancarlo Angelozzi and Cesarina Casanova, \textit{Donne criminali: Il genere nella storia della giustizia} (Bologna: Patron, 2015).
resulted in two wounds to Caterina’s head, deemed by many witnesses as potentially deadly. Fausto suddenly disappeared from Modena. He went to Bologna, where he was arrested along with a young tailor, also from Modena, named Ercole Monti. He was charged of having brought prohibited weapons into the city. Interrogated, Fausto said at first that he had gone to Bologna to see a rich tailor who had a workshop there because he needed to buy certain “cloths” from him. But slowly, as the interrogation became more and more aggressive, he changed his version. In fact, Fausto had fled Modena after having injured Caterina, and he went to Bologna because he was looking for another Modenese tailor called Giovanni Battista. He had brought weapons with him because he needed to be very persuasive with this Giovanni Battista. Fausto’s parents-in-law had bought a house from Giovanni Battista two years before. Fausto believed that the money used to buy that house was to be destined to his wife’s dowry. It then turned out that buying that house had been a mistake. Giovanni Battista had debts: the creditors took the house back “and I am now with no house and no money, and to tell you the truth I came to Bologna precisely to talk to said Mr Gio. and to ask him to give me at least something, even if not the whole sum of 1000 lire.”

Tagliacozzi appeared in the trial as the author of a certificate written on 18 September for Fausto’s lawyer in Modena, Domenico Ferraris, attesting that Caterina’s life was not at risk. He was confirming the diagnosis made by Matteo Colombo, the Modenese physician who took charge of Caterina after Tagliacozzi had left Modena.

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70 Fausto’s mother in law probably used to sell Bolognese silk “veils”, a specialty of the city; all this back and forth between Modena and Bologna is understandable in light of the role of Bologna as a proto-industrial district of silk production: see Carlo Poni, *La seta in Italia. Una grande industria prima della rivoluzione industriale* (Bologna: Il Mulino, 2009), pp. 153-227.

71 ASB, Torrone, 1695, fol. 181r-183v: “di maniera che io mi sono senza casa et senza dinari et per dirvi la verità io sono venuto posta a Bologna per parlar con detto m. Gio. et per pregarlo che volesse esser contento di darmi qualche cosa anco che io non havesse havuto a perdere in tutto et per tutto le mille lire.”
I, Gaspare Tagliacozzi, testify that in the past days I have been called to Modena to visit a woman injured with two wounds in the head; I have visited said woman and I stayed there until after four days passed and then I left; several times the physician there has updated me on her condition, and more specifically the physician sent me a letter yesterday in which he says that given that 14 days have passed by without having discovered any sign of danger of death, she will get her health back and her life is not at risk in any way either now or in the future, if well treated. I have faithfully written this with my own hand, Gaspare Tagliacozzi, physician. 72

Why was Tagliacozzi called to another city to see a middle class patient? One small detail in the young tailor Ercole’s deposition helps the modern reader to make sense of the surgeon’s intervention in this case. Ercole, arrested with Fausto, had only known him for two days, but he had immediately noticed that Fausto was a bit of a chit chatterer. In fact, Fausto had told Ercole everything about his assault on Caterina. “[Fausto] told me here in Bologna that he had injured his mother in law by using a small knife on her face and on her head while his mother in law was in the piazza selling veils, and [Fausto] told me this happened on Saturday 1 September at mid-morning.”73

Tagliacozzi was called to Modena because in late 1584 he was already known as a specialist of facial injuries – after all, the letter to Mercuriale dates early 1586 – and this case caused a stir in Modena as it happened right in front of the Duomo, for everyone to see. By that date, Tagliacozzi was famous already for to the same group of illnesses having to do with facial appearance, disfigurement, and beauty. 74

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72 Ibid., fol. 184v: “Faccio fede io Gaspare Tagliacozzo come alli giorni passati fui chiamato a Modena per visitar una donna ferita de due ferite in testa la qual visitai et stette sin che fu passata la quarta appresso di lei di poi me parti et ne ho più volte del medico presente havuto ragguaglio et in particolare hieri per una sua lettera et una fede che ha fatto dove dice essendo passati dieci giorni senza che se sia scoperto segno di mortale giudicio che serà per recuperare la sanità et non habbi da incorrer a periculo alcuno della vita al presente et per l’advenire essendo ben curata, così io in fede di ciò ho scritto et sotto scritto la presente di mia mano, Io Gaspare Tagliacozi medico.”

73 Ibid., fol. 180v: “[Fausto] me ha racontato qui in Bologna de haver dato delle ferite a sua Madonna madre di sua moglie dicendomi di havereli dato con un falcinello una ferita nel volto et con un altro su la testa mentre detta sua Madonna stava in piazza a vendere li veli et me ha racontato che questo fu il primo di Settembre che fu il sabato a meza matina.”
Around the same time Fulvia Ballestra, known as the Prieta, a rather wealthy courtesan of Bologna, had been disfigured by an unknown youngster one Sunday while going back home from the Mass. Tagliacozzi treated her wound, about which we have a few details. The case has many characters, which is impossible here to summarize in their entirety: noblemen openly fornicating with mistresses, strongly independent women forming a community with rivalries and solidarities, issues of male honor connected to fighting for the love of a woman, and the shaming nature of disfigurements.

On 26 December 1583, the notary went to Fulvia’s home to check her wound, since he was told that she had been injured “with big disfigurement (cum magno sfrisio).” He found her in bed, “with one big wound which I could not see as it was all covered by bandages … and she had been recently treated, and her face was all covered by bloody linen cloths.”75 “A little while ago – Fulvia said – when I was coming back home after the Mass with my mother and the servant … a young man whom I do not know hit me with a dagger on my face so suddenly that I did not realize what was happening, and he has wounded my face all across my lips cutting my nose and my face so badly that the physician had to put many stitches in it”76 Fulvia’s mother, Caterina, was more precise in describing the young assaulter: “a beardless, badly dressed young man passed by, a dark face, wearing a green

74 For example, in June 1590, Tagliacozzi, along with the family physician and with another eminent Bolognese academic Felice Castelli, was called by the very powerful Senatorial family, the Gozzadini, to treat one of their offspring. The 18-month-old Fabio Gozzadini suffered from a terrible case of smallpox with petechie (a skin eruption), and Tagliacozzi and the others “were much diligent in treating him with good remedies.” See BAB, Gozzadini, Documenti, 3, 3, fol. 7r: “furno diligenti nel curarlo e farli boni remedii.”

75 ASB, Torrone, 1670, fol. 148r: “unico magno vulnere quam videre non potueri propter medicamenta apposita … erat medicata de recenti et habebat faciem tota involutam fasciculis lineis sanguinolentis.”

76 Ibid., “Poco fa tornando io dalla messa con mia Madre et la serva … un giovenotto che io non so chi se sia mi ha menato un colpo con un pugnale alla volta del viso al improviso che non me ne so accorta et mi ha ferita a traverso del mostaccio tagliandomi el naso e la faccia con si mal fatto modo, che il medico me ci ha dato parecchi ponti.”
blouse, a black, old, and short, a pair of very tight pants of I don’t know which material, and a woollen black hat French style; his face was thin but he was daring, of middle stature, and as he walked by us and Fulvia he raised his hand from under the cloak and he had a dagger in his fingers, and he hit Fulvia on her face with a diagonal blow, and he cut her lips, so that the physician put 15 stitches in it.”

The notary reported that her mouth hurt a lot when she talked, and that blood came out of her cheek and mouth. Fulvia was in much pain, and the notary decided to come back the next day. The day after Fulvia was a little better, but she warned the notary that doctor Tagliaicozzi had told her not to talk too much. On 29 December, during the third interrogation, the notary found Tagliaicozzi there medicating Fulvia: “I have arrived at said house at the same time Magnificent Tagliaicozzi, doctor in medicine and surgery, wanted to treat her; while said doctor was changing her bandages, I had the chance to see the open wound on her face, which was like this: a wound starting from the corner of the left eyebrow crossing said eye and the nose, and ending on the right side of the face … Tagliaicozzi said he treated this wound with 15 stitches, which I have seen and inspected thoroughly.” Even though this was not a case of a lost nose, a disfiguring wound had been deliberately inflicted on Fulvia’s face.

77 Ibid., fol. 152r.: “passò un giovane sbarbato malvestito menuto bruono in viso che portava una casacha verdona un ferraiolo negro vechio curto un paro de calzoni stretti stretti che me dettero fantesia di che se fossero ed un cappelo di feltro negro basso alla franzese magro in viso ma ardito in su la vita di meza statura, et subito che ci ebbe passato et che arrivò la Fulvia che era davanti a noi alzò la mano sotto il ferraiolo con un pugnale tre dita largo sfoderato et tirò un colpo a traverso il volto a Fulvia mia figlia et gli ha tagliato il mostaccio che il medico ci ha messi 15 ponti.”

78 Ibid., fol. 156v: “perveni ad dicta domum in essa hora quae Magnificus D. Tagliaicotius In chirurgia et medicina doctor ipsa medicare volebat ita quod deletis per praedictus D. Doctor medicamentis quis reprendebat medicata vidi partitum vulnus existente in facie D. Fulviae hoc modo: un sfrescio piglia dal ciglio de fora del ochio manco et tira a traverso di deto ochio e del naso fino alla parte destra della faccia … In quo sfrisio praedictus Magnificus Doctor asseruit dedisse quindecim punctos quae sic bene visa et inspecta per me notarium.”
Fulvia gave the notary a list of people she considered her enemies and who could potentially hurt her. “Lucrezia Villana” was her enemy because Fulvia testified against her in a trial in which she was banished as “bad woman (mala femmina).” From that moment on Lucrezia, once back in town, always went after her insulting her. Among other things, Lucrezia uttered nose-related insults: “she used to yell at me from the window, on the street, anywhere: ‘bad nose’, ‘take it through that big nose’, and similar other insults, and one day because of her envy, she threw urine or something else at me from the window, which ruined my new pink dress.”

Democrite Desiderio was the second suspect: he had been Fulvia’s “lover, and during Carnival he insulted me in the piazza and he publicly showed his penis to me along with a rain of insults, and I sued him and he was put in prison both for this reason and because he had insulted me.”

Giovanni Mele, another suspect, while the Legate was away from Bologna “more than once sent Giulia Rigoni called la Monarina [another courtesan] to tell me to beware since when the Legate would leave something bad would happen to me.”

Francesco Maria Sighizano was another former lover “and several times he did beat me up, and even if lately we made peace, last summer he beat me up again and bruised my eyes, and even if I did not sue him I do not want his friendship no more and I don’t want him around my house.”

Giacomo delli Lieti told la Monarina to tell Fulvia “that I was a whore, a grumbling drunkard and many other injuries (che io ero una poltrona un bugirona una imbriaconaccia).”

Finally, another prostitute appears on the list, la Renzina, “a whore who lives nearby … because of the insults she told me the last few days, as Your Lordship knows since I did sue her … and also because in the past few days, from her front door she told me so that everyone heard that Mr Giuseppe Orsi, his friend, did not want to go to her house anymore
because he had heard other whores closeby saying that she has a mustache like a Ramino.”

Here we see the Orsi name, one of the most powerful Senatorial families of Bologna, connected to a matter of rivalry among courtesans.

The case ended abruptly and no one got convicted, but interrogations went on until the end of 1585 and a parade of other characters pops up in the pages of the record. Particularly interesting is the interrogation of one major suspect, Annibale Landini (then released and absolved of all charges), a young “barber and needle maker (aguchiarolo)” in the service of the Orsi family and apparently very close to the two brothers Camillo and Giuseppe Orsi. The brothers Orsi were suspected of having commissioned him the disfigurement of Fulvia on behalf of their lover, la Renzina, who had had multiple word fights with Fulvia. Annibale told the inquisitors he was poor and that he had lost his job at a master barber’s workshop because too many times he han not shown up at work. Since then, he worked for the Orsi and he shaved and cut his patrons’ hair as a private barber. Annibale revealed an interesting inter-class male relationships with the Orsi brothers, namely, that Annibale’s mother had been Giuseppe’s wetnurse: “I sometimes frequent the Orsi household … Of these Orsi I frequent one is called signor Camillo and the other signor Giuseppe, and I frequwnt their houses more often than others because signor Giuseppe has been raised by my mother and therefore he is

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79 Ibid., fol. 148r-152r: “me diceva nasaccio, dalli a traverso di quel nasone, e simil altre inurie dalla finestra, per strada, et per tutto e tra le altre per farmi dispetto per invidia che mi portava mi tirò dalla finestra non se fu orina o altro che mi machiò una vesta incarnatina nova che havevo … amoroso et anco di Carnevale mi disse villanie in piazza e mi mostrò il membro pubblicamente con dirme un mondo di vilanie basta che ne gli detti la querela et fu messo pregione et per questo et ancho perché haveva un precetto di non dirme villanie … più volte mi ha mandato a dire per Giulia Rigoni detta la Monarina [another courtesan] che io me guardasse perché quando era andato via il Legato me sarria intervenuto male … et più volte mi ha date delle botte et gli ho fatto la pace ultimamente questa state mi dette e mi amacchò l’ochi tanto che io senza farli altra querela non volsi più amicitia sua et non ho voluto che me sia venuto più in casa … una puttana che sta qui vicino … per rispetto delle ingiurie che mi disse alli di passati come VS sa che gli ne detti querela … et ancho perché alli di passati stando sull’uscio dela casa sua et io su l’uscio qui di casa mia disse così forte che ognuno senti che il sig. Iosephe del Orsi suo amico non voleva più andare in casa sua de di perché aveva sentito dir a certe poltrone che stavano qui vicino che lei haveva el mostaccio come un Ramino.”
my milk sibling.”

Annibale had not any problem in telling the notary that he had been “many times in the courtesans’ houses with these signori.”

In another interrogation, Fulvia advanced the hypothesis that she had became the object of a dispute of honor between Democrite Desideri and a young gentleman from Brescia, Giovanni Giacomo Alberici, who was renting a room at her house and probably had fallen in love with her. “In the past months – she tells the inquirers in a passage in which we can notice the language of honor and of “giving the lie” among gentlemen – [Democrite] fought with signor Giovanni Alberici from Brescia, who is this gentlemen I host here in my house, and who is my friend, and said signor Giovanni gave a lie to this Democrite for the sake of my honor, and since then said Democrite has been out of town, and he says he wants revenge, and signor Giovanni has never left the house again … and I think he [Democrite] wants to have me disfigured to get his revenge against him [Giovanni].”

This Alberici’s story took soon a tragic turn, since on 3 January 1584, doctor Flaminio Rota – Tagliacozzi’s colleague at the studio – and the notary were called to Fulvia’s house because Giovanni Giacomo killed himself by inflicting three wounds to his own throat with a razor blade. Witnesses testified that he took his life because he was short of money; moreover, he was feeling so sad because of Fulvia’s disfigurement, probably feeling guilty about it.

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80 Ibid., “io pratico alle volte in casa delli Orsi … Questi Orsi in casa dei quali io pratico uno si chiama il signor Camillo et l’altro il signor Giuseppe delli Orsi et in casa de questi io praticco più strettamente che in casa delli altri perché il signor Giuseppe è mio fratello da latte che mia madre l’ha allevato.”

81 Ibid., “per assai volte con questi Orsi a casa de Cortigiane.”

82 Ibid., fol. 156v-157v: “Alli mesi passati [Democrite] venne alle mane col signor Giovanni Alberici da Brescia che è questo gentilhomo che io tengo qui in casa mia che è mio amico et detto signor Giovanni gli dette una mentita a questo Democrite per rispetto mio et dal hora in qua detto Democrite se n’è stato fuor di Bologna et minacciaria di volersene vendicare et el signor Giovanni non è mai uscito di casa … penso che sia mosso a farmi sfrisciarme per poterse vendicare con lui.”

83 ASB, Torrone, 1670, fol. 192r-195r.
Disfiguring injuries continued to be a frequent sight in early modern Bologna, for both men and women, criminals and prostitutes, noblemen and adulterous women. Not all of them fell into the rather narrow category of injury described by Tagliacozzi in his learned monograph, and in many cases surgeons could intervene right away, suturing and bandaging, without a significant time span occurring between the injury and the treatment. The Bolognese physician was explicit about that. “For example – he wrote – I ask the reader to imagine a terrible facial injury, the result of a sword blow that almost severs the jaw and causes it to hang down to the level of the shoulders. Anyone can see that the jaw is still attached to the rest of the face, however precariously, and that we can restore its integrity with sutures. But uniting the graft with the mutilated nose is another story. It is a laborious and difficult task owing to the distance between the two parts, not to mention the differences in the substance and nature of their integument.”84 As noted by François Delaporte, Tagliacozzi’s procedure could be performed months and even years after the injury had occurred, and in this sense it lacked that sense of urgency which was so characteristic of many surgical procedures.85 This generous use of time and this lack of urgency were in itself a measure of luxury which indicated that the procedure targeted the upper class and its rituals. Moreover, wounds to the nose, ears, eyes, and lips were generally classified as “wounds which do not involve any of the principal parts of the body [heart, brain, and liver] or any of the parts that serve the principal parts.”86

Nonetheless, it is significant that Tagliacozzi, who clearly had to deal with disfiguring injuries given to women’s faces of different classes for reasons revolving around male honor, 84 Tagliacozzi, De curtorum, p. 174 (2:53-54).
85 Delaporte, Figures of Medicine, pp. 57-58.
86 Jean Tagault, Institutione di cirugia (Venezia: appresso Giorgio Angelieri, 1570), p. 128. This book by the French surgeon Jean Tagault (d. ca 1546) had been published in Latin in 1543 and then translated into the Italian vernacular in 1570. It was a very popular and influential compendium: indeed, it went through three other editions (1585, 1596, and 1607) in the space of a few decades.
money, or both, chose to mention only men and to build an entirely male world in his works. The other surgeons, with the exception of Hildanus, followed him in this narrative of men and swords. Is it because these women could not pay for the treatment? All the evidence points to the fact that Fulvia had enough money to afford Tagliacozzi’s reconstructive treatment. More plausibly, disfiguring wounds on women’s faces did not have the same public meaning, as women’s role was not a public one, especially among the upper classes. And certainly saving a prostitute’s face would not have been a good move for a learned and respectable surgeon. Tagliacozzi decided to write his work as a learned surgery monograph on one specific kind of injury and procedure because he observed that daily life was animated by choreography of masculinity in the form of men debating and fighting in public.
CHAPTER 2

PATIENTS AND PRACTITIONERS: A MALE CULTURE OF VIOLENCE

An upper-class clientele played a very important role in the career of middle-class learned surgeon Gaspare Tagliacozzi. Just like other sixteenth-century learned surgeons, Tagliacozzi came from the artisanal class. He was the son of a silk worker of some means, possibly the owner of a small workshop, and climbed the social ladder thanks to his medical education and practice. His career was spectacular: he treated very important and wealthy patients, from the Medici to the Orsini families, until he became the personal physician of Duke Vincenzo Gonzaga of Mantua. He served as Prior of the College of Medicine which he had entered in 1576, and he also was several times tribuno della plebe. He published a first description of his work in a book by his friend Girolamo Mercuriale, and then in the form of a long, erudite, and even verbose monograph, a quite exceptional work among sixteenth-century genres of surgical writing. Tagliacozzi’s career and wealth were built upon his private practice with powerful patrons, and facilitated by his choosing a rather unusual and “wondrous” subject through which he wished to be remembered as an author.

In his narrative of the events of Bologna in the years 1589-1600 chronicler Francesco Galliani wrote the following passage to record the death of the eminent surgeon: “Today 7 November [1599] the excellent doctor of medicine Gaspare Tagliacozzi passed away; in our age, he was more famous than anyone else in the art of surgery, and he used to make noses, lips, and ears that had been cut off by wounds or other things … he was the son of a poor carpenter, and with his virtue alone he has earned 30.000 scudi.” Galliani thought that

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87 Tribuni della plebe were a traditional communal 4-month magistracy which had the purpose of balancing the aristocratic side of the city government. Together with the Magistrati dei Collegi they had economic functions of regulation of food prices.

88 BUB 3839, Cronica, o sia Diario di Francesco Galliani (1589-1600), fol. 83v: “Adì 7 di Novembre [1599] passò di questa vita lo eccellente dottore in Medicina Gaspare Tagliacozzo
Tagliacozzi was born from a “poor” family, the son of a “carpenter.” This information is not correct, but it tells a lot about how Tagliacozzi was associated not only with the faces of the upper classes, but also with ideas of social mobility.

Tagliacozzi was remembered in several chronicles, and he too translated and wrote parts of a chronicle, a significant circumstance concerning his desire to become a public civic figure, a living monument to the city’s political and intellectual prestige. The document is titled *Cronica di Bologna d’Autore Ighnoto che comincia dal 404 e seguita sino al 1585. Portata dall’Idioma Latino In Italiano da Gasparo Tagliacozzi l’Anno 1594*. In fact, this is not just a translation, since Tagliacozzi added his own notes. For example, he shows some familiarity with events related to the hospital of Santa Maria della Morte, the center of training for the Bolognese “learned” surgeons. He also shown some interest for singular human forms when he added a marginal picture of a “human monster” to his translation of a note from 1321 (fig. 2.1).

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89 Tagliacozzi noticed the remaking of the façade of the hospital between 1565 and 1566, when he was a student about to become assistant (astante) of the official surgeons and physician of the hospital: see BUB 1413, fol. 165v-166r. The title of the chronicle listed in the BUB catalogue is doubly incorrect. The manuscript is actually divided into two parts: the first part, up to folio 161v, ends with to the reform of the Senate, the end of the Bentivogli rule and the victory of pope Julius II in 1506, and it is signed: “Laus Deo. Acta Bononiae die quarto mensis Maii anno 1564. Per Gasparem Tagliacotium, ex latino sermone educta.” Then there is a second part, undated, which goes up to 1597 but does not record the events in chronological order, which was written by Tagliacozzi himself. So, the correct end date is 1597, not 1594. Indeed, on folio 165r the author recorded the death of the Duke of Ferrara: “In the year 1597 the news came to Bologna that Alfonso d’Este Duke of Ferrara had died (Nell’anno 1597 vene la nova a bologna della morte del ducha Alfonso da este ducha di Ferrara).”

90 Ibid., fol. 24r.
In this chapter, I briefly sketch a picture of the social and political stratification of late sixteenth-century Bologna, as well as a scheme of the relationships among different kinds of men, and the culture of duel and the practices of violence in the Papal state. I then move to describe the encounter between these kinds of patients and the learned surgeons. I describe what it was like to be a learned surgeon in sixteenth century Italy. I thus focus on practitioners, and I describe the career paths of a group of learned surgeons – teachers, colleagues, and pupils of Tagliacozzi – in late sixteenth century Bologna. I argue that the emergence of a textual representation of facial surgery is linked to the great prestige that surgery and surgeons enjoyed at that studio. Moreover, the specificity of Tagliacozzi’s book and the fact itself that he embarked in the enterprise of writing a long, learned, and specialized monograph on one single surgical operation, at a time in which virtually none existed, was closely linked to the specificity of the Bolognese social and cultural context of the late Renaissance.

Based on the scant evidence of the actual practice of this procedure, I argue that the reconstruction technique was performed very few times during the long sixteenth century, either by Tagliacozzi or by other surgeons. This means that Tagliacozzi chose to write about and to give textual representation to one of the most spectacular procedures among many a surgeon could perform on men’s and women’s faces. All kinds of skin problems and injuries could affect people’s faces, and Tagliacozzi clearly became known as an expert on facial issues in general. Nonetheless, he decided to write about only a tiny portion of the range of operations one could perform on the human face. In other words, surgical reconstruction was a rare, demanding, and expensive procedure that only few men could have undergone, but the Bolognese surgeon choose to give, so to speak, a plastic and solid form to fluid information on the reconstructive technique that previously circulated in the form of cases and sparse notes. However, this rarely practiced procedure was connected with several important trends concerning developments in medicine and surgery, and social and political phenomena. Only
a self-confident learned surgeon, backed by a century-long tradition of academic surgery, immersed in a culture of aristocratic honor and violence, could have written a learned monograph on one single surgical procedure.

SOCIAL STRATIFICATIONS

Reconstructive surgery in the sixteenth century was an elite and a man’s business. At least, this was the representation the authors wanted to convey their readership. This tradition pre-dated Tagliacozzi’s monograph but it was both exploited and further carried on by the Bolognese physician. Tagliacozzi consciously targeted noblemen, their culture of the face and honor, and their ethos of aggressive masculinity.

Historians of early modern noble culture generally share the idea that around the middle of the sixteenth century a unified and homogeneous ideology of the noble class took shape. Claudio Donati defined this period as a “time of oligarchical closure and cultural and social aristocratization.” Noblety became a “trendy topic” for discussions and writing, and a flood of books, pamphlets, treatises, manuscripts, correspondence materialized on the subject. At the same time, the number of the noblemen increased all over Europe, and the magnitude of the process of class separation and distinction intensified as well. This process of change within the ruling class triggered, in turn, a certain widespread social tension. Finally, this was also the period in which noble ideology clashed and negotiated with theories and practices of political “absolutism.” The late sixteenth-century is recognized as the period in which this process began in Europe and beyond.


If we narrow the focus on Bologna, we have at hand a striking document concerning the definition and role of nobility and social stratification. This document was written by Camillo Baldi (1551-1637), a very important figure in Bolognese academic and political culture. It does not present by any means an objective view on the social composition of the city, since it was written by a member of the local noble class who enthusiastically supported the central government of the Roman court, and for this reason would probably have been considered as a traitor by some of his fellow patricians. Nonetheless, it is a precious document if read “between the lines.”

In the sixteenth century, after the Church re-gained effective control of the city, the Pope formally ruled Bologna. He exercised his jurisdiction through a Cardinal Legate, who ruled the city with the Senate, or the Reggimento as it was also called, expression of the most powerful, rich, and influential patrician families of Bologna. The Legate had to oversee the justice system and the public order, while the Senate had the power of managing the finances.

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93 The manuscript is titled *Descrizione della città, territorio, qualità, costumi e forma del governo del popolo di Bologna, e necessary avvertimenti a chi desidera di ben governare un tal Stato. Il tutto fatto dal dottor Camillo Baldi professore di filosofia nello Studio della città di Bologna l’anno di nostra salute 1605*. Baldi was born in 1551 from a noble family, and his father was a professor of medicine and philosophy. He became a member of the College of Physicians and Philosophers, was a colleague of Aranzi, Tagliacozzi, and Cortesi, and taught theoretical medicine, philosophy, and logic at the studio for 59 years. He wrote on topics as diverse as practical philosophy, chivalric sciences, and physiognomy, that which makes him a very representative figure of the cultural context of reconstructive surgery and a direct witness to it. Baldi was also named overseer of the Aldrovandi Museum, and died in 1637. The *Descrizione* was probably commissioned by a Cardinal Giustiniani, who would become Cardinal Legate of Bologna the following year. See Mario Fanti, “Le classi sociali e il governo di Bologna all’inizio del secolo XVII in un’opera inedita di Camillo Baldi,” *Strenna Storica Bolognese*, XI (1961): 133–179. See also Giancarlo Angelozzi, “Nobili, mercanti, dottori, cavalieri, artigiani: stratificazione sociale e ideologia a Bologna nei secoli XVI e XVIII,” in Walter Tega, ed. *Storia Illustrata di Bologna*, vol. 2, (Bologna: Nuova Editoriale AIEP, 1989), pp. 41-60.
and the general administrative matters. This political balance was called “mixed government (governo misto).”

Baldi described the five orders of people of Bologna, associating them with five types of men: knights, gentlemen, merchants, artisans, and the “plebs.” The definition Baldi gave of the noble, or chivalric, order was rather standard for the early seventeenth-century, and followed half a century of debates and discussions on the essence of nobility.

They say that Knights surpass all other citizens by virtue of their nobility and wealth. The Bolognese call noblemen those who are born from an old and honored family, which always had great wealth, and just like without light one cannot see a painting, however beautiful, in the same way they [the Bolognese] do not call one a nobleman if he is not wealthy, and those who were noble and became poor are called fallen noblemen. This is perhaps not without reason, since a nobleman must be generous, liberal, and munificent, and when he has nothing he cannot do any of these things. Therefore, if a nobleman becomes poor, he also becomes ignoble, because he cannot act in a noble way. The other reason is that there are neither nobility nor virtue when there are no wisdom and good judgment in a man: throwing away one’s wealth and becoming poor for whatever reason are signs of poor judgment and limited intellect. Therefore, with his wealth a nobleman loses his nobility too; and it is useless to blame bad luck or some other misfortune, since men are the makers of their own fortune.

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95 BCAB, B. 3587: Descrizione della città, territorio, qualità, costumi e forma del governo del popolo di Bologna, e necessary avvertimenti a chi desidera di ben governare un tal Stato. Il tutto fatto dal dottor Camillo Baldi professore di filosofia nello Studio della città di Bologna l’anno di nostra salute 1605, fol. 64-65: “Definiscono l’Ordine Cavalleresco esser quello, che per nobiltà, per ricchezze gl’altri Cittadini precede. Nobile chiamano li Bolognesi, colui, che è nato d’un antica e onorata famiglia, dalla quale sempre siano state possedute molte ricchezze, e sicome senza il lume non si vede colore, o Pittura, sia quanto si voglia bella, così senza ricchezza non mirano ne considerano la Nobiltà, e sogliono li Nobili venuti in povertà dire, che già erano Nobili, ma ora sono caduti ed abbassati; e forse non senza qualche cagione, perché veramente il Nobile deve essere magnanimo, magnifico, e liberale, ma quando non ha robbia, non può fare alcuna di queste cose: però fatto povero, è fatto ignobile ancora, perché non può Nobilmente operare. L’altra ragione è perché non può esser Nobile veramente dove non è virtù, ne può essere virtù dove non è senno e giudizio: il gittar il suo, e per qualunque cagione diventar povero, è segno di poco cervello, e di mancamento di giudizio, perciò ne segue, che il Nobile con le ricchezze perda la Nobiltà ancora; ne occorre dar la colpa alla fortuna, o ad altra cagione, perciocché ogni uomo è fabro della fortuna sua.” The narrow correspondence between class and political role of the Bolognese citizens is confirmed by the contemporary manuscript by Ciro Spontone on the governmental
Noblemen had to meet two requisites to considered real noblemen: they had to be born from an ancient aristocratic family, and they had to be wealthy. In other words, they lived without working, and they – at least formally – cultivated a noble ethos and way of living.\footnote{BCAB, B. 3587, fol. 75: “Si dilettano questi Signori di abitar nobilmente, vestir bene, aver compagnia quando vanno fuora, alloggiano Forastieri … molti si compiaccono si suoni e di canti, di nuove, di ciancie oziose.”}

What about doctors? From Baldi’s description, certainly biased by the fact that this was the group to which he himself belonged, it emerged that graduates and members of the Colleges occupied a liminal space. Doctors comprised one of the few social ranks which allowed for a certain degree of social ascension, and for this reason it was potentially in conflict with the knights and the gentlemen. Baldi reflected here the opinion of the minority of the lecturers and intellectuals who felt discriminated against and excluded from real political power. He also voiced the fact that their relationship with the patrician class composing the Senate was not easy at all.\footnote{During the late sixteenth-century and the early seventeenth a harsh fight between the Colleges of doctors and the Senate went on in Bologna, particularly concerning the government of the “Gabella grossa”, the fund, coming from taxation, destined to pay for the lecturers’ salaries; see Gian Paolo Brizzi, “Lo Studio di Bologna tra orbis academicus e mondo cittadino,” in Adriano Prosperi, ed. Storia di Bologna, vol. 3, tomo II: Cultura, istituzioni culturali, Chiesa e vita religiosa (Bologna: Bononia University Press, 2008); Verardi Ventura, “‘L’ordinamento Bolognese’,” pp. 352-53.} Practically speaking, by becoming a doctor a man could jump two or more orders. Baldi had already claimed earlier in his treatise that “as an old habit, doctors have a higher status than knights, and among the lay people they have the higher status after the magistrates.”\footnote{BCAB, B. 3587, fol. 19: “precedono per antico uso li Cavalieri, e dopo li Magistrati fra i Laici vengono in primo luogo.”} Clearly a certain tension and competition existed between doctors and knights. Baldi also argued that it was not possible to move from one organization of Bologna: see Sandra Verardi Ventura, “‘L’ordinamento Bolognese Dei Secoli XVI-XVII.’ Introduzione all’edizione Del Ms. B 1114,” L’Archiginnasio 76 (1981), 349–354.
order to the other but by following two very narrow paths: “on the one hand, the path of the letters and sciences which are useful and necessary, on the other, the path of wealth.” The first one was not very successful. For example, doctors were entitled to public signs of honor such as that of having precedence in the streets, but in practice “besides according them precedence when they meet on the street, noblemen do not hold doctors in high esteem, except when they need them; and it has now been a while that people from the first order do not care about the letters, unless they believe them to be the fastest way to access the Roman court and the offices that are distributed there; otherwise, noblemen despise the letters, and they laugh about them.”

Philosopher and scientist as he was, Baldi complained about the fact that even if wealth did not formally granted access to the first orders, rich people of lower birth were much more respected than learned people.

NOBLEMEN’S CULTURE OF VIOLENCE

Baldi’s description gives the modern reader a glimpse of the social tensions that could interfere in the doctor/patient relationship, especially for a procedure like facial reconstructive surgery and a man like Tagliacozzi.

By the middle of the sixteenth century, the culture of honor and cultural elitism of nobility increased as their political privileges became more and more questioned. The discourse on nobility at mid-century established itself around the pairing of honor and the

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99 Ibid., fol. 70-71: “l’una è quella delle Lettere, e delle Scienze, che sono utili, e necessarie, l’altra della robbia … oltra quel darli la strada negli scontri, li Nobili poco caso fanno di loro, se non quando e quanto ne hanno bisogno; e da certi anni in qua, molti di questi del primo ordine non attendono alle Lettere, se non quando le stimano scala per salire alla Corte di Roma, e agli’uffizii, che in quella si dispensano, altrimenti le sprezzano, e se ne ridono.”

100 Ibid., fol. 71-72.
duel. Both honor and the duel were concepts and practices that potentially conflicted with State authorities, especially in the Papal States.  

True noblemen had their honor to defend. But what was honor? The famous Portuguese theologian and jurist Luiz Beja de Perestelo (1539-1610) in his Responsionum casuum conscientiae (1597) defined honor as “a condition of perfect dignity, proven by the life and customs … the fully clear notion that others have of us.” Early modern honor was an ephemeral and almost impalpable male value defining the worth of a man in the eyes of others. Honor was not primarily a matter of real deeds but of perceptions of virtue, social status, and the intrinsic nobility of a person. For a nobleman, a life without honor was worse than death. This was the reason why those whose honor was under threat had to put their life at risk in a duel. When recognition of the other’s reputation and virtue failed, a duel should take place in order to restore the broken honor, to which everything else was subordinated. Honor had nothing to do with the law: it was above the law. One of the most quoted definitions came from a bestseller of the sixteenth century, Girolamo Muzio’s Il duello (1550): “The knights’ opinion is that there is no law, neither of a State nor of a prince,

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101 This was an editorial phenomenon as well: twenty-seventy books were printed between 1550 and 1563 on matters regarding the chivalric science of honor and duels; see Donati, L’idea di nobiltà, p. 94. The cultural elaboration of the literature on chivalric sciences has been defined as “one of the few avenues for the political debate in Italy,” especially because of the problem of “precedenze,” namely the problem of social and political primacy. Chivalric science literature reflected the fragmented composition of the upper classes, and at the same time it constituted the common language of all these fragmentary components; see Giancarlo Angelozzi, “Cultura dell’onore, codici di comportamento nobiliare e Stato nella Bologna pontificia: un’ipotesi di lavoro,” Annali dell’Istituto Storico Italo-Germanico in Trento, VIII (1982): 305–324.


103 One of the most crucial debates running through this literature concerned who could deal with honor, what kinds of men, what social classes. Experts of the chivalric sciences argued that only noblemen had honor to defend. In practice though, historians have showed that the lower classes, and sometimes women too, could fight for their honor and could put their honor at stake in public, even if dominant discourse made honor the upper-class male value par excellence; see Niccoli, Storie di ogni giorno.
no wealth, no life which should be preferred to honor; and that despite what some
constitutions say and whatever the dangers, knights must obey only the law of honor. Such a
law says that the one who is called to the challenge of the arms must immediately reply to
that call with a brave soul, and that the one who does not does not deserve to be counted
among the honored knights.”

In fact, it is hard to grasp what honor consisted in if it is examined apart from duel, its
twin. Francois Billacois has defined duel as a “total social phenomenon.” The duel was
indeed a juridical institution, a vector of social differentiation, a political manifestation, a
work of art, a religious ritual, and it worked according to laws of a “symbolic” economy.

Early modern duel was a form of cultural resistance to the rise of the centralizing States, or at
least the principal expression of a desire of independence from the judicial systems expressed
by the noble classes. The sixteenth-century duel for honor was constitutionally linked to the
business of men of honor taking care of their affairs as a true “symbol of aristocracy’s

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104 Girolamo Muzio, Il duello (Venice: appresso Gabriel Giolito de Ferrari e fratelli, 1550),
fol. 84r: “Et la opinione de’ cavalieri è, che legge alcuna né di patria, né di principe, né
interesse di havere, né di vita, all’honore non debba essere anteposta; e che non ostante
alcuna costituzione, né pericolo di perdita, i cavalieri alla legge dell’honore debbano
obbedire: la quale è, che dove altri è chiamato per via ordinaria alla pruova di arme, là se ne
debba incontanente con prontezza di animo caminare; e che quale altramente fa, non sia
degno di essere annoverato fra cavalieri honorati.”

105 Great quality literature on early modern duel has grown in the past three decades. These
works have been especially useful for this work: Francesco Erspamer, La biblioteca di don
Ferrante: Duello e onore nella cultura del Cinquecento (Rome: Bulzoni, 1982); Marco
Cavina, Il sangue dell’onore: storia del duello (Rome: Laterza, 2005); David Quint,
“Duellling and Civility in Sixteenth Century Italy,” I Tatti Studies in the Italian Renaissance 7
(1997): 231–278; Edward Muir, Mad Blood Stirring: Vendetta in Renaissance Italy
(Baltimore: Johns Hopkins University Press, 1998); François Billacois, The Duel: Its Rise
and Fall in Early Modern France, tr. Trista Selous (New Haven: Yale University Press,
1990); Thomas V. Cohen, “The Lay Liturgy of Affront in Sixteenth-Century Italy,” Journal

autonomy and privilege."\textsuperscript{107} Duels and chivalric values became the expression of the community of the noble warriors threatened by state developments.\textsuperscript{108}

Moreover, duels were socially and culturally linked to war. The periods of the maximum fortune of duels coincided with periods of war, in our case the Italian wars. The particular development of the art of war also played a part in the phenomenon. The advent of infantry, fire arms, light cavalry, armies filled with people of lowly origins who could become more “noble” through their service in the army pushed forward the social system of honor with its signs and rituals.\textsuperscript{109}

The worst sin for a noble knight was to lie, and especially to lie – or, better, of being accused of lying – about another knight’s honor. The most frequent cause of duel was thus an \textit{ingiuria}, an insult. In turn, one of the most serious insults was the \textit{mentita}, namely accusing someone of lying. The accusation was even more serious if those insults touched upon honor and the function of the body at the same time, like inflicting punches and stick blows.\textsuperscript{110} The culture of duel was a cult of the sword. For example, while the \textit{mentita} was insulting per se, a knight wounded with a sword could not consider himself injured, since the sword was the purest noble-class weapon. On the other hand, the stick and the hand as instruments of offense expressed disdain for the insulted, a sign that he was believed to belong to a lower

\textsuperscript{107} Cavina, \textit{Il sangue}, p. 41.

\textsuperscript{108} As Mario Sbriccoli has argued, the centralizing model of penal justice ignited a conflict with older modes of communitarian ways of doing justice. Sbriccoli has described a system of “hegemonic justice” opposed to one of “negotiated justice” in the early modern states, a regime in which justice lived through an informal network of mediators, negotiators, and peace-makers, which was different, if not always opposed, to a conception of justice as a formal damage to the State. Early modern people used to believe that “justice” was located in the informal and communitarian network, rather than the formal apparatus. See Mario Sbriccoli, “Fonti giudiziarie e fonti giuridiche. Riflessioni sulla fase attuale degli studi di storia del crimine e della giustizia criminale,” \textit{Studi Storici}, 29, 2 (1988): 491–501.

\textsuperscript{109} Cavina, \textit{Il sangue}, pp. 43-44.

\textsuperscript{110} Ibid., pp. 72-73.
class. But the sword had to be used to cut, not to inflict blows with its flat surface. Certain kinds of wounds and injuries – like certain kinds of arms – were typical of the nobleman.

The literature on duelling was not uniform throughout the sixteenth century. Indeed, unlike judiciary duels, which were regulated procedures for establishing the legal truth of a matter in the presence of a representative of the king or the local lord, and tournament duels – training exercises for knights who had to be prepared for war – duels “in point of honor” became clandestine in the second half of the sixteenth-century.

The paradox was that at the time of its golden age, the practice of duel was also severely condemned by secular and spiritual authorities. While the courts of the Este at Ferrara and of the Gonzaga at Mantua became the best-known centers for the chivalric sciences of sixteenth-century Italy, in the Papal state, where the spiritual and the secular power were unified in one single person, the matter became particularly delicate. On 4 December 1563 the twenty-fifth decree of the Council of Trent was issued, titled *Detestabilis duellorum usus*.

The detestable custom of dueling, introduced by the contrivance of the devil, that by the bloody death of the body, he may accomplish the ruin of the soul, shall be utterly exterminated from the Christian world. Any emperor, kings, dukes, princes, marquises, counts, and temporal lords by whatsoever other name entitled, who shall grant a place within their territories for single combat between Christians, shall be thereupon excommunicated … As to the persons who have fought … they shall incur the penalty of excommunication, and the confiscation of all their property, and of perpetual infamy, and are to be punished as homicides, according to the sacred canons; and if they have perished in the conflict itself, they shall be for ever deprived of ecclesiastical sepulture. Those also who have given counsel in the ease of a duel, whether for the question of right, or fact, or have in any other way whatever persuaded any one thereunto, as also the spectators thereof, shall be subjected to the

111 Ibid., p. 74. Other causes of duel included: to defend, exalt, or avenge the honor of a woman, whether she was a wife, a daughter, or a mistress; belonging to rival camps (mainly to different confessions); fighting for a public office (dueling was a means to prove that the post was not merited); deciding legal cases (when trials were too long and intricate); precedence, or fighting for prestige and material symbols (such as dresses, seating, rank in ceremonies, etc.); fighting just for “fun;” see Billacois, *The Duel*, pp. 8-14.
bond of excommunication, and of a perpetual malediction; any privilege soever, or evil custom, though immemorial, notwithstanding.\footnote{112}{Quoted by Cavina, \textit{Il sangue}, pp.109-10. Before Trent, several popes had issued similar statements. Julius II in the \textit{Regis pacifici} bull (1509) issued a solemn condemnation of duels for honor as a case of private violence and the propensity to fight long-lasting feuds on the part of the noble class. Leo X’s \textit{Quam Deo} bull (1519) confirmed the severe prohibitions and the picture of the duel as a threat to the order of the State, providing for punishments like excommunication, \textit{damnatio memoriae}, confiscation of all property, including the lands, and fines for the spectators. Julius III in the \textit{Cum sicut accepimus} (1554) reaffirmed the need to repress duels, confirming that the practice was far from gone. Pius IV, in the \textit{Ea quae} bull (1556) extended the prohibition to all Christianity, not just the Pontifical State. See Giancarlo Angelozzi, “La proibizione del duello: Chiesa e ideologia nobiliare,” in Paolo Prodi and Wolfgang Reinhard, ed. \textit{Il concilio di Trento e il moderno} (Bologna: Il mulino, 1996), 271–308, especially pp. 278-282.}

Secular state authorities agreed with the core arguments of this condemnation. Duels were assimilated to \textit{lèse majesté} crimes and banned in most of the Italian states.\footnote{113}{Duels were outlawed in Naples in 1540 (passible capital punishment); in Venice in 1541 (passible of banishment); in Milan in 1541 (punishable by death and confiscation of property); in Mantua in 1543 (punishable by confiscation of paternal property); in the Papal States, including Bologna of course, in 1543 and in the Duchy of Parma in 1546 (in both cases punishable by capital execution and confiscation of goods): see Donati, \textit{L’idea di nobiltà}, p. 102. The text of the decree challenged the noble class’ customs and ideology. But the decree itself was the outcome of a compromise between two parties within the Church which were divided on the matter, perfectly reflecting a general cultural ambivalence between tolerance and condemnation of aristocratic rituals. The Council fathers devoted very little time to the topic of the duel, but duel was the object of at least three-century-long discussions in Church decrees, canon law literature, and confessors’ manuals. Within this long tradition, duels could fall under the rubric of \textit{inculpata tutela}, which admitted the use of private violence in certain cases as a measure of self-defense. And indeed, the text of the decree of the Council had some ambiguous elements and reflected the different views of its extensors. The debate over the text prohibiting duels was marked by a division among the “rigorists,” who also wanted to put books on duels to the index, and pushed for harsher punishments, and the “laxists,” who claimed that Scriptures never forbade it, that the reference to the Devil’s work was excessive, and that more tolerance for duels was in order, when such duels were taking place in private. This whole affair did not end in 1563 either. The Bolognese pope Gregory XIII (ruled 1572-1585) in the 1570s and early 1580s made clear that the condemnation referred to all forms of duel, but he never mentioned honor. Furthermore, Gregory made a distinction between duel and fight or brawl (\textit{rixa}), thus leaving a door open for a much more agile and informal form of duel that in the meanwhile had spread across Italy. Clement VIII (ruled 1592-1605) issued his \textit{Illius vices} bull in 1592 a text produced in a very difficult environment marked by a strong preoccupation for public order in the Pontifical State, mostly due to banditry and famine. Clement explicitly connected his condemnation to the knightly (\textit{more cavalleresco}) duel. See Angelozzi, “La proibizione del duello.”}
The severity of Counter-Reformation ideas did not translate automatically and immediately into practice. For example, sixteenth-century confessors’ manuals were soft on duels. One of the most influential of such manuals, the *Enchiridion sive manuale confessariorum et poenitentium* written by the Augustinian monk Martin de Azpilcueta called El Navarro (1492-1586), published in Venice in 1584, clearly stated that violence and homicide for self-defense had always been admitted, and that honor was the most precious of all goods. Duels for honor had to be tolerated: “Honor is more worthy than other goods given by fortune.” In other words, Navarro claimed that natural law of self-defense could not be altered by positive law, an opinion which was very similar to that of the most radical members of nobility. The Trent decree did not have any strong immediate effects, even though it expressed both the idea that duels were nothing better than homicides, and that the State needed to exercise a “monopoly” on violence.

In any case, literature opposing the chivalric sciences, the culture of honor, and duels existed and multiplied, without ever reaching the editorial peaks of its foe, after 1563. One very interesting case is Fabio Albergati’s *Del modo di ridurre alla pace le inimicizie private*, published in Rome in 1583. Albergati (1538-1606) graduated in law in Bologna and had a brilliant career at the Papal court. In his book he argued for a new ethos of the good civil servant which reflected new ideas about the state and citizenship. Albergati explicitly claimed that chivalric virtues were not compatible with a well-ordered state, and that honor was indeed a value, but “true honor” was given by personal virtue, which in turn was linked to the welfare of the State, the *res publica*. Honor was therefore not just an attribute of “active men,” but of all men who had a role in the organization of a good society (politicians, the clergy, soldiers, judges, those who practiced the mechanical arts, philosophers, etc.). Honor was not only restricted to nobility and it was not especially linked to physical prowess or to

the faculty of carrying weapons, since the state and the Prince were the only criteria for conferring honor. Learned physicians and surgeons must have felt included in this new class of honorable citizens and civil servants.

The impression of tolerance and compromise is confirmed not only by the cases of duels reported by chroniclers throughout the peninsula and the continuous flow of books, new or reprinted, on chivalric science and duels, but also by the fact that the literature on duels became the object of a concrete project of expurgation by the Congregation of the Inquisition only in 1596, and with several attenuating provisions. In the period which roughly went from the 1560s to the 1590s the Church was busy on many fronts, and opening up a new one against the ideology of the upper class would have seemed unwise, at least until the outbreak of noble brigandage in the 1590s. Books on honor and duel continued to

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116 Claudio Donati, “A Project of Expurgation by the Congregation of the Index: Treatises on Dueling,” in Gigliola Fragnito, ed. Church, Censorship and Culture in Early Modern Italy (Cambridge: Cambridge University Press, 2001), pp. 134-61. A similar tension between condemnation and fascination for noble violence by the emerging states can be found in the case of banditry, or brigandage. In the papal state there was a real outbreak of banditry in the period between the middle of the 1570s and the middle of the 1590s, against which the Popes did not hesitate to wage real wars. The phenomenon of banditry, in its specificity related to this time and place, originated when powerful and rich noblemen were banished from their cities for various sorts of crimes considered lése majesté – the most common one was murder – thus falling victim to the inquisitorial trial enforced by the state. These bandits then retreated to the countryside, sometimes taking advantage of their county villas or castles, organizing private armies, subjugating peasants, and robbing passers by and entire villages. The current view is more inclined to picture banditry as a higher-class phenomenon. Some historians explained the banditry crisis of this period as the resistance of the feudal class and local lords to the absolutist policy of the Popes; others think that the phenomenon was an expression of the permanent weakness of the Pontifical States’ power. Popes even tried to integrate noble bandits into the state as military professionals, soldiers, leaders, and while in some cases they succeeded, many knights of the Papal States preferred to leave to fight against the “Turks” in Eastern Europe, at the service of foreign rulers. The overlap between the knight as a military leader and the nobleman as a privileged citizen in the social life of late sixteenth century was no doubt one of those delicate sites of exchange in which early
circulate. The 1596 prohibition took some inquisitors by surprise and even raised doubts and criticisms. For example, the project of expurgation in Parma and Piacenza was welcomed lukewarmly by the local Inquisition’s examiners. Ultimately, even projects of expurgation and correction failed to see the light and remained unpublished in the Inquisition archives.\footnote{Donati, “A Project of Expurgation,” pp. 144-45.}

Discourse on duel was heavily gendered, and appealed to noblemen’s specific virility. One anonymous Bolognese manuscript on the duel from the beginning of the seventeenth century stated that state justice was for women, not real men. “It seems that in those cities where duel rules the citizens must necessarily practice it not to look dishonored and even impious in the face of others; and this is mainly because soldiers, knights and all the honored man do not think that in such cases it is acceptable to step back ... they also believe that to call the magistrates and the Prince is by all deemed unworthy of a honored man but only suitable for women, who do not have any strength whatsoever in them and therefore protect themselves under the shield of justice, a shield which is shameful for soldiers and men of honor, whose trial is that of the arms alone.”\footnote{Donati, “A Project of Expurgation,” pp. 144-45.} The very gender identity of someone who refuses to duel was put into question.

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modern political order was decided. Banditry and nobiliary violence were nuanced phenomena: on the one hand, banditry was the expression of the noble ideology of resistance to the new culture of the State; on the other hand, the Papal States were not an “absolute” monarchy at all in the late sixteenth century. Local noblemen and the upper classes always tried to reach agreements and compromises with the central power. This double process, or double bind, can be seen in banditry, in the use of the army, in the many Bolognese diplomats working in Rome, and in the ambivalence towards duelling and the noble ideology of honor showed by secular and spiritual authorities. See Irene Fosi, La società violenta: il banditismo nello Stato pontificio nella seconda metà del Cinquecento (Rome: Edizioni dell’Ateneo, 1985); Gherardo Ortalli, ed. Bande Armate, Banditi, Banditismo E Repressione Di Giustizia Negli Stati Europei Di Antico Regime: Atti Del Convegno, Venezia, 3 - 5 Nov (1983); Andrea Gardi, Lo Stato in Provincia: L'amministrazione Della Legazione Di Bologna Durante Il Regno Di Sisto V (1585-1590) (Bologna: Istituto per la storia di Bologna, 1994); Giampiero Brunelli, Soldati del papa: politica militare e nobiltà nello Stato della Chiesa (1560-1644) (Rome: Carocci, 2003); Irene Polverini Fosi, Papal Justice: Subjects and Courts in the Papal State, 1500-1750 (Washington, D.C: Catholic University of America Press, 2011).
Indeed, all the sources point out to the fact that violence among noblemen and
between noblemen and commoners was a constant feature in the urban and country
landscapes of Bologna. A decree on public order published in 1575 addressed, by
specifically linking the face to the culture of honor, “disfigurements and injuries” (Sfreggi, e
debilitamenti): “we command that all persons of all status who with weapons or whatever
tool will permanently disfigure, mark, or scar someone’ face or some other visible body part,
or will cut off or injury some other part, he will be subject to paying 200 scudi and to other
corporal punishments.”

Noblemen defending their honor by dueling were part of a coherent and specific
culture of violence and physical prowess, which Gaspare Tagliacozzi consciously targeted
when he wrote his book. Sixteenth-century Bologna, as noted by Montaigne, was not only

118 BAB, A. 1361, Trattato del Duello, fol. 11v-12r: “in quella città dove sia introdotto il
Duello, parrebbe, che i cittadini per non rimanere, non solo dishonorati, ma ancora empii,
dovessero di necessità essercitarlo, et massimamente poiché a soldati, et a cavalieri et a gli
huomini honorati non pare in alcun altra maniera convenevole il risentirsi in cotali casi … et
che il ricorrere a i magistrati, et al Prencipe sia stimata communemente cosa indegna
d’huomo honorato; ma conveniente a femina che non havendo in se fortezza alcuna si riprara
con lo scudo della giustitia, scudo vergognoso a soldati, et a huomini d’honore, dovendo
esser il lor tribunale quello dell’armi.”

119 When passing through Bologna in his Italian journey in the 1580s, Michel de Montaigne
paused to notice the famous and celebrated schools of arms and fencing, the studio, and the
fact that Bolognese noblemen used to divide up in two parties, the Spanish and the French,
and to fight against each other; see Michel de Montaigne, Journal de voyage en Italie (Paris:
Les Belles Lettres, 1946), pp. 154-57. A public decree dated October 1584 forbids to carry
the signs and things that mean belonging to a certain “faction” against others, since “non
deve esser altro nome, altra Fattione, ne altra insegna, che della Chiesa”. Reference to foreign
names and symbols, probably the French vs. Spaniard parties mentioned by Montaigne; see
ASB, Legato, Bandi.

120 ASB, Assunteria di Sanità, Bandi Bolognesi, b. 1: Bandi generali del Ill. e Reverendissimo
Monsignor Fabio Mirto Arcivescovo di Nazarette Governatore di Bologna. Pubblicato in
Bologna alli xvii di Febraro, & reiterato alli xviii & xix detto 1575: “si ordina che qualunque
persona di qual si voglia condizione, che con Arme, o qual si voglia istromento farà sfregio,
segno, o cicatrice da restarsi perpetuamente in faccia, o in qual altro luoco della persona
apparente, o li mozzarà, o debilitarà alcun membro, incorrerà nella pena di scudi duecento
d’applicarsi, & c. & di altre pene ancora corporali.”
famous for its studio, but for its schools of fencing too. The emergence of fencing as a sport, just like the contemporary transformations of jousting, riding, and gymnastics, was part of a wider process of transformation of military techniques into new bodily techniques separated from the purpose of war and associated with the new “civil” needs of the noble class in times of political crisis.\footnote{Guy Bonhomme, “Le cheval comme instrument du movement humain à la Renaissance,” in Jean Céard, Marie Madeleine Fontaine and Jean-Claude Margolin, ed. \textit{Le corps à la Renaissance} (Paris, 1990); Georges Vigarello, “The Upward Training the Body from the age of Chivalry to Courtly Civility,” in Michael Feher, ed. \textit{Fragments for a History of the Human Body, 3 Vols} (New York: Zone Books, 1989), vol. 2, pp. 148-99.} \textit{Opera Nova} by the master of fencing Achille Morozzo (1484-1553) is the most famous and well-received fencing book of the times, reprinted throughout the whole sixteenth century after its 1517 first edition (fig. 2.2). This is a manual of bodily technique, but book V, the last one, is devoted to specifying the rules of an honorable duel. In chapter 26 Morozzo presented and discussed the idealized case of a duel in which one of the duelists cut one eye out of the enemy’s orbit, and the other reacted by cutting off his nose. The question was how to decide who won the duel. The knight who cut out the eye argued that there was no worst thing than to be deprived of sight, since a man is useless if he cannot see. He went on by explaining that the eye was the most noble part of the face, placed in a most eminent site, and it was the guide of the whole body in that it was as if it shed light on its path. Moreover, visual impressions were decisive for human memory and for human pleasure, for example when one contemplated the vividness of the colors of the world. Eyes could be opened and closed and thus manifested the supreme human feature of willpower. Finally, the eye was most excellent “so much so that if it is hit it causes more pain, and for this reason it enjoys bigger honor.” The knight also reviled the nose. It was a “useless and vile part of the head” because it was the vessel of the excrements of the brain and the “stinking vapors of the head,” and finally because smell was useless for human life. The only merit of the nose concerned his role in the symmetry and beauty of the face.
The nose cutter replied that the nose was unique in the economy of body parts, therefore its loss was more disastrous, since a face without a nose could not be repaired in any way. If one lost an eye, one did not lose sight, and moreover eyesight was made stronger and more acute in the remaining eye. Moreover – the nose cutter went on making reference to the tradition of excluding disfigured people from both civic and canonical offices – the law did not claim that one who lost one eye must be removed from office, thus implying that such man was not deemed imperfect. “Losing the nose is a bigger disgrace, because given that the human face is similar to the divine face, it is completely disfigured by the loss of the nose: it loses its beauty, for which there is no remedy, and no one could cover the deformity produced by a missing nose … losing the nose is the bigger loss, just like a man who loses his only son suffers more than a man has two sons and loses one.” The knight recalled that it was a common and shared opinion that “there is no bigger insult and affront to a living man than cutting his nose, which represents a bigger offence than the simple loss of a foot, a hand, or an eye, because one thing is more apparent [in those men who have lost their nose], namely shame; and for this reason it is considered a very serious punishment when criminals have their nose cut off, because it is a permanent sign of the punishment on his face, which cannot be hidden in any way.” The conclusion by Morozzo was that cutting off the nose was by far a more serious offence, and that the winner would always be the one who cut the nose.  

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122  Achille Morozzo, *Opera nova* (Venice: ad instanza de Melchior Sessa, 1550), fol. 124r-v: “tanto e più quanto che per la sua percussione causa maggior dolore, & per questo ha maggior honore … membro inutile, nel capo, e vile … puzolenti vapori della testa … Perdere il naso, è maggior vituperio, attento che essendo la faza humana assimigliata al volto divino, totalmente per la perdita del naso resta molto deturbata, perdendo la ornate belleza, alla quale non è alcuno remedio, ne potria per coprimento celare tale deformità del naso tagliato … è maggior pena e incarico per exemplo uno che perde el naso, come quello el quale gli more lo unico figliolo ha magior dolore di quelli che havendone dui, li more solamente uno … non si può fare magiore improperio, e ingiuria al huomo vivente, che privalo del naso, per el quale è magiore offesa che se d’un piede, d’una mano, o d’un ochio lo privasse, perché è più manifesta cosa: cioè vergogna, e per questo per una gran pena se sole uno delinquente
WHAT IS A LEARNED SURGEON?

Let me now turn to practitioners. Historians of early modern societies have emphasized the fact that the study of surgeons is still in its infancy, and in general that the history of early modern surgery and surgeons is just about to begin. One of the most puzzling features of early modern surgery is that the title of surgeon seems to describe very different kinds of practitioners: from barbers to bonesetters, from practitioners hired by the city to treat the people for free to university-trained physicians, from specialists on hernia to sellers of unguents and potions. As has already emerged from a few important works on early modern practitioners, or “artisans” of the body, and despite all the differences among Italian cities, at least south of the Alps the conflict between learned surgeons and non-graduate surgeons was not as pervasive and widespread as it has been imagined. In European cities the typical sixteenth-century institutional arrangement could take three forms. The first was a division between a College of Physicians, a College of Surgeons (learned surgeons) and a guild of barber-surgeons (this was the case of Venice and some northern cities); in the second one, learned surgeons were part of the College of Physicians, and non-graduate surgical practitioners were part of the barbers’ guild or independently licensed by the College (the case of Bologna and Padua). The third model, more widespread north of the Alps, was a division between a guild of barber-surgeons and a College of Physicians, with surgeons alla privatione del naso condannare, aciòché porta per eternale pena in su la faza de continuo la sua vergognosa punitione, la quale non può in niuno modo coprire.”


124 On this point see Sandra Cavallo, Artisans of the Body in Early Modern Italy: Identities, Families and Masculinities (Manchester: Manchester University Press, 2010), pp. 1-7. As the bibliography used in this work will show this is not exactly true. In the last three decades surgeons have become interesting for historians, although generally in light of a history of professionalization more than a that of a cultural history of the body. It is true though that surgeons are very rarely the specific focus of monographs on pre-modern science and medicine. This is probably due to the fact that it is often very hard to track down a category that was so multifaceted. On the other hand, there is substantial “internalist” literature on the history of surgeons written by practicing surgeons, at least since the eighteenth century.
sharing their practice with barbers. However, subterranean and infra-institutional attempts of surgeons to differentiate themselves from barbers were common in the whole continent.125

For the purposes of this work, it is important to underline that there was a cultural and technical contiguity between practitioners of the body in early modern Italy, who dealt with the care of health and the care of appearance. I will explore this contiguity further in chapter 4. But emphasizing this contiguity does not mean that there were not significant differences, both in the social status of learned surgeons, and in their claims to master a more difficult and important set of surgical techniques, informed by theory. While the social and professional gap between surgeons and barbers widened during the course of the seventeenth and the eighteenth centuries, social and cultural categories, as well as the practitioners’ social mobility, were more malleable in the sixteenth century. In this period there was a certain mutually acknowledged complementarity between “lower” and “higher” surgery.

Confusion surrounding the early modern meaning of the word “surgeon” does not only puzzle modern historians, but it did puzzle the contemporaries too. Scipione Mercurio (1550 ca-1615) was a student of medicine in Padua and Bologna, a Dominican friar, and a medical practitioner. In his *De gli errori popolari d’Italia libri sette*, a 1603 book molded upon, and partially translating, Laurent Jaubert’s French book on popular “medical errors,” he acknowledged the confusion of categories between different kinds of surgical practitioners and attempted a social explanation. Mercurio asked himself why so many people used to put their trust and lives in the hands of such “ignorants” as barbers, wise women, and empirics of all sorts. Now, in Padua – Mercurio claimed – no one can treat surgical illnesses unless he is licensed, either by the College of Physicians or by the Rectors of the studio. The problem is that “these men, when they get a license, they think they have a doctorate too, and so believe the people, who beging to call them Doctors, and they [the licensed surgeons] are so charmed by this kind of language that they believe the people … and when they have to show where they can be found they say: there is the house of the Doctor Surgeon.” Furthermore, the common people are confused by the fact that they see “that some Doctors of Medicine practice surgery, and for this reason they are called Surgeons.” This is why the empirics become persuaded, and try to persuade the public, that they are surgeons just like the graduate surgeons.\(^\text{126}\) A linguistic grey area existed between the semantic reference of the terms of “surgeon” and “doctor.”

With the license came the promise by empiric surgeons not to give any medicament by mouth and not to perform manual operations like bloodletting without the supervision of a graduate physician. Moreover, “all Doctors of Medicine are doctors of surgery too, and no

\(^\text{126}\) Scipione Mercurio, *De gli errori popolari d’Italia libri sette* (Padua: ad’Istanza di Francesco Bolzetta, 1645), pp. 208-09: “hora questi tali subbito, che si veggono licentiati, credono di essere addottorati, e così crede anco il Volgo, il quale subito incomincia a dargli del Signor Dottor per la testa, e loro addormentati da queste continue cantilené facilmente lo credono … e quando vogliono insegnar lor case, dicono domandate la casa del Dottor Ciroico … che alcuni Dottori di Medicina, medicano di Cirugia, dalla quale per il frequente uso sono chiamat Cirugici.”
simple surgeon can be a Doctor too (ogni Dottor di Medicina è anco dottor di cirugia, e niun cirugico semplice può essere Dottore).” The fact that graduate physicians used to practice and in some cases chose to specialize in surgery was indeed seen as a peculiar feature of the Italian medical marketplace. For example, the English medical student Fynes Morison (1566-1630) recorded with wonder in the travelogue of his trip to Italy in the late sixteenth-century that “many famous physicians are ... in Italy, surgeons as well.”127 Mercurio tried to explain why there were graduate physicians who practiced surgical procedures, an idea that would seem at first glance a little foolish, given the lower status of surgery. The answer was that “this happens … because not all of them [the graduate physicians] have the guts to practice surgery: for this reason some licensed manual operators are allowed to treat wounds and aposteme, to clean rotten parts, to bandage, and to apply plasters.”128 Mercurio explained the puzzlement away by referring to the practitioners’ guts to find themselves immersed in blood to their elbows, but there was much more at stake for a garduate surgeon: academic prestige, social status, and the possibility of attracting wealthy patrons.

The second half of the sixteenth century in Bologna was a period of renewal of health care institutions. The guild of barbers, the College of Medicine, the Hospital for the sick poor of Santa Maria della Morte all renovated their statutes and internal organization. Moreover, a new institution for the care of public health was created in the 1570s, directly dependent on


128 Mercurio, De gli errori, p. 209: “questo nasce … perché ognun non ha stomaco da essercitarla: e perciò vien permesso ad alcuni manuali detti cirugici licentiatì, che curino piaghe, posteme, nettino martie, facciano taste & stendino ceroti.”
the Senate, a public health board called Assunteria di Sanità, dealing specifically with epidemics and hygiene.\textsuperscript{129}

The College of Physicians, an institution formed by the elite members of the medical profession, was established in the fourteenth century on the model of the older College of Lawyers, and greatly expanded its functions over the course of the sixteenth century. The Protomedicato, a medical magistracy charged with policing the boundaries among health care providers and medical practitioners which was composed of members of the College, was founded in 1517. By 1563 Protomedicato officials started to be paid with a public salary. By that time, the Protomedicato had acquired full jurisdiction over people who did not comply with its rules in matters of medical practice.\textsuperscript{130} Sixteenth-century Italian Protomedicati and Colleges of Physicians all over the peninsula tried to enforce a threefold partition of the medical professions – graduate physicians, apothecaries, and barber-surgeons – with more or less success, depending on time and place.\textsuperscript{131} It is also crucial to understand that the College and the Protomedicato were not professional associations, but an aristocracy, a self-affirming ruling medical elite. Their aim was not to ban all illicit practice, but to affirm their right to rule and be recognized as the top of the medical hierarchy.\textsuperscript{132}

The first statutes of the College date back to 1395; they were reformed in 1507 and then integrated with several punctual additions over the course of the whole early modern period. \textit{Rubrica xviii} of the 1395 Statutes stated that no one could practice medicine or

\textsuperscript{129} See ASB, Assunteria di Sanità.


\textsuperscript{131} David Gentilcore, “‘All That Pertains to Medicine’: Protomedici and Protomedicati in Early Modern Italy,” \textit{Medical History} 38, 2 (1994): 121–42.

\textsuperscript{132} The history of the College and the Protomedicato of Bologna has been written in full detail by Gianna Pomata, so I will not insist much on it, except for the parts that are directly relevant to the regulation of the surgical arts.
surgery without a license. Surgeons in search of a license had to attend the lectures of “public masters” teaching in Bologna or another studio for at least three years. Plus, all those who wanted to practice the medical arts in the city “must be examined, licensed, and approved by the doctors of medicine.”133 Already in the fourteenth century, taking an academic degree in surgery was an option for medical students.134 It was also made clear that all the physicians of the College and faculty of medicine could teach and practice surgery without any further examination. On the other hand, “those who are matriculated in surgery should not dare or presume to treat the sick as physicians do.”135

It is not exactly clear what precisely comprised the full study plan for a degree in surgery. It is hard to imagine why a medical student would have wanted to get a degree in surgery after a long period of study, when he could get one in medicine in an almost equal amount of time. Certainly, in early modern Italy there were multiple cases in which one single surgical practitioner was empirically trained in a workshop, then attended a few university lectures, and maybe served as assistant to a publicly appointed physician or surgeon.136 But surgery in Bologna had a long tradition as an academic discipline.137 The

133 Carlo Malagola, Statuti delle Università e dei Collegi dello Studio Bolognese, 2 vol. (Bologna: Zanichelli, 1888), vol. 1, p. 469.

134 Ibid., p. 470. Candidates for such a degree had to “comment upon puncta received from the hands of the prior and the doctors of the medical faculty both on lecture I, part III, fen IV of Avicenna’s Canon, and on lecture II, part I of Bruno’s Surgery.” The candidate must have been able to read and comment upon the passages, and to debate them with the examining board of the Collegiate doctors.

135 Ibid., p. 471. A fragment of a manuscript copy of the College statutes of the fifteenth century restates the requirements for all those who want to practice surgery, adding one year of study: “no citizen and no foreigner, of whatever status, condition, should dare or presume to practice surgery in the city of Bologna or its countryside if they have not studied and listened to lectures for four years with a salaried master of surgery, or someone teaching surgery in the public schools of Bologna or in another place where there is a studio. Our Prior, or the college of the studio in which the candidate studies, should be fully informed of this; as an alternative, the candidate should be examined and approved by the doctors of the college of the faculty of medicine.” See Ibid., p. 490.
holders of surgery chairs were also in charge of conducting the annual public dissection by
the fifteenth century, and in 1570 Bologna was the first studio in Europe to create a chair of
anatomy, given to Giulio Cesare Aranzi.\textsuperscript{138} To sum it up, the oldest statutes of the College
thus established three kinds of surgeons: those with an academic degree in surgery;
physicians who chose or wanted to practice surgery; people with no academic degree but
with a certified path of apprenticeship with a master surgeon. The 1507 statutes repeated
these very same points, but by the second half of the sixteenth-century the matter became
more complex and professional distinctions multiplied.\textsuperscript{139}

The most significant innovation in the system of controlling the practitioners of
surgical operations came not from a reform of the statutes but from a 1572 public decree
concerning public order written by the Protomedicato and signed by the Legate, the executive
authority. As we know, by that time, the College and the Protomedicato had become public
magistracies. The text of the public announcement concerning barbers, and directly
addressing the barbers’ guild, prescribed all barber-surgeons who wanted, or were used to,
“treat all kinds of people, of whatever illness they are affected, and most prominently
wounds, aposteme, tumors or other evils … not to let blood or authorize someone to let
blood, not to allow someone to give a patient something orally, be they men or women, old or

\textsuperscript{136} Donatella Bartolini, “On the Borders: Surgeons and Their Activities in the Venetian State

\textsuperscript{137} The 1405 University statutes state that lecturers in surgery “each year, at the beginning of
the study [in surgery], they should start lecturing on Bruno’s \textit{Surgery} first lecture; once they
are done with that, they should read Galen’s \textit{Surgery}. For the second lecture, let them teach
Avicenna’s \textit{Surgery}, then book seven of Almansoris” (see Malagola, \textit{Statuti}, vol. 2, pp. 247-
48). As it appears from the \textit{Rotuli} of the studio, the document on which all the lecturers were
recorded year by year, by 1586 the whole surgery teaching focused on three books by Galen:
\textit{De tumoribus praeter naturam}, \textit{De ulceribus}, and \textit{De vulneribus}. By the late sixteenth-
century the chair of surgery was offering lecture cycles of three years on tumors, ulcers,
and wounds, one topic each year; see Malagola, \textit{Statuti}, 1, p. xx.

\textsuperscript{138} Giovanna Ferrari, “Public Anatomy Lessons and the Carnival: The Anatomy Theatre of

\textsuperscript{139} ASB, Studio, 216, \textit{Statuta Collegiorum Medicorum Bononiae 1507}, fol. 92-93.
young – if they have not been previously licensed by the signori Priors and Protomedici.”

The leaders of the barbers’ guild tried to retain control over the examination of barber-surgeons, but a series of bandi constantly repeated the injunction. Coming from a century-long tradition of including surgery within the academic disciplines, the Collegiates’ strategy was to consider barber-surgeons as health care practitioners in order to place them under their direct control.

There is no way to be sure about the number of licenses given to barber-surgeons and surgeons in the late sixteenth-century, but in the archives of the College there are only fifteen such licenses for the period 1570-1600. Despite the fact that the 1572 decree explicitly contemplates the possibility that surgical practitioners might be women, there are no surviving records of women officially practicing surgery in the Protomedicato files. From an analysis of the licenses, it emerges that in practice the authorities recognized two kinds of surgeons: barber-surgeons or people who practiced other professions but were also skilled in some surgical specialty (often along with a competence in recipes and “secrets” for external medicaments); and those who had some kind of academic training or at least could read some

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140 ASB, Studio, 195, Liber privilegiorum, mandatorum et memorialium, fol. 29r: “medicare sorte alcuna di persona, di qualunque morbi si sia, et maximamente ferite, apostemi o tumori, o altri mali … nemmeno cavar o far cavar sangue in modo alcuno, ne dare ne far dare o consentire sia data cosa alcuna di qualsivoglia sorte per bocca ad alcuna persona maschio o femmina piccola o granda che sia – se prima non sarono stati licentiati dalli signori Priori et Protomedici.”


142 ASB, Studio, 233, Provisione sopra il grave abuso di quelli che senza licenza presumono medicare. Moderatione rinovata sopra li Spetiali, e Barbieri. Pubblicata di XXIX di Dicembre. MDLXXI. The situation of barber-surgeons’ practice must have been very hard to regulate, since ten years after the first decree the College and the Protomedicato appointed two inspectors, one for the city and one for the contado – the country territory subject to the city of Bologna – to verify whether practicing barber-surgeons were licensed by the College or not. The College was taking seriously the barbers’ surgical skills concerning bloodletting, cautery and in some cases bone setting, pulling teeth, and treating bladder stones.
Latin, for whom the professor of anatomy testifies they went to the public dissection. This professional distinction was accompanied by a language emphasizing the difference between treating “simple” wounds and “complex” wounds, the latter often involving the human head.\textsuperscript{143}

By comparing the two series of documents – the normative and the archival ones – it emerges a complex picture of the practice of surgery in early modern Bologna: (1) barber-surgeons, licensed by the College; (2) empiric surgeons specialized in some kind of procedure and licensed by the College; (3) practitioners with some degree of academic training but not a doctorate; (4) graduate physicians who practiced surgery; (5) the moving and hard-to-grasp mass of empiric surgeons – which is not the focus of the present work. Tagliacozzi belonged to group (4), and had to live, and compete with, all the other groups. The question is still why a graduate from the studio should decide to practice and write about surgery.

Learned surgeons like Tagliacozzi were not silent at all about their professional identity. We must not forget that that the celebrated anatomical renaissance of the sixteenth century was in fact made by learned surgeons. Nearly all learned and Latin Renaissance surgery books – be they treatises organized according to kinds of illnesses and injuries, or booklets built around specific cases or controversies – included a sort of description of the learned “ideal” surgeon. Usually such descriptions combined elements that remained constant from the times of Celsus and Galen. First of all, such descriptions of the surgeon’s characteristics recall the Galenic idea that surgery, which means “manual operation,” is one of the three integral components of medicine, along with dietetics and pharmacy. Then, they define the moral, technical, and cognitive qualities of surgeons. In particular, Celsus’

\textsuperscript{143} The licenses granted by the College to surgeons I have consulted are in ASB, Studio, 195,\textit{ Liber privilegiorum, mandatorum et memorialium}, fol. 26r-v; 53r-54r; 62v-63r; 67r; 76r; 80r-v; 123r.
definition of the ideal surgeon, together with a passage of the Hippocratic corpus recommending the dexterity of the practitioners’ hands, formed the standard picture medieval and Renaissance learned surgeons always reiterated. Celsus’ surgeon had to be “youthful or at any rate nearer youth than age; with a strong and steady hand which never trembles;” he had to have “sharp and clear sight.” As for his moral qualities, which at the same time constituted a scientific equipment, the good surgeon had to have a “spirit undaunted; filled with pity, so that he wishes to cure his patient, yet is not moved by his cries, to go too fast, or cut less than is necessary; but he does everything just as if the cries of pain cause him no emotion.” The ability to detach from the patients’ vocal and gestural expression of suffering was thus inscribed in the very definition of surgery by one of the most important classical authorities. Pain was also something which the surgeon had to understand, to assess, to pay attention to, and to soothe and ease.

Medieval, Latin-writing, “rational surgeons” like Bruno da Longobucco (early thirteenth century-1286) and Guy de Chauliac (1300-1368) put less emphasis on the ability to handle pain and more on the fact that surgeons had to be literate in Latin and erudite. Their effort aimed at establishing surgery as a dignified medical specialty. In the late thirteenth century, Bruno, whose book was part of the curriculum of the arts and medicine in Italian universities, recalled that surgeons had to learn from other experienced practitioners, and that they had to be cautious and ready to adapt to changing individual situations. He stressed that

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“those who practice surgery must be erudite men too, or at least they have to learn from those who studied the letters… and it has to be deemed hideous and indecent that weak and ignoble women claimed this art for themselves, because they have neither skills nor inventiveness, as Al Mansur says. He also adds that those who practice this art are for the most part idiots, rustic and ignorant men, and that because of this ignorance they cause in their patients permanent damage or even death, since they operate in a superficial manner and with no reason.”

In the fourteenth century, Guy de Chauliac claimed that surgeons must be “experienced”, “ingenious” – they must have a good memory, good judgment, good eyesight – they must be skilled, with a sharp intelligence and “a good appearance” (bonitate forme), with thin fingers, steady hand, not trembling, clear eyes, “modest”, “pleasant with patients”, “a good companion”, chaste, sober, pious, and “compassionate” (misericors). Finally, they must not be greedy but rather demand a fee commensurate their patients’ occupation and wealth. Guy too, like Bruno, emphasized literacy: surgeons must be literate, not just in surgery but in physic too, both theoretical and practical; they must know all complexions; they must know the causes, since without knowledge of causes cure cannot be achieved; finally, they should have a practical knowledge of diet and pharmacy.

Renaissance surgeons’ definitions combined more or less the same elements, but, perhaps influenced by the direct reading of Celsus, usually put the emphasis less on Latin literacy and more on technological innovation and abilities in minimizing pain. Giovanni Andrea Dalla Croce describes an ideal surgeon who can also be an “inventor of new

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150 Ibid.
instruments” and “ready to promise to restore the patients’ health;” “his way of proceeding must be light, safe, quick, and painless.” Another characteristic theme of sixteenth-century descriptions of ideal surgeons is that of the “learned hand,” a phrase emphasizing the intertwining of theory and practice, manual skill and medical education. Finally, even learned surgeons did not disdain comparisons with artisanship and the world of crafts.

The Bolognese surgeon and anatomist Giovanni Battista Cortesi gave the most complete image of the learned surgeon in his surgical manual published in 1633, titled In Universam Chirurgiam absolutam Institutio. Cortesi underlined the necessary preliminary education in the studia humanitatis and then in philosophy for the graduate surgeon, along with the close study of human anatomy. Surgeons must also study the contemporaries, particularly “Vesalius’ anatomical books, Falloppio’s observations, Colombo’s, Valverde’s and Laurenzi’s anatomies, and above all Paré, who also most expertly wrote about surgery.”

But beyond theory, surgeons must pile up a great mass of experiences and observations taken from the patients’ bedside, and must always be good and gentle with them.

The surgeon must among other things be young, or close enough to the young age, since this is the age at which the body and the senses are in their prime, and apt for correctly performing all the operations pertaining to the art; so that he is able to carry on the tasks required by the art without being hampered by the weakness of the

151 Giovanni Andrea Dalla Croce, Cirugia universale e perfetta, (Venice: Giordano Ziletti, 1583), fol. 52v-53r.


153 Giovanni Battista Cortesi, In Universam Chirurgiam absolutam Institutio (Messina: apud haeredes Petri Breae, 1633), fol. 3r: “libros anatomicos Andreae Vesalii, observationes Gabriellis Fallopippi, Realdum Columbum de re anatomica, Ioannis Valverdi & Andreae Laurentii anatomen, nec non Ambrosii Paraei, qui etiam de rebus chirurgicis sapientissime scripsit.”

154 Ibid., fol. 3v-4r.
senses: he should always be ready to use both his hands, and have a strong and effective hand, always steady in making an incision, cauterizing, and cutting off; an acute and clear eyesight; a brave and merciless soul so that he is able to heal screaming, crying, and weak patients, either those who willingly undergo the procedure, or those whom he deems necessary to cauterize and cut. In this way, he will be able to perform his procedures as if he would not hear the screaming, and not be affected by it.\textsuperscript{155}

Moreover, a good surgeon had to be a “virile”, “pious” and “generous” man, “confident and brave in uncertain matters and cautious in dangerous ones, not precipitous, a good sport, humane, calm, generous with his assistants and easygoing with his peers, sociable, prudent, most attentive in anticipating future events, neither greedy nor too harsh in collecting his fees.”\textsuperscript{156}

Almost three centuries of surgical academic education had generated a coherent and widely shared image of the learned surgeon among the experts. This physician who practiced surgery was a product of both humanist education and manual skill, of both bookish study and practical training. In cities like Bologna and Padua, the double character of learned surgery could attract middle-class students of medicine wanting to establish a name for themselves.

\textsuperscript{155} Ibid., fol. 5r: “Debet praeterea Chirurgus esse aetate iuvenis, aut saltem iuventuti propinquis haec enim aetas est, in qua, & sensibus, & corpore viget ad ea recte agenda, quae artis propria sunt; atque ut quod ars iudicat, praestare commode possit sensuum imbecilliatate non impediente: manu insuper strenua, & valida ad opus, quod molitur stabili, sive secundum sit membrum, sive ureundum, sive etiam excidendum, non minus una quam altera promptus esse debet: oculorum acie acri, & clara, animo intrepidus, & immisericors, ut sanare velit eum, quem accipit non aut clamore, & eiulatu [?], aut mollitie aegrotantis, vel magis, quam res desiderat, properet, vel minus, quam nescesse sit fecet aut urat, aut excidat; sed perinde omnia faciat, ac si clamares eius, qui afficitur, non audiret, nullu sue inde in eius animo oriatur affectis.”

\textsuperscript{156} Ibid. “securus & animo intrepidus, in rebus dubiis, periculosisque cautus, ac minime praeceps, comis, humanus, placidusque, circa laborantes facilis, & mansuetus erga suae factionis homines, sociorum amator, prudentis, summeque in praesagiendo circumspectus, pecuniae minime cupidus, nec acerbus exactor.”
THE CAREER OF THE LEARNED SURGEONS

By comparing the lists of the student assistants of the hospital of Santa Maria della Morte in Bologna (fig. 2.3) and that of the professors of surgery and anatomy in the second half of the sixteenth century, a clear pattern emerged. Hospital training was a staple of the careers of learned surgeons like Tagliacozzi. There are significant overlappings in the two lists. There is no way to know whether Angelo Michele Sacchi, lecturer in surgery and anatomy at the studio from 1567 to 1611 had been assistant at the hospital, since the hospital started recording their names only in 1567. But he was nonetheless very much part of the hospital life: by the 1590s he was appointed surgeon of the institution. On the other hand, we know as a fact that Giulio Cesare Aranzi had never served as assistant there. But the list of student assistants includes: Gaspare Tagliacozzi from 1567 to 1570; Giulio Cesare Gessi from 1570 to 1576; Flaminio Rota from 1576 to 1580; Giovanni Battista Cortesi from 1580 to 1583; and finally Francesco Muratori from 1599 to 1602.157 Along with Aranzi and Sacchi, all of them, with the exception of Gessi, were lecturers in surgery and anatomy from 1570 to the early years of the seventeenth century. Virtually all the Bolognese surgeons involved in the history of reconstructive surgery had something to do with this hospital. Aranzi, Tagliacozzi, and Cortesi were all involved in the history of reconstructive surgery, while Rota and Sacchi were their colleagues at the Studio.

In the period between 1583 and 1599 (the year Tagliacozzi died and Cortesi left Bologna for Messina) these five physicians and surgeons are all listed on the official records of the Studio as lecturers in surgery and charged with organizing the annual anatomical demonstration.158 They were colleagues and rivals, especially for the chair of anatomy, a

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157 ASB, Ospedale di Santa Maria della Morte, VIII, 1, fol. 97r. In another document, an account book of the hospital, there is one Angelo Michele listed as astante in 1570 with no family name, but it would be hard to imagine that it is Sacchi, who was already lecturing in surgery at the time.
prestigious position not only for the studio but for the whole city, granted to Aranzi in 1570
and then passed on to his pupils and colleagues. Significantly Tagliacozzi, when he moved to
the much sought-after chair of theoretical medicine in the year 1590-91, struggled to keep the
title of anatomy professor. These five surgeons had different backgrounds. Aranzi and
Tagliacozzi came from the artisanal class, Cortesi was born in a poor family, while Sacchi
and Rota were part of medical families of Collegiate physicians. Aranzi, Tagliacozzi, and
Cortesi all dealt in various ways with facial reconstruction, and all chose to publish books;
Sacchi and Rota never published anything, and it is not clear whether they were involved in
the procedure of surgical reconstruction. Two patterns emerge: not only many surgery
lecturers had received clinical instruction at the hospital of Santa Maria della Morte, but those
who decided to publish came from the middle and lower classes, while those who did not
came from upper class established families. Second, for those who came from families who
had other members in the elite medical profession, university education in surgery passed on
among family members, as one would expect a craft did.

Aranzi was always listed as “ad anothomiam” until he died in 1589. After that, all the
other four surgeons were listed all together as anatomy chair. Salaries varied, reflecting social
status and seniority, but also scientific prestige. In 1587 the Senate listed the following
annual expenses: Aranzi, 1100 lire; Tagliacozzi, 600 lire; Sacchi, 590 lire; Rota, 280 lire; and
finally Cortesi, 225 lire. Just to make a comparison, the best paid professor in the Arts faculty

158 Orazio Bertalotti was also part of the group until 1589. He left no publications. Why five
or more surgery and anatomy lecturers at the same time? The fact that many professors were
listed in the rotuli – the name of the official roll of lecturers – for the same chair was a
constant source of concern for the authorities. In 1583 a Senatorial commission reported on
this problem and on the frequent controversies among the listed professors. The reformers
proposed to divide up lecturers in ordinarii (older and more famous) and straordinarii
(younger), the latter waiting a number of years before entering the former category. Legate
Gaetani decreed in 1586 that there could be no more than three teachers for each class, and
that if there were more than three, they should be listed as straordinarii. Very often, ordinary
lectures were based on the most important books and took place in the morning, while
extraordinary ones were based on less important books and happened in the afternoon. See
Ibid., pp. iv-xv.
was Ulisse Aldrovandi with an annual stipend of 1775 lire. A nine years later, in 1596, a document titled *Provisioni che si pagano a’ Dottori* recorded by the Assunteria di Studio listed: Tagliacozzi, then chair of theoretical medicine and anatomy, 890 lire; Sacchi, 880 lire; Rota, 570 lire; Cortesi, 425 lire. Aranzi had the most important record of academic publications. The second best paid was Tagliacozzi, who was younger than Sacchi and with less seniority, probably on account of his practicing the most spectacular surgical procedure. Sacchi was an eminent person in the city, practicing for a wealthy clientele and for a number of institutions; Rota never published anything but came from a good family and was very popular among students. The worst paid was always Giovanni Battista Cortesi, the true outsider in terms of social background.

The first thing to understand is what was going on in the hospital of *Santa Maria della Morte*, and how future learned surgeons were trained there. Of the 30 hospitals composing

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159 ASB, Senato, Partiti, 11, fol. 161v-162v and 164r.

160 ASB, Assunteria di Studio, 92, n. 5. In general professors of arts and medicine make much less than law teachers; among the latter, the highest salary is of 4800 lire.

161 I have described in detail the organization of this hospital and the role of the student assistant in Paolo Savoia, “The *Book of the Sick* of Santa Maria della Morte in Bologna and the Medical Organization of a Hospital in th Sixteenth Century,” *Nuncius* 31 (2016): 163–235. Recent historiography on early modern Italian hospitals has emphasized that the period between the late fifteenth and the early sixteenth century has been one of important transformation and reorganization of the health care system and in general of the system of charity. This reorganization was characterized by the models of “concentration”, “reconversion,” and “consolidation” namely of rationalization and coordination of previously scattered charity institutions. A parallel process of “specialization” – hospitals came to be divided according to their functions, and some of them were organized as medical spaces – and “bureaucratization” – hospitals became part of the State system as their governing boards became more and more occupied by local upper class families – also took place. By the middle of the sixteenth century, hospitals had become better funded and had acquired wider functions. The hospital also played the role of an institution of social control, as it is showed by the increasing detail in the internal organization of the medical and non-medical personnel, marked by an increasing discipline. Even if it would not possible for historians to trace a clear-cut and monolithic process of transition from an institution of assistance to a medical space, one important step towards medicalization was the institution of the hospitals of the “incurables,” which ran parallel to the distinction between spaces devoted to the care
the Poor Relief and health care system of Bologna, only two of them – Santa Maria della Morte and Santa Maria della Vita – had a well-structured and hierarchically organized medical staff.\textsuperscript{162}

The statutes of the hospital of Santa Maria della Morte were renewed in 1562 as part of the general renovation of health care institutions of the period. One of the most interesting figures the new statutes introduced is that of the student assistant (\textit{astante}). The astante was a complex figure in the social economy of the hospital. He was a medical student of modest means but greatly promising, and thus was there to learn. He was at the same time the assistant of the physician and surgeon, and ruled over the nurses. He oversaw the preparation of medicaments and the implementation of the dietetic regime, which were typical tasks of the learned physician or surgeon, and at the same time he had to take care of bloodletting, the hallmark of barber-surgeons, an officially subordinated professional figure. He had important diagnostic functions in that his opinion was required in cases of suspect incurable or contagious diseases. He entertained a nuanced relationship with the hospital “guardian:” he was hierarchically subordinate to him, since the guardian had to check that \textit{astanti} put into practice all the instructions given by physicians and surgeons, but, on the other hand, he had

\textsuperscript{162} BCAB, Gozzadini 243, n. 1, \textit{Ordinazioni generali per il buon governo di tutti gli Hospitali della Città & Diocesi di Bologna}, fol. 15-16.
to make sure that the guardian did not let anyone in without his own previous diagnostic assessment.\textsuperscript{163}

The Italian sixteenth-century hospital had an educational or proto-clinical function. Jerome Bylebyl has described the innovation in teaching that took place in Padua by the 1540s, including the practice of bedside instruction at the hospital, and emphasized the role of Giovanni Da Monte, whose proto-clinical lectures were recorded and published by his students.\textsuperscript{164} The hospital of Santa Maria della Morte – physically contiguous to the Archiginnasio – provided the cadavers for the public anatomical dissection. The cadavers literally passed from the hands of the hospital prior to the anatomist via the written authorization of the official of the criminal court; the anatomist then paid for the funerary rituals of the executed, or of the poor who had died in the hospital.\textsuperscript{165} A collection of consilia by the medicine professor Elideo Padoani (d. 1576) shows that he used to take his students to the hospital to follow him in bedside visits.\textsuperscript{166} The Dutch physician and anatomist Volcher Coiter (1534-1576), student and then lecturer on surgery in Bologna in the 1560s, reported in his surgical and anatomical observations that “in that hospital of Bologna which is called hospitale della morte I have dissected the body of a man killed by a long-lasting illness, whose liver was putrid and suppurating, so that I was barely able to extract one fourth of its

\textsuperscript{163} BCAB, Ospedali 42, Statuti dell’Ospedale di Santa Maria della Morte (1562), fol. 31-33.


\textsuperscript{165} BCAB, Ospedali 43, Memoria di quello che debbe fare li Signori Priori della Arciconfraternità dell’Hospitale di Santa Maria della Morte della città di Bologna [1595], fol. 3. On this topic see Giovanna Ferrari, “Anatomy Lessons and the Carnival.”


It is within this context that Tagliacozzi learned how to open bodies, dress wounds, apply stitches, and perhaps to experiment with skin grafting. By looking at his colleagues’ career paths we will learn that his own career was not exceptional with respect to a pattern of social climbing, but only in its intensity.

One of the most important sources in order to sketch a group portrait of learned surgeons are the *civilitatis probationes*, a record of the interrogations of four witnesses conducted in order to admit candidates to the College. In this record, officials verified whether the candidates fulfilled the double citizenship requirement (the candidate plus his father or, better, his father and grandfather, had to be Bolognese citizens).

In the case of Aranzi, this document indicates that his father was a simple baker (*fornario*) and that he learned all his Latin and his first medical notions from his maternal uncle, the learned surgeon Bartolomeo Maggi (1477-1552).\footnote{ASB, Studio, 196; Giovanni Fantuzzi, *Notizie degli scrittori bolognesi*, 9 vol. (Bologna: Stamperia di S. Tommaso d’Aquino, 1781-94), vol. 1, pp. 266-72. On Maggi’s work see chapter 5.} Aranzi indeed liked to add Maggi to his family name, in honor of his uncle, one of the first innovators in matters of gunshot wounds and professor of surgery at Bologna in the 1540s. Giulio Cesare Aranzi had the best record of publications and was renowned all over Europe. He published on anatomy,
on the female organs of generation, and on surgical conditions, particularly tumors, ulcers, and aposteme. Born around 1530, Aranzi made an extraordinary career, graduating, accessing the College of Medicine in 1562, and becoming the first official anatomist of the studio.

From Aranzi’s will we grasp something of his fortunes and the kind of sociability he preferred. He had four daughters, for whom he provided a generous dowry; he was also very generous with his wife Isabella, to whom he left 5000 lire, 1000 lire from her maternal dowry, plus several pieces of furniture. Isabella was also named the legal guardian of his two male heirs, Ottavio and Angelo, until they turned 20 years old. Had Isabella died before they reached such an age, their legal guardianship would go to Paolo Bucchi, with whom Aranzi owned a silk workshop in partnership. This Paolo Bucchi seems to have been a rather important figure in Aranzi’s life: according to the testamentary dispositions, the anatomist’s older son, Ottavio, would inherit the silk workshop along with Bucchi’s eldest son, besides the real estate.

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169 Aranzi’s scientific record has been described multiple times, see for example Raffi Gurunluoglu, Maziar Shafighi, Aslin Gurunluoglu, and Safiye Cavdar, “Giulio Cesare Aranzio (Arantius) (1530–89) in the pageant of anatomy and surgery,” Journal of Medical Biography, 19, 2 (2011), 63–69.

170 ASB, Notarile, fol. 110v-112v. Carlo Poni has described how Bologna occupied a dominant position in Europe for silk manufacture and export throughout the early modern period. Indeed, towards the end of the sixteenth century a very large part of the population of Bologna (about 24,000 people against a population of 60,000 ca) lived off the art of making and selling silk. Production was disseminated in a multiplicity of households, workshops, and manufactures; on the other hand, there were no more than 50-60 powerful silk merchants, and their guild was powerful and influential. The Bolognese silk industry exhibited a clear tendency towards proto-industrial organization, with mechanized mills used by workers in the phase of silk-throwing. The various aspects of silk production can roughly be described as silk-throwing (in proto-industrial and mechanized factories); silk-weaving (mostly done by women in the household); gathering, in large artisanal workshops; and finally, the sale on the international market. Many women worked in the complex process of silk-making, alongside with their male relatives and co-workers, especially in the household. The high rates of female employment in the silk industry were highly praised by the authorities as they allegedly kept the social order and prevented unemployed women and young girls from becoming prostitutes. All the production of silk in its various stages, except for the
Aranzi and Bucchi owned one of those artisanal workshop, and it is interesting to notice that the capital Aranzi accumulated in teaching and above all in private practice was invested in the largest proto-industrial productive activity: in a way, he never cut his ties with the middle class. And his private practice must have been very profitable: Volcher Coiter, his pupil in the 1560s, recalls that Aranzi used to treat the injured members of the Senatorial class, including people from the powerful Senatorial Malvezzi family.\(^{171}\) He was important enough to be mentioned in the chronicles of the city compiled by Antonio Francesco Ghiselli in the early eighteenth century. Ghiselli describes an important occasion in 1581, in which Aranzi served as lay expert in a case involving the highest civic and religious authorities.\(^{172}\) Aranzi was in good terms with Ulisse Aldrovandi as well. Together, they wrote a response to a request of advice from the Assunteria di sanità, concerning the 1575-77 plague threat.\(^{173}\)

\[^{171}\text{Volcher Coiter, } Externarum et internarum, \text{ pp. 110-11.}\]

\[^{172}\text{BUB 770, Ghiselli, } Memorie, \text{ vol. XVII (1580-85), fol. 335: “the bones of the Beata Imelda lambertina were translated from the Church of San Gioseffo to that of the sisters of the Maddalena in Galliera, with the help of Giulio Cesare Aranzi, surgeon and physician, Count Cornelio Lambertini, Senator, Giulio Cesare Lambertini, Alfonso Paleotti, officer of the Cathedral Church, and those sisters’ Father Confessor (furono traslocate le ossa della Beata Imelda Lambertina dalla Chiesa di San Gioseffo a quella delle suore della Madalena in Galliera, con l’intervento di Giulio Cesare Aranzi medico chirurgo, Conte Cornelio Lambertini senatore, Giulio Cesare Lambertini, Alfonso Paleotti Canonico della Chiesa Cattedrale, e del Padre Confessore di dette suore.”}\]

\[^{173}\text{BUB, Fondo Aldrovandi. They were also correspondents. For example, while in Parma for a patient afflicted by a kidney illness, Aranzi asked Aldrovandi for information about a plant for a medical recipe he confessed he knew nothing about. See BUB 596, Miscellanea CC. 8, Lettera di Giulio Cesare Aranzi ad Ulisse Aldrovandi: “Signor Paterno had given a consultation for someone suffering from heated kidney in Parma, in which he proposes the application of a herb called Narisca … I was never able to understand what this Narisca is; I have found something with a similar name (Naryca), which is said to be similar to Theophrastus’ air and water, coming from a tree in between a oak and a willow, but I am not sure about it. I pray your Excellence to enlighten me about it, because I cannot believe that this name (Neriscae) could mean that other plant (Il Signor Paterno haveva dato uno consulto a Parma per uno qual patisse calidità di Rene, nel qual propone l’applicazione di un’herba quella nominata Narisca … io non ho mai trovato che pianta sia questa se non un nome quale cosi (Naryca) qual vogliano che sia il simile che Aria, et Aqua Theophrasti che di nota)}\]
Aranzi is a great example of a middle-class man who started a brilliant medical career through his maternal kinship, and focused on publishing books of anatomical descriptions based on careful observations. In a way, Aranzi is a typical figure of post-Vesalian anatomy, caught in between traditional Galenism and the new spirit of observation. His *De humano foetu* was published in 1563, at the beginning of his career, and then reworked several times until the third and final edition of 1587; his *Liber anatomicarum observationum* was published for the first time in 1579, when he was already an important professor and influential member of the College, then republished in the edition containing all his works of 1587, and contained important new information on the physiology of blood and the anatomy of the brain. Later in his life, when he was about to retire, he did not disdain to publish on tumors. Moreover, he served as Prior in the College of Medicine several times. His career is an example of social mobility based on the prestige of academic writing, quality teaching, and the politics of the College.

Angelo Michele Sacchi and Flaminio Rota were different cases, and they make for an interesting comparison. They both came from families of upper-class physicians, and both never published a word in print. Angelo Michele Sacchi came from a family of *gentilhuomini*, he was not part of the Senatorial aristocracy but of a leisured class which exercised no “mechanical” trade. He occupied the position of lecturer in surgery at the studio

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from 1567 to 1611, the year of his death. Son of a Antonio sacchi, a Collegiate physician and
lecturer in surgery, he was admitted to the College of Medicine in his turn in 1576.\footnote{175}

The legacies he charged his son to pay for after his death show his own and his
family’s commitment to the hospital of Santa Maria della Morte.\footnote{176} Indeed, Sacchi appears as
“graduate surgeon (medico cerusicho)” with the stipend of 110 lire per year for the period
1591-1611.\footnote{177}

Sacchi’s private practice must have been flourishing too, considered the social rank of
the patients he was caring for. An anonymous chronicler reports that on January 31, 1590,
count Andalò Bentivoglio, jousting with one member of the Ruini family, was hit by a
splinter, which penetrated the visor of his helmet and lodged itself into the count’s eye. One
of the bystanders tried to pull it off, but in the meantime Angelo Michele Sacchi was called.
The learned surgeon tried to pull off the splinter with his bare hands, but finally used a big
forceps and removed it. Unfortunately, Count Bentivoglio did not make it, and “died because
of the spasm and the harsh pain.”\footnote{178}

In another 1598 case, Sacchi worked together with
Tagliacozzi and Giulio Cesare Gessi on treating another violent nobleman:

\footnote{175} Giuseppe G. Forni, L'insegnamento della chirurgia nello studio di Bologna: dalle origini
a tutto il secolo XIX (Bologna: Cappelli, 1948), pp. 89-90; ASB, Studio 196. Chronicler
Ghiselli even wrote a brief family genealogy of the Sacchi. He recalled that the Sacchi family
was said to have Tuscan origins, and that one Pompilio, who had moved to Parma, became
doctor of Medicine and knight of Charles V, thus starting the dynasty of physicians; see BUB
770, Ghiselli, Memorie, vol. XX (1595-1600), fol. 556-57. The fact that Sacchi’s son was
part of the Anziani is important: this was a two-month magistracy composed of members of
the Senate with the task of running the activities of the Senate and of the guilds.

\footnote{176} Sacchi left 150 lire to pay for a mass every year “to the Madonna of San Luca in the
Hospital della Morte;” 100 lire for one mass every year; 550 lire for provisions of “bed sheets
(lenzuoli)” for the hospital; 105 lire for wax candles in honor of the procession of the
Madonna of San Luca, also organized by the brotherhood of Santa Maria della Morte BAB,
Gozzadini 76, n.10 (pages are not numbered).

\footnote{177} ASB, Ospedali, Santa Maria della Morte, Serie XII, fol. 11: libro giornale 1591-1612
(pages are not numbered). The Sacchi family donated an altarpiece to the hospital’s church,
as recorded in a 1606 inventory; see ASB, Ospedale di Santa Maria della Morte, VIII, 5, fol.
6r.
It happened that Captain Flaminio Ringhiera from Strada Maggiore … after about one hour he left the Palace [of the Senate] with one of his servants to go home was assaulted near his house by some say four some say more assailants; the servant fled and he was wounded in two parts, one in the head and the other in the face, and the latter crossed his face and cut off his right ear in two … the miserable gentleman went to the above mentioned Confalonieri nearby the place he was attacked, and there was treated by Angelo Michele Sacchi, Giulio Cesare Gessi, and Gaspare Tagliacozzi.179

Sacchi used to deal with the same kind of disfiguring injuries that affected the faces and bodies of the upper classes of the city, but he never felt the need to publish something on his multiple and probably very interesting surgical practice. As a learned surgeon very well connected with a network of powerful Bolognese families and institutions, Sacchi could treat and observe several kinds of surgical conditions, affecting people of all social classes and genders. Still, or maybe because of this, he did not try to boost his reputation by making use of the printing press.

Flaminio Rota’s social background was similar to Sacchi’s, but he seems to have left fewer traces in the city archives. He was lecturer on surgery from 1579 to 1611 and the son of another surgery lecturer, Giovanni Francesco, after he had been astante at Santa Maria della Morte. In 1576, he was appointed “graduate surgeon (medico cirusico)” at the Saint Job hospital of the Incurable, and in 1585 was named “supernumerary surgeon” at the hospital of Santa Maria della Vita; finally, in 1592 he was admitted to the College of Medicine.180 Like Sacchi, he combined the activities of lecturer and of hospital surgeon; like Sacchi, the events

178 BCAB, Gozzadini 287, Frammento di una Cronaca bolognese degli anni 1588-1595, d’anonomo autore, fol. 21.


180 ASB, Studio 196; Forni, L’insegnamento, pp. 95-96.
concerning his family were recorded in the chronicles: for example, he made a very good marriage in 1592, the same year he entered the College, with a Lucia Dolcini, who brought him a dowry of about 7,000 or 8,000 scudi.\textsuperscript{181} Rota built his career upon his ability as a teacher, both in private and in public, and by exploiting the social prestige he inherited from his family tradition, But like Sacchi, he never published anything.

Giovanni Battista Cortesi (fig. 2.4) explicitly took up the facial reconstructive technique in both his scholarship and his practice. Cortesi’s path is the most singular, and it embodies the whole continuity between different kinds of practitioners of the body, both in cultural and social terms. Like Berengario da Carpi and Niccolò Massa in the first half of the century, Cortesi was the last of the sixteenth-century poor barber-surgeons who became learned physicians and surgeons, even he was accepted as one of the elite only after considerable tribulations. But it is true that social mobility and cultural contiguity between all the professions and practices that dealt with the external parts of the body were much higher in the sixteenth than in the following century.\textsuperscript{182}

Early modern and modern biographers of Cortesi report an interesting story about his early years, of which I have not found any archival trace, and of which Cortesi himself never says a word in his printed works.\textsuperscript{183} The story, first told by Girolamo Ghilini in his \textit{Theatro}

\textsuperscript{181} \textit{BUB} 770, Ghiselli, \textit{Memorie}, vol. XIX (1591-95), fol. 277.

\textsuperscript{182} A survey of both the proofs of citizenship necessary to be admitted to the College and of the increased number of barber-surgeons put on trial by the Protomedicato show that social backgrounds of the admitted members mattered more and more during the seventeenth century, and that the politics of licensing became more strict. The language of the notaries recording these documents changed as well, always emphasizing the fact that the candidate and his male family members never practiced any “mechanical arts” and always lived off family revenue. See, respectively, ASB, Studio 353 and 338.

d’huomini letterati (1647), goes like this: Cortesi was a poor boy, an apprentice in the art of barbers and a stufaiolo; he became a barber at the hospital of Santa Maria della Morte when he was about 16, and there he showed his amazing will to learn. He started to study Latin and natural philosophy thanks to the generosity of an anonymous grammar teacher who noticed the exceptional intellect of that poor bath attendant; he then studied and acquired medical experience by following the hospital physicians and surgeons in their daily visits; finally, he got his degree in medicine (although not in philosophy) in 1583, and in that very same year he was named lecturer in surgery. That was only the start – if belated – of a brilliant career.\textsuperscript{184}

The story reads like a fairy tale, and although a few details might have been edulcorated, there is no serious reasons to doubt it. Cortesi was a stufaiolo, the lowest rank of barber-surgeons.\textsuperscript{185}

Sources uniformly repeat the fact that he was 16 when he started working at the hospital, so it must have been 1568 or 1570, during Tagliacozzi’s tenure as astante. In any case, what “saved” him from a life of poverty, ignorance, and immorality was the hospital, where he not only studied for about ten years privately and more or less formally, but also became assistant in 1580, for the regular three years, until his graduation. Significantly enough, in December 1585, once he had been appointed lecturer on surgery already, he was paid 18 lire “for letting blood to the poor in the hospital (per havere cavato sangue alli poveri mentre egli stava nello Spitalle),” a sign that his ties with the hospital continued, and that he


\textsuperscript{185} In fact, by the late sixteenth century barber-surgeons themselves managed to get them out of their guilds all over Italy. See Anna Esposito, “Stufe e bagni pubblici a Roma nel Rinascimento,” in Taverne, locande e stufe a Roma nel Rinascimento (Rome: Roma nel Rinascimento, 1999), pp. 77-91.
did not disdain to practice the task of a barber-surgeon even after graduation. In 1583 he was made public letrurer in surgery, “even if he had never lectured in logic,” which was the preliminary mandatory teaching for young lecturers.

In the meantime, his career and fame as a teacher and author started to pick up. He was appointed as anatomy demonstrator and started to publish on surgical matters. In the early 1590s Cortesi served as military surgeon for the Bolognese troops in the war several popes waged against bandits in the countryside in the last decades of the sixteenth century. Cortesi never highlighted the experience he gained on the battlefield in his printed works; on the contrary, in these books he rather stressed his learned training at the studio under the

186 Cortesi is listed in the account books of the hospital as getting his regular annual stipend of 36 lire, but he was also performing other tasks, since for example in 1581 the books lists a payment to him of 66 lire. See ASB, Ospedali, Santa Maria della Morte, serie XII, 9, *Libro mastro 1572-91*, fol. ccixvi and cclxxxviii.

187 ASB, Senato, Partiti, 11, fol. 24r.

188 I was not able to find many information on Cortesi’s family, except that he got married in 1586 with a certain Agata di Pietro Moscatelli; see BAB Cartari B. 900, Matrimoni, 138. Other sources report that he had a numerous family and Ghilini even says that some of his relatives used to beg in the streets; moreover, in 1589 the Senate started to periodically award him sums of money of 100, 200, and 600 lire because of “rei familiaris tenuitate,” a measure repeated in 1591 and 1592; see ASB, Senato, Partiti, 12, fol. 67v, 117v, and 138v.

189 See ASB, Senato, Partiti, 12, fol. 106r. His publications of the period are: Giovanni Battista Cortesi, *Epistola qua in simplici sede teli calvariae, os ipsius non abradendum nec perornadum esse demonstratur, ad Ill.rem ac Excell.mum Virum D. Ioannem Cecchium nostrae tempestatis Medicum celeberrimum*. Bologna: apud Faustum Bonardu, 1590; as an editor, Costanzo Varolio, *Anatomiae sive De resolution corporis humani* (Frankfurt: apud Iannem Wechelum & Petrum Fischerum consortes, 1591)

190 ASB, Senato, Partiti 12, fol. 117v: “in curandis militum adversus bannitos missorum vulneribus multum opera ac laboris, idque non sine magno ipsius incommodo impenderit.” A special stipend of 600 lire for his military services figures in the account books of the Senate in 1595: ASB, Senato, Partiti, 12, fol. 187v. In 1598 he was appointed to the more official role of military surgeon of the city, a job which depended directly on the Senatorial commission for military affairs, and thus was paid from a special fund allocated to military affairs. ASB, Senato, Partiti 13, fol. 39r.
guidance of Aranzi and Tagliacozzi, and his animal dissections with the great Ulisse Aldrovandi in the latter’s private museum.\textsuperscript{191}

In the years 1592-93 Cortesi got very close to the peak of his professional success in Bologna. In the spring of 1592, between April and July, his candidacy to enter the College of Medicine was taken into consideration and his \textit{civilitatis probatio} examined in the rooms of the College. Cortesi regularly presented four witnesses, all highly respectable citizens, among them Ercole Bentivogli, son of the Senator Antonio. There was a problem though, in that one of the witnesses, the rich merchant Giovanni Battista Avanzi, could not say that Elia, Cortesi’s father, was a citizen, and instead declared: “I have met Elia Cortesi, tailor, and I know that he was not born in Bologna, but he has lived here for a long time.”\textsuperscript{192} Despite the fact that Cortesi’s grandfather, Bolognino, was a true Bolognese citizen and that Cortesi himself was born in Bologna, the examining board of the College took this problem very seriously. In fact, the fact that only Giovanni Battista’s grandfather and not his father were verified Bolognese citizens turned out to be a problem, as it is revealed by the other proofs of citizenship, which all insisted on the citizenship of both the candidate’s fathers and grandfathers.\textsuperscript{193} So, the College ordered a search in the archives of the duomo of San Pietro for Elia’s baptismal record, but this could not be found.\textsuperscript{194} Cortesi was not admitted to the College. The missing proof of Elia’s citizenship got thrown in the mix with other troubling factors, such as the poverty and low-status of Cortesi’s family, and his lack of degree in

\textsuperscript{191} Cortesi, \textit{Miscellaneorum}, p. 1.

\textsuperscript{192} ASB, Studio 196 (pages are not numbered): “Io ho conosciuto Helia Cortesi Sarto quale so non esser nato a Bologna, ma ha habitato assaiissimo in Bologna.”

\textsuperscript{193} ASB, Statuti del Collegio.

\textsuperscript{194} ASB, Studio 196.
philosophy. The Collegiate must have thought that social mobility should be limited somehow.\(^{195}\)

Cortesi must have been disappointed. Despite all his services to the city and his experience, he was still the least paid of his cohort of surgery and anatomy professors. And of course he was not a member of the College. On the other hand, students must have loved him. There are two memorials dedicated by the syndics of anatomy to Cortesi as lecturer in anatomy: one is from 1591 and the other from 1597.\(^{196}\) In the end of 1598 Cortesi finally accepted an offer from the recently founded University of Messina, in the kingdom of Naples.\(^{197}\) When he left for Messina, Cortesi definitely had the hope of coming back to finally get what he wanted in Bologna. But that never happened. Cortesi built a new life in Messina. During his travel to southern Italy he did not miss the chance to visit Tropea, the city where the first and famous reconstructive surgeons had lived and worked, curious to meet them and to see what kind of procedure they employed. He found no more members of the Vianeo family living and practicing, but someone showed him their old instruments, which he found very rough and primitive compared to those designed by his teacher Tagliacozzi.\(^{198}\) In his 1625 account of the trip, Cortesi presented himself as the heir to the

\(^{195}\) Cortesi’s disappointment was perhaps mitigated by the fact that he spent a long period of time in Paris from the fall of 1592 to the end of 1593, when he was called to take care of Cardinal Filippo Sega, the Bolognese papal nuntius in the French kingdom, for an unspecified illness. This must have been a very important occasion for the former garzone and stufaiolo, who mentioned the episode in print, greatly exaggerating his period of stay in France, extending it to three years; see Cortesi, Miscellaneorum, p. 3. The rotuli show that this was not true; the Senate reserved his chair for the period Cardinal Sega deemed necessary: ASB, Senato, Partiti 12, fol. 146r. He was still in Paris in November of 1593 though, since he wrote a letter to Aldrovandi from France discussing his observations of the putrefaction of sea shells from the Atlantic Ocean; see BUB, Fondo Aldrovandi, Ms. 136, tomo XXIV. Transunti di lettere, fol. 13v-14r.


\(^{197}\) ASB, Senato, Partiti 13, fol. 47r; ASB, Senato, Lettere, serie I, fol. 20.
Bolognese tradition of facial surgery, at the same time acknowledging and paying tribute to the inventors of the method, two sons of the Kingdom of Naples. Cortesi became quite famous and respected at that young and dynamic studio, which had an aggressive hiring policy and offered high salaries to its recruits. In 1604, he was admitted to the local College of Physicians in Messina.\textsuperscript{199}

A clear idea of his strategies of self-fashioning is given by his constant tactic of recalling his Bolognese training and of embracing one of the most spectacular surgical procedures of the times, that reconstructive surgery of the nose of which he wrote the second most detailed account after Tagliacozzi’s, even if a much more dry and technical one. The best example of Cortesi’s self-fashioning is given by his 1629 \textit{Pharmacopeia, seu Antidotarium Messanense}, the official list of ingredients and recipes all apothecary shops of the city must comply to in preparing medicaments. In this work, Cortesi recalled that the famous Bolognese jurist and professor of law Andrea Barbato had proposed to him to go to Messina to teach in 1598.\textsuperscript{200} But the frontispiece image says it all (fig. 2.5). The most famous Bolognese doctors, most prominently Aldrovandi, who is placed at the center, are at the top: Cortesi lived his whole professional life at Messina while underscoring his Bolognese origins and education.

\textsuperscript{199} Cortesi, \textit{Miscellaneorum}, pp. 1-2.


\textsuperscript{200} Giovanni Battista Cortesi, \textit{Pharmacopeia, seu Antidotarium Messanense} (Messina: ex typis Petri Breae, 1629).
Between 1618 and 1620, after almost fifteen years, the Bolognese studio tried to call back its lost professor.\textsuperscript{201} Despite nearly all eighteenth-century historians of medicine report that Cortesi went back to Bologna and died there, the negotiation did not go anywhere. In 1625 Cortesi decided, perhaps as part of his strategy of self-fashioning – after all, Bologna wanted him back and he refused – to publish a touching 1619 letter to Camillo Baldi, who had written to him relating the Senate’s offer. This letter is a document of a life spent in medicine, the life of someone who would have liked to stay in his hometown but ended up building his reputation elsewhere. Cortesi wrote Baldi that at that point he would feel bad leaving a studio and a city which had treated him so well, and that after all he was getting a very high stipend in Messina, and enjoying all kinds of exemptions and benefits. Despite a burning desire to see his hometown and his friends – he went on – and despite the risk of appearing ungrateful, he could not bring himself to leave Messina, among other things also because the journey was too long and dangerous, and he was too old already.\textsuperscript{202}

After his Bolognese beginnings as an author and editor, Cortesi published all his works much later, between 1625 and 1635. Besides the \textit{Miscellanea}, the most original and autobiographical of his books, he wrote a manual of surgery, a manual of practical medicine, a pharmacopeia, and a learned commentary on Hippocrates. The underdog had made it far from home, but nonetheless he remained the Bolognese author who brought prestige to the new Messina studio.

\section*{Patients and Practitioners}

This group portrait of the Bolognese learned surgeons shows that a certain degree of social mobility was granted to the sons of the middle class when they applied themselves to

\textsuperscript{201} ASB, Assunteria di Studio, 36, n.15 bis; ASB, Assunteria di Studio, 8. A negotiation must have taken place, since in June of 1619 the Senate proposed a higher sum, an annual stipend of 2400 lire: ASB, Senato, Partiti 16, fol. 128v; see also ASB, Ibid., fol. 141r.

both manual and intellectual work. These men must have felt a mix of fascination and repulsion for “natural born” noblemen. After all, noblemen could be learned surgeons’ best clients; but noblemen must have never lost the sense of superiority toward these “new men” who ascended from a lower class. Tagliacozzi’s book, as well as those of the other surgeons who wrote about reconstructive surgery, was full of references to the culture of honor, of the face, and to the upper class masculinity that valued physical strength and bravery in bearing all kinds of suffering. Tagliacozzi mentioned duels fought by gentlemen from Piacenza in the letter to Mercuriale, and we have seen that Piacenza was one of the places where the Inquisition’s dispositions against duel encountered strong resistance. Moreover, the surgeon made several references to the “sword” (ferro) in De curtorum. For example, he said that lips were close to the nose and often they help it perform its functions, and they were “particularly vulnerable to injuries occurred in dueling.” Furthermore, the dedication of De curtorum to Vincenzo Gonzaga – and once again we have seen that the Mantua court became specialized in chivalric sciences in the sixteenth century – said that “the house of Gonzaga has always been known for its prowess with swords. Because camp followers and those who deal with arms often incur this type of injury, I thought it fitting to dedicate a book dealing with martial injuries to military men.”

Below the idealized surface of both chivalric sciences and Tagliacozzi’s learned monograph, the early modern learned surgeon had to deal with more mundane affairs and types of injury. Reading Bologna’s chronicles it appears that Tagliacozzi was known among noble circles and often called upon by them for more or less serious episodes of violence and street fights involving firearms as well as knives and swords. In November 1580, after a fight

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203 Tagliacozzi, De curtorum, p. 46 (1:33): “quod non infrequenter digladiantibus, altius adacto ferro laesionem incurrant.”

for a futile reason among one member of the Pepoli and someone from the Castelli families, a
chain of crossed vendettas started in Bologna and moved to Florence, where Tagliacozzi had
to intervene to treat three men with gunshot wounds.205 In February 1592, Tagliacozzi was
called from Bologna to the nearby small town of Imola to treat local noblemen who injured
themselves in a street fight with both swords and firearms, and took the time to teach the
local barber-surgeons how to correctly treat a gunshot wound.206 In 1594, at the moment of
his greatest renown, the physician traveled all the way to Vienna to treat Virginio Orsini
(1572-1615), a very powerful Roman nobleman wounded in the war against the “Turks.”207

The relationship between doctors and noblemen was not an easy one, and all the more
so in cases when doctors where men who came from the artisanal class. Class interacts with
gender. Recent historiography on masculinity in pre-modern European history has stressed
the importance of studying men/men and men/women relations in their historical
contingency, without assuming that a fixed male identity would have remained constant
throughout history. Historians have insisted on the fact that patriarchy must be historicized.208

207 Ibid., fol. 529. All the three cases have been transcribed by Teach-Gnudi and Webster.
208 See Peter Tosh, “The History of Masculinity: An Outdated Concept?” in Sean Brady and
John H. Arnold, ed. What Is Masculinity? Historical Dynamics from Antiquity to the
Contemporary World (New York: Palgrave Macmillan, 2011), pp. 17-34; Diederik Janssen,
“Can the Hegemon Speak? Reading Masculinity Through Anthropology,” in Brandy and
Arnold, ed. What is Masculinity? pp. 35-56; Alexandra Shepard, “Manhood, Patriarchy, and
Gender in Early Modern History,” in Amy Leonard and Karen L. Nelson, ed. Masculinities,
Symposium (Newark: University of Delaware Press, 2011), pp. 77-95; Ruth Mazo Karras,
From Boys to Men: Formation of Masculinity in Late Medieval Europe (Philadelphia:
University of Pennsylvania Press, 2003), pp. 1-19; Elizabeth S. Cohen, “Honor and Gender in
the Streets of Early Modern Rome,” Journal of Interdisciplinary History (1992), 597–625;
Stanley Chojnacki, Women and Men in renaissance Venice (Baltimore, Johns Hopkins
University Press, 2000), pp. 1-24; Sandra Cavallo, Artisans of the Body, pp. 181-223; Patricia
Simons, The Sex of Men in Premodern Europe: A Cultural History (Cambridge: Cambridge
I believe that such a historical use of the tool of gender and masculinity is most useful to understand the rise of reconstructive surgery.

Let me put things schematically. In the sixteenth century, noblemen lived in a culture of patrilineal kinship structures, of aggressive competition with their peers and of contempt for lower class men, and they were used to consider women as “currency.” Besides all this, noblemen’s political role was a delicate matter in late sixteenth century Bologna, since in the Papal State as elsewhere new ideals of good male citizenship were emerging. On the other hand, the world of crafts, and to a certain extent of health care professionals, was more open to cognates and horizontal kinship structures (for example, Aranzi allegedly received his first medical education by his maternal uncle, Bartolomeo Maggi), and had to deal with women in a different way than noblemen. At least women could work as midwives and could own apothecary and barber shops (but rarely work in them). Aranzi, Tagliacozzi, and Cortesi had been able to climb the social ladder and to confront themselves with a different kind of men: those of the ruling class. The patients who were financially and morally able to look for this kind of procedure were all members of the noble and ruling class who injured themselves in fights, jousts, duels, and war. Tagliacozzi was a physician coming from the artisanal class who treated noble patients, thus occupying a delicate and liminal social and gender position. As a man, he was not part of the culture of honor and arms by birth, he was raised above those men practicing mechanical arts only by virtue of his education and skills in medicine and surgery. Doctors of medicine were experiencing in a positive way the emergence of new roles of civic officials, while at the same time dwelling in a liminal space between the artisanal culture and the noble culture, of which they were part only because of the privileges that emperor Charles V accorded to Collegiate doctors in 1530. This encounter between

different kinds of men was mediated by several cultural and scientific factors that I will take into account.
CHAPTER 3

THE CULTURE OF THE FACE

Tagliacozzi summarized in one passage of *De curtorum* the centrality of the face for sixteenth-century selfhood.

For this reason [that the face is the seat of many physiological functions] we will hardly be amazed that Nature has duly bestowed such outstanding qualities on the face and denied them to the other parts of the body. For the face has obtained the highest position; like a citadel, it occupies a high place, especially the area around the eyes, whose action demands a more elevated site than other parts … The face itself is an indication of gender; it distinguishes one person from another and the measure of the entire body lies hidden in it; on the face we can read the foundations of physiognomy. The face reveals age and beauty and distinguishes between the sexes. It displays a man’s dignity; finally, it is a true image of our souls and exposes most fully our hidden emotions … Prudent Nature arranged things this way so that individuals could be distinguished one from another by certain special marks and true signs, lest too much similarity of features cause errors in recognition.209

This passage opens the way for a deeper exploration of the culture of the face, made both of a network of symbolic meanings attributed to faces and noses, and of several practices of the care and the alteration of the face.

In its broadest anthropological meaning, culture can be defined as a system of shared values, meanings, and beliefs inscribed in a series of material supports and expressions. In this sense, there existed an early modern culture of the human face. Without aiming at an impossible all-inclusiveness, in this chapter I discuss the medico-physiognomic culture of the face in Tagliacozzi’s times and I place it in the wider context of attitudes toward the dignity, honor, and integrity of the face in medicine, law, and the Christian theological tradition. I follow Tagliacozzi’s text and highlight the wider cultural context for the practice of plastic surgery with reference to three components: the Renaissance revival of classical notions of beauty, proportions, and integrity of the human figure; the growing importance and influence of...
of physiognomy; and the great reputation and cultural salience the human face – and the nose – enjoyed in that period. In this culture, the human face could be both a sign of prestige and a sign of inferiority and infamy. Renaissance practices of disfigurement built on a rich tradition which consisted in a converging perception of moral character, physical standing, aesthetic appearance, and metaphysical integrity. In the early modern culture of the face, being disfigured meant at the same time being ugly and being morally faulty. This particular culture of the face was organized along the gendered and moral lines of the distinction between the natural and the artificial. I shall show how the face entertained complex relationships with the self in the sixteenth century.

CLASSICAL BEAUTY

At the beginning of his erudite discussion introducing the surgical techniques he is presenting to the public, Tagliacozzi includes a straightforward account of what might be called the classical conception of beauty in the Renaissance. Tagliacozzi recalls the opinion of some of the most wise men of Greece and Rome and of their contemporary followers. These men all believe that our face presents a “harmony and a symmetry that, once we know its size, we can conjecture as to the size and proportions of the entire body, since it appears that the other parts are proportionate to the face.”

A beautiful human face, characterized by symmetry and proportion, was considered the measure of the length, breadth, and depth of the whole human body. Tagliacozzi specifies the rules to recognize a well-proportioned and symmetrical face. “First of all, I must say that the dimensions of this kind are symmetrical and are consistent with a symmetrical body, not at all with a deformed one.” Considered with respect to its length, the face was divided into three parts: the forehead, symbolizing

210 Tagliacozzi, *De curtorum*, p. 11 (1:7).

211 Ibid.
knowledge; the medium part (from the eyebrows to the nostrils), the proper seat of beauty; and the lower part (from the nostrils to the chin), the symbol of “honesty.” Tagliacozzi’s main reference is the famous humanist architect and sculptor Pomponio Gaurico (c. 1482-1530), who had divided the length of the human body in three parts. Each of these parts was three-fold, which gave an image of the body as composed of nine parts. The face was the first, and highest, part.212

Tagliacozzi shows a good deal of erudition. Erwin Panofsky studied the history of the theories of proportions and defined them as “a system of establishing the mathematical relations between the various members of a living creature, in particular of human beings, in so far as these beings are thought of as subjects of an artistic representation.”213 These systems can be norms for either representing or for measuring the actual human body (or both). One of the most influential theoretical conceptions of the normal human body and of beauty in the Renaissance was a loosely Platonic theory of harmony and proportion.214 Renaissance humanists progressively discovered a whole tradition on geometrical beauty which was more ancient than Plato. Polykleitos produced his Diadumoeno, then renamed Canon, in the fourth century BCE. The Diadumoeno is a statue of the perfect human body

212 Ibid.


214 Plato, Timaeus, Critias, Cleitophon, Menexenus, Epistles, tr. G. Bury (Cambridge: Harvard University Press, 1929) (Timaeus V, 31c), p. 59: “And the fairest of bonds is that which most perfectly unites into one both itself and the things which it binds together; and to effect this in the fairest manner is the natural property of proportion.”
inspired by this principle of proportion, which became a model not only for artists, but for physicians and anatomists too throughout the sixteenth century.\textsuperscript{215}

In the first century BCE, the Roman architect Vitruvius – a true Renaissance star – expressed in his \textit{De architectura} the numerical relationship constituting the parts of the body. Vitruvian ideals of ornament and harmony became for Renaissance thinkers the rules not just for art theory and practice, but for all the other arts and even for public behavior and social life.\textsuperscript{216} The peak of this idea of mathematical beauty was reached in the literature on perspective.\textsuperscript{217} Architecture textbooks animatedly discussed harmony and proportion for music, painting, sculpture, and the human body – all together. In particular, the analogies and network of relations between architecture and the human body proliferated.\textsuperscript{218} The two currents of technical, aesthetic theory of proportions, and of metaphysical harmony merged together.\textsuperscript{219}

\textsuperscript{215} For example, Vesalius explicitly mentioned it in his quest to represent the normal human body in his \textit{De humani corporis fabrica}; see Nancy Siraisi, \textquotedblleft Vesalius and human diversity in \textit{De humani corporis fabrica},\textquotedblright \textit{Journal of the Warburg and Courtauld Institutes,} 57 (1994): 60–88.


\textsuperscript{219} Panofsky, \textquotedblleft The History of the Theory,\textquotedblright pp. 89-90. Platonist philosopher Marsilio Ficino (1433-1499) defined beauty as “a certain proportion between all the parts, or a real proportion and commensuration, with some new color (una certa posizione di tutti i membri, o veramente commensurazione e proporzione, con qualche novità di colori);” quoted by Castelli, \textit{L’estetica}, p. 46. Artist and polymath Albrecht Dürer (1471-1528) in his book on the symmetry of human bodies (published in 1528 and translated into Italian in 1591 as \textit{Della proprtione delli corpi umani}), employed the same concepts of proportion and symmetry. See \textit{Ibid.}, pp. 46-47
Tagliacozzi’s favorite model was Pomponio Gaurico. In the second part of his 1504 treatise *De sculptura*, titled “On Symmetry,” Gaurico had established that all the parts of the body must be compared to the face, which gave them their measure and proportion.\(^{220}\) Gaurico also gave the ratio for the analogy or proportion between the parts of the face, and between the parts of the face and other parts of the body, which he called common measure (*commensum*). “The length of the space between the eyelids and the top of the nose must be the same between the chin and the throat, and in turn it must be the same as that between the top of the nose and the chin: these are the right proportions.”\(^{221}\) Gaurico specified that those peoples who did not embody these rules, such as the African “Pygmies,” should be called “monstrous.” He went on detailing a complex musical analogy based on the notion of harmony, adding that “measure, or symmetry” was the most wonderful thing God created in nature, and especially in man.\(^{222}\) By uniting all the arts with cosmology and Christianity, the work of Gaurico exemplified the broad scope of symmetry in Renaissance culture.

By endorsing Gaurico, Tagliacozzi also meant to emphasize that there was a parallel intellectual stake in surgery and sculpture: both arts were the outcome of classical culture and manual dexterity. In the second volume of *De curtorum*, devoted to the technical aspects of surgery, Tagliacozzi showed what the theoretical notion of beauty as geometrical proportion meant in practice. While discussing the relation between the skin flap and the mutilated parts to restore, and the operation of measuring the skin flap itself, the learned surgeon defined the aim of this practice with plenty of references to the classical theme of art imitating nature and to the symmetry of perfect natural shapes. “The goal of our art – he wrote – namely, that the


\(^{221}\) Ibid., pp. 156-57. Panofksy has argued that this way of measuring bodily proportions came from Byzantine art theory much more than from classical art: see Panofsky, “The History of the Theory,” pp. 75-76.

\(^{222}\) Gaurico, *De sculptura*, pp. 158-59.
mutilated part be restored to its former size, will provide the answers to these questions of the relationships between art and nature. We must do our best to follow Nature’s example and provide pleasant sights for mortal eyes.”

One of the most telling examples of this conception of beauty, and of its highly intellectualized and abstract character, is to be found in the *Iconologia* by antiquarian and courtier Cesare Ripa (c. 1555-1622) (fig. 3.1). Ripa’s illustrated 1603 edition shows the quintessential classical conception of beauty as participation of the divine light. “Beauty is depicted as having her head in the clouds, because there is nothing more difficult to talk about with a mortal speech and nothing which is so hard to grasp by human intellect as beauty, which among creations is – as the Platonists say – nothing else than a light deriving from the splendor of God’s face.” Beauty holds a sphere and a compass in her hands “to show that all beauty consists in measures and proportions, which are harmonized with time and place. Place determines beauty in the dispositions of provinces, cities, temples, piazzas, man, and all things which can be seen by the human eye, such as distinct colors, and with proportioned quantity and measure, and other similar things; time determines harmony, sounds, voices, orations, sadness and other things, which when are performed with good measure are rightly called beautiful.”

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223 Tagliacozzi, *De curtorum*, p. 149 (2:31).

224 Cesare Ripa, *Iconologia*, ed. Sonia Maffei (Turin: Einaudi, 2012), pp. 61-62: “Si dipinge la Bellezza con la testa ascossa fra le nuvole, perché non è cosa della quale più difficilmente si possa parlare con mortal lingua, e che meno si possa conoscere con l’intelletto umano, quanto la bellezza, la quale, nelle cose create, non è altro, metaforicamente parlando, che un splendore che deriva dalla luce della faccia di Dio, come definiscono i Platonici … per dimostrare che ogni bellezza consiste in misure e proporzioni, le quali s’aggiustano col tempo e col luogo. Il luogo determina la bellezza nella disposizione delle Provincie, delle Città, de’ Tempi, delle Piazze, dell’uomo, e di tutte le cose soggette all’occhio, come colori ben distinti, e con proporzonata quantità e misura, e con altre cose simili; col tempo si determinano l’armonie, i suoni, le voci, l’orazioni, gli abbattimenti, et altre cose, le quali con misura aggiustandosi, dilettano e sono meritamente chiamate belle.”
Ripa’s icon of beauty, despite being a woman, is meant to be genderless and universal. However, as we shall see, more realistic and practical conceptions of beauty in the Renaissance were based on gendered conceptions of the human body.

FACES OF PHYSIOGNOMY

Physiognomy, understood as the science of interpreting the passions of individual souls through the reading of the external marks on the body, was highly popular in the sixteenth century, both in its philosophico-medical version, and in its occult and natural-magical one. Physiognomists were most interested in the human face. Besides the obvious connections between interpreting facial expressions and medical diagnosis, physiognomy played an important role in the literature on facial surgery. All physicians and surgeons who discussed such technique referred to it. One of the most important tenets of physiognomy was for Tagliacozzi the fact that it showed in the clearest possible way the dignity of the human face. The art of plastic surgery found in physiognomy both an important source of legitimization, and a source of operative principles to justify the enterprise of correcting disfigured faces.

Physiognomy was one of the factors that contributed to shifting the attention to the face and its traits as key features of social and political life in the sixteenth century. One of the fundamental axioms of physiognomy, that soul and body can mutually influence each


226 With the phrase “culture of the face” I do not mean to imply that the face had a culture or was important only in the Renaissance, or only in Italy. My idea is to describe this particular and historically determined culture of the face.
other, became firmly entrenched in the minds of learned writers as well as in institutional practices. Two of the most important and representative texts of the physiognomic tradition are the pseudo-Aristotle’s book *Physiognomonika*, central to the medieval institutionalization and scholasticization of the discipline, and the book by Neapolitan natural magician and experimentalist Giovanni Battista della Porta (1535-1615), written in the late sixteenth century. Both are relevant for the discussion of physiognomy made by Tagliacozzi.

By the time of Tagliacozzi, physiognomy had already a century-long tradition, and it was firmly established in the curriculum of arts and medicine faculties. In the 1405 statutes of the University of Bologna the pseudo-Aristotelian *Physiognomonika* appeared as a mandatory reading in the second year of the arts curriculum, propedeutic to the medical degree.227 Similarly to the case of surgery, by the late thirteenth century physiognomy acquired a “rational” structure in the scholastic sense: it became a body of knowledge ruled by a system of knowable causes which could be deciphered through logical thinking. In these new clothes, physiognomy entered the fields of learned natural philosophy, medicine, and astrology. Starting from the late Middle Ages, physiognomy moved from the intuitive and the conjectural to a different kind of knowledge, rooted within a firm theoretical framework, and closely associated with medicine.228

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228 From the early eleventh century on, Avicenna and other Arabic-writing natural philosophers tried to include physiognomy within the realm of the sciences alongside with medicine and astrology. Arabic texts by Rhazes, and above all the *Secretum secretorum*, were translated into Latin in the early thirteenth century. Natural philosopher Michael Scotus (1175-c.1232) in his 1230 *Liber physionomiae*, drawing largely on Arabic material, was the first to call physiognomy a *scientia naturae*, which was the first step towards the “scholasticization” of this body of knowledge. Scotus was followed by Albertus Magnus (c.1200-1280), Roger Bacon (c.1219-c.1292), and later by Pietro d’Abano (1257-1316), who all made use of physiognomic ways of knowing and wrote about it. Medieval authors took pains to distinguish physiognomy from chiromancy and the divinatory arts, and to connect it with the science of interpreting the stars, astrology, understood in a non-deterministic way. See Agrimi, Ingeniosa scientia nature; Ziegler, “Philosophers and Physicians.”
Pseudo-Aristotle was the most important ally of, and provided the fundamental theoretical ground for, physiognomists throughout the sixteenth century. This book posed the problem of the relationships between the body and the soul in a straightforward manner. Pseudo-Aristotle put the need of a scientia of physiognomy in the wider context of human affairs, thus giving this interpretative technique a broad scope from the beginning.

Dispositions (dianoiai) follow bodily characteristics and are not unaffected by bodily impulses. This is obvious in the case of drunkenness and illness; for it is evident that dispositions are changed considerably by bodily affections. Conversely, that the body suffers sympathetically with affections of the soul is evident for love, fear, grief, and pleasure. But it is especially in the creations of nature that one can see how body and soul interact with each other, so that each is mainly responsible for the other’s affections. For no animal has ever existed such that it has the form of one animal and the disposition of another, but the body and soul of the same creature are always such that a given disposition must necessarily follow a given form. Again, in all animals, those who are skilled in each species can diagnose their dispositions from their forms … Now if this is true … there should be a science of physiognomies.”

In the fourth part of the book, the author also specified the issue of the relationships between body and soul: “It seems to me that soul and body react on each other; when the character of the soul changes, it changes also the form of the body, and conversely, when the form of the body changes, it changes the character of the soul.”

Zoological comparison was at the core of Aristotelian physiognomy. Pseudo-Aristotle considered animal shapes to be the medium term of a particular kind of syllogism. Since we can observe specific relations between the shapes of animals and their moral

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229 The text of the Pseudo-Aristotelian physiognomic book, a Latin version of an anonymous Arabic text, circulated in Western Europe since the thirteenth century and was included in the sixteenth century editions of Aristotle’s complete works, including those by Manuzio and Oporinus. Aristotle discussed physiognomy and the method of the physiognomic syllogism in his books on logic (First Analytics, II, 70b, 1-38).


character (braveness, laziness, generosity, etc.), then if we notice specific analogies of shapes between humans and animals we will be able to conclude that such humans have similar moral traits. The author claimed that the special medium for physiognomy was the face: “Clearest of all are those that appear in the most favourable position. The most favourable part for examination is the region round the eyes, forehead, head, and face.…”

Pseudo-Aristotle’s structuring opposition were centered on moral qualities such as brave/coward; shameless/temperate; high-spirited/low-spirited, which were in turn connected to a general and supposedly self-evident notion of sexual difference. Women were more evil, less brave, less strong, more gentle, more skilled in rearing children. They had a “smaller head, narrower face, and a more slender neck … softer, moister flesh.” For example, the lion was the closest animal to the “pure” male type: “gentle, just, and affectionate towards his associates,” while the panther was the most female-like: “petty, thieving, and, generally speaking, deceitful.”

Giovanni Battista Della Porta’s widely read and greatly influential De humana physiognomonia, first published in Latin in 1586, then soon translated in several European vernaculars, took up all the pseudo-Aristotelian themes and deepened them. Della Porta’s attitude highlights the fact that physiognomists were becoming more and more straightforward in linking external signs and internal character through the medium of humoral complexions. Not only did he focus almost entirely on the face and build his whole enterprise on zoological comparisons, but he also included in the science of physiognomy the fleeting expressions of feelings, albeit not in a systematic fashion. Della Porta began his book
by defining physiognomy right away as “a science that from the permanent signs of the body – and from the accidents that change these signs – understands the natural inclinations of the soul.” The author also formalized the proper way of reasoning (fig. 3.2): “Let A be strength, B to have big limbs, and C the Lion. All animals with big limbs are strong; all lions and some other animals have big limbs; all lions and some other animals are strong.”

Della Porta’s book showcases a conception of the human face that came from physiognomy but spread beyond its disciplinary boundaries. In this way, Della Porta’s book throws some light on the general cultural conception of the human body, which in turn shifted the “norms of seeing” from the body toward the face. The face was like a dynamic text made of fixed traits and mobile features that were readable through specific techniques of interpretation that only trained natural philosophers could acquire. All physiognomic enterprise had to start from the face, since “it is the most noble part of the body, the seat of the senses and of the most important part of man, because here sight, hearing, smelling and taste are placed close to one another … and if I meet a man I see his face first, which is not true of the chest and the other parts … [in the face] we find the most important part of the soul and the gift of intelligence.”

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but also “the true witness of our conscience, and it is uncertain, changing, and diverse.” The surface of the face and its movements were “that which reveal as well as that which cover the soul. Therefore it is reasonable to judge a man from his face, unless when the movements of his soul have cooled down … The face is the mirror of the mind because it shows the secrets of the soul through the eyes. Physicians say that the whole body sends its blood and spirits to the face, because the face is the most noble part of the body; therefore, the passions of the whole body and the soul are made evident in the face.”

Della Porta pushed the physiognomic way of reasoning to its limits by linking it not only to a moralized version of the Hippocratic-Galenic theory of humoral complexions, but also to the classical notion of beauty. Della Porta mentioned the Hippocratic definition of beauty as the best temperament and the perfection of the proper action of each of the parts of the body. This view, he recalled, was opposed to the “philosophical” definition of beauty associated with Plato, according to which beauty was the beauty of the soul, given that proportion between the parts of the soul reflected the proportion between the parts of the body. Della Porta argued that Galen combined the two definitions. “One of Physiognomy’s axioms, old and shared by all, is that the right disposition of the parts of the body shows a right disposition of the conduct; it is indeed said that those who are monsters in the body are monsters in the soul as well. Beauty is a well-measured disposition of the parts of the body.

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238 Della Porta, *Della fisionomia*, pp. 99-100: “come parte nobilissima di tutto il corpo, stanza de’ sensi e nella quale abita la principal parte dell’anima, perché quivi la vista, l’udito, l’odorato et il gusto abitano ristretti … et, incontrandomi un uomo, subito si vede la faccia, il che non avviene al petto e all’altre parti … [nella faccia] starà la principal parte dell’anima et in quella il dono dell’intelligenza.”

239 Ibid., pp. 163-64: “testimone dimostratore della nostra conscienza, il quale è incerto, incostante e vario … è suo [dell’animo] simulatore e dissimulatore, onde non è fuor di ragione in ogni ora poter giudicare dal volto, fuorché quando sarà raffreddato dai movimenti e passion dell’animo … Il volto è infatti specchio della mente, perché, stando taciti gli occhi, ancor si manifesta i segreti dell’animo. Dicono i medici che tutto il corpo manda il suo sangue e spiriti alla faccia, per essere membro più notabile di tutto il corpo; onde le passion di tutto il corpo e dell’animo si conoscono nella faccia.”
which is model and image of that of the soul.” There was a clear correspondence between the inner and the outer parts of the body: “nature made the body upon the model of the soul.”

True beauty of the face was “harmonious agreement of the parts.” On the other hand, “those who have an ugly face have a ugly soul too … If someone wants to know the natural cause of this state of affairs, that is because the lack of temperance of the humors in the body makes the parts of the body badly shaped; and the lack of humoral balance causes vices and bad conduct.” A beautiful face was a moral face, as well as a healthy face.

Physiognomy took a normative stance with respect to the ideal male facial shape. Moreover, masculinity had a lot to do with noses. Masculine noses *par excellence* were thought to be aquiline noses, indicating *gravitas*, authority, and *decorum*. The nose had “a certain royal and noble quality,” and not only it revealed the beauty of a soul but also the authority of a person. This is testified by “the Persians who loved to see an aquiline nose in their kings, and by the Jews, who excluded from priesthood those who had an ugly nose or missed a nose altogether.” And of course, these government tasks are by definition male tasks, and more precisely upper-class male ones. Most of the physiognomic descriptions of the noses referred to men since, despite the supposed universal character of physiognomic

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240 Ibid., p. 464: “E un assioma vecchi et approvato da tutti quelli che fan professione di Fisionomia, che la convenevol disposizione delle parti del corpo dimostra ancora una convenevol disposizione di costumi; e si suol dire proverbialmente che chi è mostro nel corpo è ancor mostro nell’anima. La bellezza è una misurata disposizione de’ membri del corpo, che è modello et imagine di quella dell’anima … la natura ha fabbricato il corpo conforme a gli effetti dell’animo.”

241 Ibid., p. 467: “una armoniosa e concordevol concordanza di parti.”

242 Ibid., p. 473-74: “li brutti di faccia sono bruttissimi di animo … e se alcuno volesse cercarne la cagion naturale perché i brutti sono cattivi e i belli buoni, a distemperanza de gli umori nel corpo e mal composti, rendendo le parti del corpo mal composte e la distemperanza de gli umori cagionano i vizii et i mali costumi.”

interpretation, it was by far more important in a male-dominated public culture to judge the
character of men than that of women. Pseudo-Aristotle established a canon, repeated by
physiognomers and physicians throughout the sixteenth century.

Those that have thick extremities to the nostrils are lazy; witness cattle. Those that
have a thickening at the end of the nose are insensitive; witness the boar. Those that
have a sharp nose-tip, but a flat one, are magnanimous; witness the lions. Those that
have a thin nose-tip are bird-like; but when it is somewhat hooked and rises straight
from the forehead they are shameless; witness ravens; but those who have an aquiline
nose with a marked separation from the forehead are magnanimous; witness the eagle.
Those who have a hollow nose, rounded where it rises from the forehead, and the
rounded part standing above, are salacious; witness cocks. But the snub-nosed are also
salacious; witness deer. Those whose nostrils are spread are passionate; this refers to
the affection which occurs in the temper.”

The connection between noses and masculinity also circulated in the most explicit
form possible. Della Porta wrote in his physiognomy: “The nose corresponds to the penis,
since if one has it thick and long, or thin and long, or short, we can say the same of his penis;
in the same way, nostrils correspond to the testicles.” Tagliacozzi was not as explicit, but
he too made a reference to the fact that irregular noses could be the “object of sly
derision.”

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245 Della Porta, *Della fisionomia*, p. 146: “Il naso risponde alla verga ché, avendolo alcuno
lungo e grosso, overo acuto e grosso o breve, il medesimo si giudica di quella; così le nari
rispondono ai testicoli.” Famous writers such as Giulio Cesare Croce and the Neapolitan
Giovanni Battista Marino (1569-1625) – for example in *Il padre Naso* (1626) – played with the
shared meanings of the nose and the penis. For example, Marino clearly intended to
suggest a direct analogy between the inflated nose and the erected penis in *La samprognia,*
when he described the God of fertility Priapos, noted for his endurance in sexual intercourse
and the huge dimensions of his penis, as the “strong herd of the field and the vine” who “with
naked head, smoky face, lit as fire, with an enflated nose and red light eyes, while admiring
such beauty, brandished his sickle (robusto custode/del campo e della vigna ... ignudo la
testa/fumante il volto e più che vampa acceso/col naso enfiato e con le luci rosse/mentre
tanta beltà quivi mirava/la sua falce vibrava).” See Giovan Battista Marino, *La samprognia*

246 Tagliacozzi, *De curtorum*, p. 6 (1:4).
Tagliacozzi was well aware of the developments of the physiognomic tradition. He recalled that physiognomists, “metoposcopists” – readers of the forefronts – like Girolamo Cardano (1501-1576), natural historians, and astrologers all recognized the deep interdependence of the soul and the body and the mutual transmission of their respective actions and passions. Tagliacozzi particularly insisted on two important pseudo-Aristotelian arguments in favor of physiognomy. One was the existence of a sympathy (consensus) between the soul and the body, so that the body could influence the soul. The other was the validity of the reverse principle, namely the fact that the appearance of the body could be modified by the passions of the soul. In other words, he embraced the view that “there is a kind of science that, with the aid of accurate conjecture, can infer the impulses of the mind from the form of the body.”

In a more philosophical tone, the Bolognese surgeon went on to explain that each body needed a “specific form” – a technical Aristotelian term to define the soul – and that they were so closely linked that one could easily move from knowing one element to knowing the other. Tagliacozzi clarified that he was not dealing with mores in the sense of costumes as they were refined by virtue or vice, but with what the Greeks had called the “passions of the soul (animi passiones)”: anger, love, hate, hope, joy, etc. In modern terms, the field of physiognomy was anthropology, not ethics. Tagliacozzi prudently opened up a parenthesis here to emphasize the separation of the soul from the body. He argued for free will, a divine gift: “Because the mind or will of man is God-given, it is by far superior to the weak and lowly body, and our power of judgment is so separate and free that it cannot be

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247 Tagliacozzi’s teacher at Bologna, Cardano built an interpretative art of reading moles and forefronts.

248 Tagliacozzi, De curtorum, p. 13 (1:9).
subject to any corporeal restraints.”

Yes, it was true that the body offered to the expert gaze signs of the soul, but the exercise of free will was quite another matter. In this respect, Tagliacozzi showed his acute awareness of one of the most thorny issues accompanying the whole history of physiognomy as a learned discipline.

DIGNITY AND INFAMY

Besides physiognomy, the philosophical, the humanist, and the medico-anatomical traditions gave plenty of arguments to sixteenth-century medical writers discussing the excellence of the human face. Aristotle, in *Parts of Animals*, had stated that “in man, the portion of the body between the head and the neck is called the *Prosopon* (Face), a name derived, no doubt, from the function it performs. Man, the only animal that stands upright, is the only one that looks straight before him or sends forth his voice straight before him.” And the Stagirite went on to claim that the higher parts of the body were more noble than the lower parts, since the parts that in the human body were placed in a higher position pointed to the universe and the heavens. Cicero’s *On the Nature of Gods*, one of the most beloved books by fifteenth and sixteenth century humanists, repeated this very same theme of humans standing on their feet with the head, face, reason, and the senses projected towards knowledge of the higher and most noble parts of the world and heavens. Finally, the early fourteenth-century classic anatomical textbook by Mondino de Liuzzi (c.1270-1326) gave the

249 Ibid.


idea a medical twist. The anatomist added to the standard praise of the face that the head was upwards also because it was warm and made of a light, airy substance.\(^\text{253}\)

It is interesting to notice the merging of traditional medical and physiognomic arguments in the cultural valorization of the face made by Tagliacozzi. In straightforward Galenic fashion, he argued that human body parts had three aims: protecting life (brain, heart, liver); defeating individual death through generation (testicles, the uterus, and the \textit{pudenda}); and, finally – the function of the face – allowing for a better life. The “honor” of the face could be inferred at first sight by its place in the topography of the body. Tagliacozzi praised the divine order of the body that put the genitals and the face at a great distance, since otherwise the genitals would have enslaved the face and even the brain. But luckily “wise Nature” decreed that the face should occupy a higher place, and the genitals had to be placed below, as in animals.\(^\text{254}\)

The face was the most excellent part also because “we can discern from the face the temperament of both the entire body and the mind itself:” just “as in a painting (\textit{ac in tabula})” on the face one could see the signs of the temperament, both of the body and of the brain. The skin of the face was thin and elastic, and thus it showed the nature and the essence of the humors of the body. A rose-colored face was sign of a warm and moist temperament; a yellow face of warm and dry people; black, dark, and livid signaled the melancholic; a pale and white appearance indicated cold and moist complexions.\(^\text{255}\) Moreover, the face offered signs (\textit{indicia}) of many illnesses. Referring to the famous “Hippocratic face,” Tagliacozzi regarded the examination of the face as a universal practice, and especially useful in devising


\(^\text{254}\) Tagliacozzi, \textit{De curtorum}, pp. 18-19 (1:13)

\(^\text{255}\) Ibid., p. 19 (1:13).
prognoses. If the face was “different,” namely not “according to its nature,” one could be sure there was something wrong.

Tagliacozzi endorsed Cardano’s three-fold explanation of the diagnostic centrality of the face. Looking closely at patients’ faces was of key importance because faces was composed of many parts, each of which was sensitive to injuries and illness, and registered in their appearance the action of disease. In the second place, the skin of the face was thin and therefore it easily revealed the inner underlying bodily processes. Finally, the brain was so close to the face that when people were struck by impressions of pain, joy, etc., then the face suddenly, and accordingly, changed. The argument easily slipped from technical medical descriptions to general considerations on human nature. In fact, Girolamo Cardano served as a model in more general philosophical terms too. In his 1551 European bestseller De subtilitate, the Milanese scientist had declared that the face was the seat of three “miracles (miracula),” or miraculous facts: first, that there could not exist two identical faces in the whole world; second, that on the face we could see the most praised beauty and the most abhorred ugliness; and finally, that on the human face we could read one individual’s emotional states as rapidly as they change.

From the most humble war surgeon to the most famous and learned physicians, medical practitioners rehearsed the theme of the nobility and dignity of the human face, often praised in connection with the head. Even the empiric Leonardo Fioravanti, albeit in an

256 Tagliacozzi, De curtorum, pp. 19-21 (1:14-15).


258 Praises of the head and the face can be read in as diverse authors as military surgeon Girolamo Crasso, in Ambroise Paré’s anatomy, and in authoritative and learned Schenck von Grafenberg. See Girolamo Crasso, Diario empirico. Nel quale si dimostra il modo di curare
ironic manner that cut short on the humanist-style rhetoric of his more learned colleagues, wrote that “the head is the most prominent thing all living creatures have. The truth of this can be seen in that a man with no foot, no penis, no testicles, no harm, no nose and no ears can live; but with no head no one can live.”

The importance of the face went well beyond medicine. Cardinal Gabriele Paleotti (1522-1597) in his treatise on the arts argued that, among other things, portraits could count as a physiognomic proof in matters of inheritance. In a similar vein, Tagliacozzi recalled that on the face appeared the signs of a person’s parents in the clearest possible way, and that this could help solving inheritance issues: “the features of fathers are seen in sons, surely the truest evidence of the legitimacy of offspring.” The surgeon also marveled at the seemingly infinite variety and singularity of individual faces, and he noticed that each one of them was formed by very specific small parts in order to be distinguished from all the others.

Late medieval and Renaissance literature often presented the topics of the theft of identity, impostors, and people not able to recognize themselves by their faces. The first

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261 Tagliacozzi, *De curtorum*, p. 10 (1:7).
sixteenth century narrators of the story of Martin Guerre constantly referred to the fact that finding two almost identical faces was indeed a “prodigious” or “marvelous” fact.\footnote{Zemon Davis, \textit{The Return of Martin Guerre}, pp. 104-22.} Penal codes judged with much severity wounds inflicted to the face which caused permanent disfigurement. The 1458 Bolognese criminal statutes – valid, with integrations, through the whole early modern period – stated that blows to the face were among those serious crimes that had to be denounced by the city’s officials, without waiting for the damaged party to make a complaint.\footnote{Statuta civilia et criminalia (Bologna: Pisarri, 1735-1736) vol. 1, p. 426 \textit{(Rubrica LVI)}. On the justice system in early modern Bologna see Marco Cavina, “I luoghi della giustizia,” in \textit{Storia di Bologna}, vol. 3.1, pp. 367-411.} Wounds and mutilations inflicted to the face were not only more seriously punishable, but could also trigger a specular retribution. For example, the code stated that “the punishment for those who inflict wounds on the face with bloodshed, and damage the eyes with a forbidden weapon is 100 Bolognese lire”. If the guilty part could not pay within one month, he must be banished, or his eyes must be cast out in turn.\footnote{Statuta civilia et criminalia, vol. 1, p. 480. At the symbolic level, the punishment for those who attacked and “wounded” the image of Christ, the Virgin, and the Saints was heavier if the perpetrators vandalized their faces; see Ibid., pp. 480-82. One of the city government’s public decrees that integrated the statutes, published in 1575, specified that disfiguring wounds were to be treated more severely than other kinds of wounds, and could even be punished by corporal punishments, at the discretion of the judge; see ASB, Assunteria di Sanità, 1. The 1585 decrees on public order were even more explicit: “Given that it is a most heinous crime to disfigure the human face, which has been created similar to God’s image,” those who committed it were condemned to pay 200 golden \textit{scudi}, and were subject to 5 years of prison, and corporal punishments at the discretion of the judge; see BUB 770, Ghiselli, \textit{Memorie}, vol. XVIII (1585-90), fol. 22-23.} A long-standing theological medieval tradition based on passages from the Leviticus and Thomas Aquinas concerned the suspicious status of mutilated bodies. The context for these ideas was provided by medieval theological debates about the resurrection of the body, \\footnote{See Groebner, \textit{Who Are You? Identification, Deception, and Surveillance in Early Modern Europe} (New York: Zone Books, 2007), pp. 17-29.}
generally supported not by a mind-body dualism, but rather by “a sense of self as a psychosomatic unity. The idea of person was not a conception of soul escaping body or soul using body; it was a concept of self in which physicality was integrally bound to sensation, emotion, reasoning, identity – and therefore finally to whatever one means by salvation... Person was not person without body, and body was the carrier of the expression ... of what we today call individuality.” Bodily continuity was the central idea of personhood, an idea which was sometimes at odds with Aristotelian doctrine but supported by a great number of pious and popular practices in the Christian middle ages.


267 Caroline Walker Bynum, “Material Continuity, Personal Survival, and the Resurrection of the Body: A Scholastic Discussion in Its Medieval and Modern Contexts,” in Id., *Fragmentation and Redemption: Essays on Gender and the Human Body in Medieval Religion* (New York: Zone Books, 1992), pp. 239-297. Here is the passage. Leviticus, 21: 17-20: “Whosoever he be of thy seed in their generations that hath any blemish, let him not approach to offer the bread of his God. For whatsoever man he be that hath a blemish, he shall not approach: a blind man, or a lame, of he that hath a flat nose, or any thing superfluous, or a man that is brokenfooted, or brokenhanded, or crookbackt, or a dwarf, or that hath a blemish in his eye, or be scurvy, or be scabbed, or hath his stones broken.” This passage has often been read as the foundation of the doctrine of *Irregularitas*, which prohibited the ordaining of priests to the wounded and the disfigured. This interpretation is correct and supported by canon law, even though, as shown by Irina Metzler, *Disability in Medieval Europe: Thinking about Physical Impairment during the High Middle Ages, C. 1100-1400* (New York: Routledge, 2006), pp. 40-41. See also Henri-Jacques Stiker, *A History of Disability*, tr. William Sayers (Ann Arbor: The University of Michigan Press, 1999), pp. 23-37. The decrees of the Council of Trent generally mentioned the “religiosity” and *gravitas* of ways of behaving, speaking, and moving of clerics, but never explicitly mentioned mutilations or disfigurement. See *The Canons and Decrees of the Council of Trent*, ed. Theodore Alois Buckley (London: George Routlege & co., 1852), session XXII, pp. 149-50. Section XXIII of the Tridentine decrees on the requisites and education of the clergy spoke in general of their physical appearance and the lack of physical defects, but did not go into further details, a circumstance that could be read as suggesting that it was generally understood that disfigured men could not hold clerical offices. See Angelo Turchini, “La nascita del sacerdozio come professione,” in Paolo Prodi, ed. *Disciplina dell’anima, disciplina del corpo e disciplina della società tra medioevo ed età moderna* (Bologna: Il mulino, 1994), pp. 225-56; Carlo
Theology also left down-to-earth traces. For example Aquinas, when speaking of regulation of marriage according to canon law, considered facial mutilations, specifically nose mutilations, a good enough reason to end an engagement. In the *Summa Theologiae*, concerning the circumstances under which the holy vow of marriage could be broken, he wrote that “if before the wedding one of the engaged parties fall seriously ill with a debilitating illness, such as a paralysis or epilepsy; or if one of the parties become disfigured after they have their nose or eyes cut off; or if their illness puts the good of the offspring in danger, as for example with leprosy; then the two engaged parties can lawfully cancel their mutual engagement in order not to become mutually unpleasant and not to compromise the happy outcome of the marriage.”

Theology and the law merged in the emerging specialty of legal medicine. Consulting for a criminal case involving a wound on the face in the 1560s, Sicilian Protomedico Giovanni Filippo Ingrassia (1510-1580) stated clearly that degrees of disfigurement – and the relative severity of the punishment to be administered to the offender – depended on the social condition and status of the wounded man. Ingrassia claimed that that not all faces were equal, and that there was no such thing as an ugly scar on the face of a poor peasant. On the

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268 Thomas Aquinas, *Summa theologiae* (Bologna: Edizioni Studio Domenicano 1984), vol. 31, p. 69 (Suppl., q. 43, a. 3): “si, ante contractatum matrimonium, aliquam gravem infirmitatem incurrat alter eorum inter quos sunt contracta sponsalia, quae ipsum debilitet nimis, ut epilepsy aut paralysis; aut eum deforme, ut a abscissio nasi vel orbitas oculos aut aliquid huiusmodi; aut quae sunt contra bonum proles, utpote lepra … possunt sponsalia dirimere, ne sibi invicem displiceant, et matrimonium sic contractum malum exitum sortiatur.”
contrary, disfigurement on the public, political, and constantly visible face of a nobleman, for whom being disfigured meant expulsion from civil and political society, was very serious.\textsuperscript{269} Ingrassia discussed several degrees of seriousness of facial injuries. One kind included those injuries that damaged the face as an ornament without damaging its more important or vital functions. About this kind of disfigurement he referred to the surgical practice of the Vianeo from Tropea, showing some skepticism about the results, but implicitly letting the reader know that he had seen the operation performed: “Some healer from Tropea who specializes in noses routinely grafts flesh from the arm [onto the nose]; however, the results are far from perfect, for he is not able to remake the skin, and therefore he cannot equisitely restore the original beauty.”\textsuperscript{270}

The first systematizer of legal medicine in the West, jurist Paolo Zacchia (1584-1659), discussed Leviticus and Aquinas in his \textit{Quaestiones medico-legales}. Zacchia specifically discussed nose mutilations, recalling all the medical and anatomical knowledge of the times, detailing the nose’s functions, and interpreting the biblical passage as referring to physiognomic ideas about deformed noses and bad moral character, rather than to real nose mutilations.\textsuperscript{271} On the issue of nose mutilation as an impediment to marriage and


\textsuperscript{270} Ingrassia, \textit{Methodus dandi relationes}, pp. 74-75. This passage is overlooked by all the histories of plastic surgery I have consulted: “nasarius quidam Tropiensis medicus ex bracchii carne illam instaurare solet; imperfecte tamen, cum pellis refici nequeat, ideoque nec pristina pulcritudo exquisite renovari.”

engagement, Zacchia interpreted the old canon law in a new way. Zacchia believed that now, after Tagliacozzi’s book, it was possible to restore defective noses, and so marriage should be celebrated among those patients who have had their noses surgically reconstructed.\(^\text{272}\)
The mere possibility of remaking lost noses could modify the perception of beauty and honor in significant ways.

Mutilations carried with them a moral suspicion throughout the early modern period. At the level of popular and social perception, cutting off the nose was a kind of punishment associated not only with adultery (especially women’s adultery), but also with political treason. This is true of several cultures and historical periods, ranging from ancient Egypt to pre-Colombian America.\(^\text{273}\) In the sixteenth century, mutilating faces of the dead enemy after battles was not an uncommon practice.\(^\text{274}\) There were known cases of “Turkish” slaves who

\(^{272}\) Zacchia, *Quaestiones medico-legales*, p. 412.


had been mutilated by cutting off their ears and noses in sixteenth-century Florence,\textsuperscript{275} and in
general the practice of branding faces and hands of domestic slaves became relatively
common in Italy by the later Middle Ages.\textsuperscript{276} In medieval Italy, the cutting off of noses was
codified as a punishment in the statutes of the northern Italian communes of Belluno (against
perjurers and those who benefited from perjury), of Padua (for the same reason), and in the
statutes of Corsica (for pimps). Several Venetian women were condemned to have their nose,
lip, and eyes cut off in the thirteenth century.\textsuperscript{277} Despite the fact that by the sixteenth century
corporal punishments appeared to be less common in statutes, and were banished altogether
from canon law, as late as 1545, in Venice, a law prescribed that the tongue and nose of
thieves had to be cut off so that all the people could immediately recognize them.\textsuperscript{278} “A
disfigured man was supposed to be a criminal from the majority of the people,” as attested by
the proverb “beware of the marked ones” (\textit{cave a signatis}).\textsuperscript{279} In fourteenth century Lucca
one could ask for a certificate attesting that specific mutilations were due to illness or some
other accident, and they were not the outcome of a punishment. Those who had been
mutilated as a punishment wandered about the countryside begging, or worse stealing and
committing other crimes, so that it was a common belief to think that the mutilated were
dangerous people.\textsuperscript{280}

\textsuperscript{275} Finucci, \textit{The Prince’s Body}, p. 86.


\textsuperscript{277} Pertile, \textit{Storia del diritto}, vol. 5, pp. 252-54.

\textsuperscript{278} Ibid., vol. 5, pp. 256-57.

\textsuperscript{279} This sentence was widespread in the sixteenth century, both in Latin and in the European
vernaculars. In Italian, it is often present in literature, for example in Torquato Tasso and
Carlo Dossi; see Renzo Tosi, \textit{Dizionario delle sentenze latine e greche} (Milan: BUR, 2017)
number 829, p. 601.

\textsuperscript{280} Pertile, \textit{Storia del diritto}, vol. 5, p. 374.
Despite some exceptions, there was no portrait of the lower classes in the Renaissance. The few portraits of artisans were bitterly criticized by intellectuals and art theorists of the second half of the sixteenth century.\(^{281}\) The instruments invented in late medieval and sixteenth-century Europe to document one’s identity and to control the movements of suspicious populations – such as gypsies, beggars, people with plague or coming from places believed to be infected, etc. – included no picture and only scantily referred to facial and bodily traits.\(^{282}\) As it emerges from the famous case of Martin Guerre and Arnaud du Tilh, the peasant witnesses’ recorded depositions showed a great deal of doubt concerning skin marks and individual physiognomic features.\(^{283}\) It might be almost unbelievable for the modern reader, but visualizing the specificity of one’s face, and remembering faces, was the preserve of the upper classes. For example, the appearance of the white collar as a fashion item in the second half of the sixteenth century was meant to highlight the facial features of the upper classes.\(^{284}\) By contrast, the so-called fedi di sanità, certificates of good health given and shown at city doors to common people traveling from town to town, very rarely contained physical descriptions of their bearers, and more often mentioned the intended itinerary of the traveler (fig. 3.3).

Very often low-class people were faceless, and they began to have a face only when they got in touch with the criminal justice system, or when they were perceived as dangerous for the social and political order. A Bolognese 1580 ordinance against a certain Baldassarre, a wanted criminal, instructed the overseers of one of the city doors in the following terms.

“You will have to be alert and ready to report if a Baldassarre from Rivarolo Villa di Pozzura

\(^{281}\) On this point see Enrico Castelnuovo, *Ritratto e società in Italia* (Turin: Einaudi, 2015), pp. 82-88.  
\(^{282}\) Groebner, *Who are You?*, pp. 171-221.  
near Genoa, also calles Sanvignonio, the son of a smith, shows up at this door. He is of middle stature, 34-year old, with sparse black beard, thin, a dark-colored face as if he had the plague, a few teeth and not in good shape, and a watery eye. In case you see him you will not let him in,” and then call the authorities to arrest him.\textsuperscript{285} Having a face, in the sense of both having a certain symmetry, beauty, and grace, and in the sense of being a distinct and specific self, was a matter of social class.

**GENDERED FACES**

Sixteenth century beauty was divided along gender lines. Female beauty could not be confused with male beauty. Physiognomists, physicians, and surgeons all made clear that observing human faces carried with it the ability to distinguish between the sexes. Some particulars of the face were specifically male, such as the nose and the beard. Male and female beauty were conceived as different, and the distinction between natural and artificial beauty was key to understanding such difference. The natural/artificial divide was both gendered and moralized; it revolved around the opposing structures of male/female, moral/immoral, true/false.

As we have seen, beauty was located in the higher parts of the body, intellectually and spiritually more elevated. Such a conception brought about a certain ambiguity and a more and more marked protest against the artificial means of enhancing or faking beauty. Make-up and cosmetics, while enjoying wide diffusion among male and female members of the upper and the middle classes, became the symbol of the artificial. In the discourses of the learned, beauty enhancers deceived the eye and fooled the soul. Cosmetics in particular came to be

\textsuperscript{285} ASB, Assunteria di Sanità, Recapiti, n. 1, busta 1580, fol. 7v-8r: “Starete con ogni esquisita vigilanza avertito, se a cotesta Porta capitasse un Bald.ra del luoco da Rivarolo Villa di Pozzura sul Genoese aliquando nominatur Bald.ra Sanvignonio detto il figlio del spadaro d’anni 34 in codesta statura giusta, poca barba e nera, magro di vita, di colore scuro in faccia, che par’ appestato, pochi denti et non molto buoni, et con l’occhi destro che gli lagrima, nel qual caso non mancarete farlo restare fuori dalla Porta.”
associated with women’s moral faults. Among the upper classes, the ideal female beauty consisted of a pale complexion, red lips (the key colors were always red and white, roses and milk), and a gentle and obedient attitude. All these features were considered “natural” in women. This ideal of female beauty was both sacred and profane. A sixteenth-century edition of a famous book of sermons by fifteenth century Dominican preacher Gabriele da Barletta (d. after 1480) stated that the Virgin Mary’s face was of perfect complexion: “as medical writers say: that color which is composed by red and white is the best.” The ideal of male beauty, on the contrary, was characterized by strength, marked traits of the face (the animal model for men was the lion), and a warrior-like attitude. Montserrat Cabré has written that in the Middle Ages the socio-symbolic order assigned women to appearances and men to the public world. This consideration can be extended to the early modern period.

More specifically, in the sixteenth century male beauty was modeled upon the figures of the knight and the soldier: strength, a fear-inducing appearance, braveness, and a certain austerity and gravitas. Force characterized men, and gentleness characterized women. Sexual difference, in the form of different humoral balance, contributed to female beauty, and complexional weakness became an attribute of female beauty. In other words, female weakness and social subordination were translated into physical beauty. For this reason male beauty had to be different from female beauty. Men could not be associated with submission. For that same reasons only the upper classes could be beautiful.

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In pre-modern times cosmetics was conceived as both an aesthetic and a medical business. This became particularly evident in the books of secrets. Late medieval cosmetics met with a taste for polychromies and a certain new attention towards facial expressions. Already in the *Trotula* collection the face and the hands were the most important locations for cosmetics. Many vernacular treatises of the sixteenth century addressed this question of the true beauty in a similar way.

One passage from the *Cortegiano* by Baldassarre Castiglione (1478-1529) deserves attention, for it embodies the whole moral problem of the natural versus the artificial and its gendered dimension. This passage also recalls the terms of a theme that will repeated an infinite number of times in the sixteenth century, all the more so after the Reformations had cast a new suspicion on the arts of dissimulation.

Women are always very eager to be – and when they cannot be, at least to seem – beautiful. So when nature is somehow at fault in this regard, they try to piece it out by artifice … Do you not see how much more grace a lady has who paints (if at all) so sparingly and so little, that whoever sees her is in doubt whether she be painted or not; than another lady so plastered that she seems to have put a mask upon her face and dares not laugh for fear of cracking it … Again, how much more pleasing than all others is one (I mean not ill-favoured) who is plainly seen to have nothing on her face, although it be neither very white nor very red, but by nature a little pale and sometimes tinged with an honest flush from shame or other accident, – with hair artlessly unadorned and hardly confined, her gestures simple and free, without showing care or wish to be beautiful! This is that nonchalant simplicity most pleasing to the eyes and minds of men, who are ever fearful of being deceived by art.

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Women’s natural tendency towards deception and artificiality was conceived as a tendency to alter those natural traits of the face that would have made them beautiful of a simple beauty.

On the other hand, sixteenth-century descriptions of the male body were much drier. Moreover, words like “force”, “size”, “stature” are morally charged, and it is hard to disentangle their physical from their moral meaning. The male body was the object of different concerns, mostly “functional” or “utilitarian” ones, before being the object of aesthetic appreciation. Physical appearance had a moral meaning in itself. The best qualities of a male body were strength and power, which were inseparable from dexterity. However, in the sixteenth century a few doubts arose about male standards of beauty. First of all, humanists sometimes expressed distrust at male strength as a sign of brutality or savageness. In the second place, youth, or better adolescence, became an object of aesthetic and also of erotic appreciation under the influence of humanist discoveries of the classics. This

292 Baldassar Castiglione, The Book of the Courtier, tr. Leonard E. Opdyke (New York: Scribner’s, 1903), p. 55 (I, 40): “Gran desiderio tengono universalmente tutte le donne di essere e, quando ssar non possono, almen di parer belle; dove la natura in qualche parte in questo è mancata, esse si sforzano di supplir con l’artificio … Non vi accorgete voi, quanto più di grazia tenga una donna, la qual, se pur si acconcia, lo fa così paramente e così poco, che chi la vede sta in dubbio s’ella è concia o no, che un’altra, empiastrata tanto, che paia aversi posto alla faccia una maschera, e non osi ridere per non farsela crepare … Quanto più poi di tutte piace una, dico, non brutta, che si conosca chiaramente non aver cosa alcuna in su la faccia, benché non sia così bianca né così rossa, ma col suo color nativo pallidetta e talor per vergogna o per altro accidente tinta d’un ingenuo rossore, coi capelli a caso inomati e mal composti e coi gesti simplici e naturali, senza mostrar industria ne studio d’esser bella? Questa è quella sprezzata purità gratissima agli occhi e agli animi umani, i quali sempre temono essere dall’arte ingannati.” On the moral condemnation of women qua users of cosmetics in sixteenth-century Italy see also Meredith Ray, Daughters of Alchemy: Women and Scientific Culture in Early Modern Italy (Cambridge: Harvard University Press, 2015), pp. 62-72; O’Rourke Boyle, Senses of Touch, pp. 124-27.

293 Cavallo, Artisans of the Body, p. 3.

contradiction signals the existence of two conceptions of male beauty: a beauty of war, and a beauty of civility.\textsuperscript{295} 

At the same time, and especially in Italy, where *Cinquecento* writers of all genres were all too conscious of the loss of political liberty and autonomy of their homelands, excessive use of cosmetics or attention to artificial means of enhancing beauty on the part of males became the object of accusations of effeminacy, subordination, loss of masculine honor, appearance, and moral strength.\textsuperscript{296} Tommaso Garzoni lamented that one could see “the most vile prostitutes and the most shameless catamites who curl their hair like women go about all anointed and scented, and not emperors and kings, who have always done so … [these prostitutes and catamites] scent their soft cheeks with a thousand perfumes … with perpetual infamy and dishonor of these vituperative times.”\textsuperscript{297} Stefano Della Casa (1503-1566) in his *Galateo* warned readers that men should not adorn themselves as women do “for his adornments will be one thing, himself another; I see many men who have their hair and beards all curled with a hot iron, and have their faces, necks, and hands so shiny smooth and

\textsuperscript{295} Gabriel-André Perouse, “La Renaissance et la beauté masculine,” in *Le corps à la Renaissance*, pp. 61-76. In chapter 6 I will go back to this point in examining plastic surgery patients’, whose identity was constructed in print by Tagliacozzi and other learned surgeons as military gentlemen who were also concerned by the new culture of appearances.


\textsuperscript{297} Garzoni, *La piazza*, vol. 2, p. 995: “non regi e imperatori andar, come già andavano anticamente, onti, e profumati, ma le vilissime meretrici, et i sfrontati ganimedi, che increspano le chiome a guise di femine … et spargono le morbide guancie di mille profumi … con perpetua infamia et disonore di questo secolo vituperoso.”
soft that it would be unsuitable for any young wench, even for a tart anxious to bring her wares to market and to sell them at a higher price.”

Sixteenth century readers must have had in mind the description of the effeminate courtier by Baldassar Castiglione. Contrary to having a graceful but manly appearance, this type was “soft and effeminate,” all concerned with curling his hair and plucking his eyebrows. These men “gloss their faces with all those arts employed by the most wanton and unchaste women in the world;” they also adopted womanly ways of walking, gesturing, and speaking, and “should be treated not as good women, but as public harlots, and driven not merely from the courts of great lords but from the society of honest men.”

Della Porta included a description of the “effeminate type” in his book on physiognomy. The effeminate had adopted the habit of artificially caring for his body and face, abandoning the natural dignity and strength typical of male beauty. “I saw one of them in Naples – he wrote – with sparse or no [facial] hair at all, little mouth, delicate and straight eyelashes, shameful eyes as women’s eyes are, weak and subtle voice, white and trembling neck, biting his lips; to sum it up, with the body and gestures of a woman. He was willing to spend time at home … and as a woman he minded the kitchen business; he shunned men and engaged in conversation with women, and going to bed with them he behaved more womanly than women themselves; he thought like a woman and he talked about himself in the female person …; and the worst was that he bore the nefarious Venus worse than women do.”

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298 Della Casa, *Galateo, or The Rules of Polite Behavior* [1558], ed. M.F. Rusnak (Chicago: The University of Chicago Press, 2013), p. 70 (chapter xxxviii): “acciò che l’ornamento non sia uno e la persona un altro; come io veggo fare ad alcuni, che hanno i capelli e la barba inanellati col ferro caldo, e ’l viso e la gola e le mani cotanto strebbiate e cotanto stropicciate che si disdirebbe ad ogni femminetta, anzi ad ogni meretrice, quale ha più fretta di spacciare la sua mercatanzia e di venderla a più caro prezzo.”

“Popular” writer Giulio Cesare Croce (1550-1609) was chronologically and geographically closer to Gaspare Tagliacozzi. In a satirical pamphlet written in the form of a letter addressed by Narcissus to the “most beautiful, attractive and perfumed youth of the city” in 1590, Croce-Narcissus presented himself as the defender of beauty and love, an ally of Venus, and wanted to give the young noblemen of Bologna suggestions to defend and advance the “true” beauty (fig. 3.4). Narcissus, after having stigmatized the effeminate type who spent too much time with mirrors and make up before going out – “just like women do” – suggested people gifted with natural beauty to “put nothing on their faces … to show everyone their beauty.” Men who cared normally about their beauty must simply cover their defects and show off their strengths and most beautiful parts. Moreover, “all those who are under our flag” – Narcissus went on – must go once or twice a week to the barber shop and spend “an hour or two there” to have a haircut, be shaved, washed, and have their hair and skin imperfections polished.\textsuperscript{301} This is what natural beauty was all about. It had nothing to do with artificially enhancing one’s figure.

Two parts of the face were particularly important in terms of sexual difference and perceptions of masculine personhood: noses and beards.\textsuperscript{302} These parts of the body were the object of intense scrutiny in the sixteenth century, both in medicine and in literature.

\textsuperscript{300} Della Porta, Della fisionomia, p. 501: “io ne viddi uno in Napoli di pochi peli in barba o quasi niuno, di piccola bocca, di ciglia delicate e dritte, di occhio vergognoso, come donna; la voce debole e sottile non poteva soffrire molta fatica; di collo non fermo, di color bianco, che si moderra le labra et insomma con corpo e gesti di femina. Volentieri stave in casa … come donna attendeva alla cucina et alla conchiglia; fuggiva gli omini e conversava con le femine volentieri e, giacendo con loro, era più femina che l’istesse femina; ragionava come femina e si dava l’articolo femineo sempre … et il peggio era, che peggior d’una femina sopportava la nefanda Venere.”

\textsuperscript{301} Giulio Cesare Croce, Lettera mandata da Narciso alli più belli, vaghi, et profumati giovani di questa città (Bologna: per Vittorio Benassi, 1590), pages are not numbered.
Tagliacozzi devoted three entire chapters to praise the nose from all possible points of view. He praised the shape and special position of the nose, as well as its role in making a face beautiful: “Although each part of the face has its own distinction and grace and is positioned with delightful symmetry … the nose has a unique property. If it harmonizes with the other parts, it graces the face to the outmost. If, however, is misshapen, crooked, flat, or disfigured by injury (distortus, pravus, simus, vulnere notatus), it destroys the integrity of the appearance.”  

Tagliacozzi then quickly moved to reporting stories of noses which had been cut off in order to preserve chastity and to scare away rapists and seducers. Among them, the story of seventh-century Saint Ebba is perhaps the most significant. Ebba was the Abbess of the Scottish monastery of Coldingham, and had cut off her nose and that of her sisters in order to horrify the invader Danes and prevent their lust: “For if the nose is amputated at his apex, the sinuses and recesses of the internal parts lie exposed and huge gaps and dark caverns (hiatus & cavernae) are visible; this is surely a horrendous (horrendum) and abominable sight,” commented Tagliacozzi. The surgeon remarked that in this particular case the mutilation was not “shameful” but virtuous, thus revealing that such mutilations were indeed ordinarily considered shameful, and underlining the reaction of horror towards one of the features of the “grotesque body.” The horrid character of this grotesque face was given by the openness of the external body towards its internal dark recesses. As noticed by

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303 Tagliacozzi, De curtorum, p. 25 (1:17). Throughout the chapter, there is, once again, more than an echo of Galen, who wrote for example: “Beauty is disregarded in the nose, lips, and other parts, because [in them] the beauty of their usefulness far surpasses the pleasure aroused by their appearances. But if a little bit of the lip or the alae of the nose were cut off, it is not easy to express how ugly it would make the whole face.” See Galen, On the Usefulness of the Parts of the Body, 2 vol., tr. Margaret Tallmadge May (Ithaca: Cornell University Press, 1968), vol. 2, p. 530 (De usu partium 11.II.153).

304 Tagliacozzi, De curtorum, p. 25 (1:18).
Mikhail Bakhtin, the grotesque was characterized by an “unfinished” character of the body, as opposed to the “geometrical closure” of the classical body.\textsuperscript{305}

All anatomy and surgery books of the time included detailed descriptions of faces and their parts, as showed for example by this diagram by Volcherus Coiter (fig. 3.5), and by Giulio Cesare Aranzi’s booklet on anatomical \textit{observationes}, which focused almost exclusively on two body parts: female generative organs, and heads.\textsuperscript{306} Tagliacozzi followed the Galenic tradition which considered the nose as the link between sensations (smell) and the brain, the seat of the senses. The Bolognese also listed the “usefulnesses” of the nose. First of all, the nose is an important organ of respiration; it has the function of filtering and purifying the air that goes into the lungs through the trachea, thanks to the communication between the nose and the palate. With the help of the nose the human voice is made more clear and speech more distinct. Finally, the nose has “the capacity for rescuing us from the vicious onslaughts of disease, end even from the jaws of death itself,” for example when it gives its “friendly help” to the other organs for the expulsion of the catarrh.\textsuperscript{307} The nose had the essential function of being a passageway, an organ which regulated the relations between the internal and the external environments.

Missing noses could elicit horrified reactions; they could mean a lack of masculine attributes; and they could suggest shameful circumstances. In a remarkable article on nose mutilation in the Middle Ages, Patricia Skinner raised some doubts about the actual popular


\textsuperscript{306} Giulio Cesare Aranzi, \textit{Anatomicarum observationum liber, ac de tumoribus secundum locos affectos liber} (Venice: apud Iacobum Brechtanum, 1587).

\textsuperscript{307} Tagliacozzi, \textit{De curtorum}, pp. 25-32 (1:17-22).
diffusion of this symbolic connection between the male genitals and the nose, but plenty of
evidence points towards this direction. It might be that this association formed later. In any
case, the association has nothing to do with psychoanalytic theory, as it makes little sense to
transfer early-twentieth century Viennese concerns to sixteenth-century Italy. Rather, if
one thinks historically, the grounds for this symbolism seem to be provided by the fact that
lack of noses was perceived either as a feminizing feature or in any case as a mark of
subordination, two characteristics diametrically opposed to upper-class masculinity.
Moreover, noses – and especially aquiline noses – were regarded as features of an
authoritative masculinity and a virile appearance. Noses and faces did not serve the only
purpose of distinguishing men from women, but also functioned as marks of social class, to
separate certain kinds of men from other kinds of men. The prototypical ignorant and savage
peasant/mountaineer, the social type who came to town only for begging or offering their raw
labor-force, had been described by Giulio Cesare Croce as having “a hooked nose, tip-tilted,
with very large nostrils.”

Noses figured prominently in the culture of the face. They mattered to the issue of
sexual difference in the early modern culture. The extremely influential thesis of Thomas
Laqueur, according to whom from ancient Greece up to the eighteenth century there was only
one medical and social “one-sex” model which conceived female as the less perfect and
reversed image of the male, has been heavily criticized in the past two decades. It has been
showed that the one-sex model followed a limited and precise textual tradition, and that

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309 For an anachronistic psychoanalytic reading of sixteenth-century noses see Finucci, The
Prince’s Body, p. 90.

310 Giulio Cesare Croce, Le sottilissime astuzie di Bertoldo. Le piacevoli e ridicolose
simplicità di Bertoldino col Dialogus Salomonis et Marcolphi e il suo primo volgarizzamento
all’insù, con le nari largissime.”
medieval and early modern medical conceptions of sexual difference were complex and multifarious, not reducible to one overarching model. The insistence on the human face and on some of its particular parts, like the nose, further shows that sexual difference was not just a matter of anatomy and physiology – in other words, not just a matter of medical culture – but a much wider issue, involving different kinds of perceptions of the body.

FACE AND SELF

I disagree with most historians of the self – especially those more influenced by the foucauldian model of sharp breaks – on one basic point: in the history of Western personhood, there is no emergence of “the” self or “the” individual, but only the emergence of historically specific forms of personhood, more or less similar to each other. The history of the face in the sixteenth century is neither a history of the progressive development of the individual through history, nor is it only a matter of how expressions and self-control have been molded by specific social conditions. Rather, it is a history about the following issue: what kind of men, of women, and of which social class were entitled to have a face and a self? What had they to do, as men or women, in order to be so entitled?

Norbert Elias’ thesis on the process of civilization as a process of self-restraint

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maintains some validity, when stripped of its teleological and Euro-centric characteristics. Building on Elias, French historians Courtine and Haroche have showed that in the early modern period manual of rhetoric, treatises of physiognomy, and textbooks of manners and the art of conversation constantly repeated that the face was the cornerstone of self-perception, of the sense of the other, of the rituals of civil society, and of the forms of political life. In the second half of the sixteenth century, writers started to claim that individuals expressed themselves mainly through their faces. According to Courtine and Haroche, this novelty was connected to the process of privatization of life of the early modern period. The early modern notion of the individual was closely tied to the expression of his or her face, as a bodily translation of one person’s inner self. In this way, the history of the face becomes a history of “the emergence of expression” as a sign of individual identity.

This thesis has some value. For example, by the middle of the sixteenth century, clergyman and courtier Giovanni Della Casa, while discussing witticism and humor, could advise his readers not to say obscene words or make vile and dishonorable gestures “as distorting one’s face and eyes or gesticulating like a dope, for no one should debase himself.

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in order to amuse the others.”

Valentin Groebner has studied practices of identification through reading the skin of people (scars, birthmarks, etc.) from the late Middle Ages to the sixteenth century, and has argued that prior to the sixteenth century the body was “opaque.” Groebner has also traced the development of the concept of complexion, temperament or humoral balance, from Galenic theory to its fundamental shift in the sixteenth century. In this period, complexion became the formula for “personality” and migrated from the internal balance of bodily elements to the outside of the body, thus transformed into a congenital category. In this process, the links between the surface of the body and the inner physical and moral make up of the individual became tighter.

In his 1938 classic essay on the notion of personhood, French anthropologist Marcel Mauss showed how the notion of the person was linked to that of the face. Mauss sketched the trajectory that from the Greek meanings of ‘persona’ (mask) and ‘face’ – attached to the practical use of ritual, tragic, and funerary masks – moved into Roman law to indicate those citizens who fully enjoyed the rights of citizenship (as opposed to slaves). Finally, the notion of person moved into the realm of ethics and a metaphysic of individuality with the emergence of Stoic moral philosophy and the full deployment of Christianity. According to Mauss’ schematic history of personhood, the radical novelty of the emergence of the modern notion of person understood as an individual psychological entity – or, in other words, the

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315 Giovanni Della Casa, *Galateo*, p. 47 (chapter xx): “storcendo il viso e contraffacendosi, che niuno dee, per piacere altrui, avvilire se medesimo.”


“self”—was introduced in the late seventeenth-century, under the influence of Descartes and Locke.\(^{318}\)

Fernando Vidal and Caroline Walker Bynum have persuasively argued that the modern self emerged around the same time through a process of disembodiment which marked a radical departure from previously accepted notions of Aristotelian unity of body and soul.\(^{319}\) Katharine Park argued that in the sixteenth century, the century of anatomy, the relationships between the external and the inner parts of the body, and between the body and the soul, were still close enough but the human body acquired a certain depth: over the course of the century “the drama of moisture and heat started to give way to an experience of personhood rooted in anatomical terms.”\(^{320}\)

Portraiture offers some insights into the relationships between faces and selves. The visual genre of the portrait bloomed in the Renaissance, evolving from a kind of matter-of-fact description of physiognomy to incorporate more and more symbolic and complex elements indicating the social standing of the subjects. Sixteenth-century portraits in particular abounded with symbols of status, family, and class, since physical and facial traits were only one aspect of the complex network of elements composing selfhood.\(^{321}\) During the

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Cinquecento, portraits began to circulate outside of the circles of noblemen, noblewomen, lords, clerics, and kings, and to be requested from middle class people too. Caroline Murphy has showed how in the second half of the sixteenth century “scholars at Europe’s courts and Universities became increasingly curious not only about distant (or dead) colleagues’ ideas and innovations, but also about their physiognomics, manners, gestures, all qualities that could bring erudition to life.” Scholars themselves began to assemble quite substantial collections of pictures of those they admired, the most famous and important being Paolo Giovio’s *Elogia virorum illustrium*.\(^{322}\) Even cardinal Gabriele Paleotti praised the habit of portraying the ancient and contemporary virtuous men as providing moral examples for the bystanders. The Bolognese artistic community in the late sixteenth century profited from the new interest in the scholar’s portrait, and a “cult of portraiture of the illustrious” developed.\(^{323}\)

In late sixteenth century Bologna – one of the places where the genre of caricature was born – a daring painter such as Bartolomeo Passerotti portrayed young noblemen with perfectly soft skin and intact features. One particular portraiture shows a young gentleman touching his sword and holding a classical statuette of the Greek-like classic image of the body, symbolizing arms and letters as the two key activities of a good son of aristocracy (fig. 3.6). On the other hand, in his caricatures of the lower-classes and of people of other races, Passerotti could play with forms and even disfigure faces (fig. 3.7).\(^{324}\) Lower-class men were

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\(^{322}\) Caroline Murphy, *Lavinia Fontana*, pp. 50-51.

\(^{323}\) Ibid., p. 58.

\(^{324}\) On Passerotti’s caricatures and grotesque works see Angela Ghirardi, *Bartolomeo Passerotti, pittore, 1529-1592: Catalogo generale* (Rimini: Luisè, 1990), pp. 63-75 and 225-229. Important and diverse sixteenth-century intellectuals like Paleotti, Pietro Aretino, and the art theorist Giovanni Paolo Lomazzo lamented that in their times even lower-class people,
positioned below the rank at which portraits were painted. Their faces could be represented, but not in portraits.

It would not be correct to say that the face coincided with the self. As shown by sixteenth-century portraits, the face was just one element among others that gave plastic representation to the self, along with clothing, behavior, accessories, etc. Historians of portraiture have described one feature which can be extended to sixteenth-century culture of the face and reconstructive surgery. Representations – or restorations – of the face and body are always in tension between the two poles. On the one hand, they should capture the individuality of human beings; on the other hand they should capture the universality of human nature. In sixteenth-century culture the face became more and more described in precise anatomical terms. The human face became a tapestry in which the individuality of the self could be read through a network of analogies between its moral and physical elements. The face became the surface from which lines departed horizontally and vertically, linking together moral character and expression, social role, physical appearance, and beauty. At the same time, these correspondences lost part of their relevance for the theological, religious, and metaphysical identity of the self, while the reference to its social life progressively took the center of the stage. The face was connected to personhood, and the more intense was the perception of details of the face, the more specific was the perception of someone’s individuality.

In an essay on allegories of nature in the Renaissance, Katharine Park has traced a shift from the medieval personification of nature (clothed, speaking, majestic) to the such as artisans, could aspire to have their images immortalized, and that they actually found painters ready to paint their portraits: see Castelnuovo, Ritratto e società, pp. 84-85.


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Renaissance and early modern one (naked, with many breasts, enigmatic and opaque). This shift was connected with changing philosophical understandings of the order and authority of nature. The new personification of nature stood for fertility, creativity, and an optimistic view of the bountifulness of nature, “a regime of plenty.” Nakedness symbolized nature’s closeness to God’s creation, and her being untouched and not polluted by human artifice. At the same time, sixteenth-century nature was increasingly represented as “premoral,” namely indifferent to human costumes. Park argued that during that century Nature’s “functions ... were set apart from and opposed to the human activities of nurture, domestication, and moral education ... and her functions were represented in purely physical terms.” In turn, this process of separation of the natural and the artificial lead to the fact that more and more philosophers, naturalists, and theologians engaged in the enterprise of developing ever more refined skills to interpret her and to “speak on her behalf.”

The gendered human face was caught in this double process too. Subject to norms prescribing its natural appearance, it was at the same time the surface on which the social order was reflected, the moral character could be read by the specialists of nature, and the artificial could be debunked. The contradiction between the emphasis on the natural and the increased attention to the care of the appearance of the face is only apparent. As in a sort of process of cultural sprezzatura – the art of masking art – selected artificial means could be used to keep appearances as natural as possible. The sixteenth-century culture of the face, which was in itself an elite culture, became more and more attentive to the distinction of social roles and more and more aware that being a person meant playing different roles.

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327 Ibid., p. 68.

328 Ibid., p. 73.
Natalie Zemon Davis’ claim about selfhood in sixteenth century France is still valid: “the greatest obstacle to self-definition was not embeddedness but powerlessness and poverty.”

An intense debate developed around Galenic notions of health and beauty in the second half of the sixteenth century among prominent surgeons and physicians. But the care of appearance occupied pride of place in the writings of humbler practitioners like professors of secrets and barber-surgeons. Taking into account these different traditions, I describe Tagliacozzi’s way of conceptualizing with the distinction between “true” and “false” beauty. For Tagliacozzi this distinction was gendered in itself. Moreover, for him just like for barbers and professors of secrets, there was a certain contiguity – sometimes even overlapping – between health and appearance. This closeness is represented by the concept of politezza, which ran across professional distinctions between barber-surgeons and learned surgeons.

Different practitioners of the body had different views on the relationships between the care of health and appearance, but a close relationship between these two endeavors was constant across the whole spectrum of professional categories. By the second half of the sixteenth century, Italian learned surgeons debated the nature of beauty and health through learned discussions of Galen and other humanistic sources. They all maintained a gendered distinction between restoring beauty and health and enhancing beauty, but at the same time they all thought that a learned and legitimate branch of cosmetics existed, opposed to what they called mangonica, comptorica or fucatoria. This latter side of cosmetics was for them assimilated to artificially enhancing beauty, a beauty which was considered false because it was separate from health, and which was associated to the social types of the vain woman.

I translate politezza with “appearance” in the title of the chapter, but I shall often use the Italian in the text to remind the reader that the word politezza is truly polisemic and that I have found no adequate English translation.
the effeminate man, and the slave dealer embellishing his “product.” Tagliacozzi tried to make these boundaries even more rigid by tracing a distinction between cosmetics and reconstructive surgery. Professors of secrets like Fioravanti were much less subtle in theoretical distinctions and elaborated a vast array of cosmetic remedies which did not pay much attention to distinctions between health and beauty. Finally, barber-surgeons’ goal was a form of care of the face which they thought was essential for the sake of men’s *politezza*, the physical and moral virtue of having an orderly appearance. On the other hand, barber-surgeons did not hesitate to jump into the debates on health and beauty, and they claimed that their art was part of surgery or of the legitimate branch of cosmetics. Overall, the concept of *politezza*, which at least in the context of health care was distinctly referring to men, brought together all these categories – if not in theory, at least in practice.

TRUE AND FALSE BEAUTY

As we have seen, one of the most popular tropes of the culture of the face was the opposition between the natural beauty of the human features and the artificial means employed by some – mostly women and effeminate – to enhance or to bring about beauty. This opposition could be translated in a rather precise way in medical terms.

Tagliacozzi was the one who brought the topics of cosmetics and medical beauty in deeper touch with the overall culture of the face of his times. Despite the fact that in practice the borders between cosmetics and surgery, between health and appearance, were very fluid, there are four conceptual oppositions structuring Tagliacozzi’s text: (1) artificial enhancement of nature vs. restoration of natural forms; (2) pure beauty vs. beauty that derives from perfection of actions and functions; (3) morally deceiving beauty vs. natural beauty as a sign of man’s dignity; (4) medicine and surgery vs. cosmetics.
Learned surgeons and physicians, mostly in the medical centers of Bologna and Padua, took up a few passages from Galen and integrated them with contemporary notions of beauty in order to discuss the opposition between false beauty and true beauty. For them, making a distinction between the arts of frivolous cosmetics and the serious and legitimate medical practice of cosmetics was both an epistemological and a socio-political gesture of demarcation. Serious physicians wanted to respond to the challenges of the contemporary culture of beauty and the face without falling in the moral grey zone – often a black zone, to abuse the metaphor – of the artificial, the deceptive, and the adulterous. The whole culture of the face described in the previous chapter supported these physicians’ view of a fundamental, if problematic, moral difference between medical beauty and “degenerate” beauty. At the same time, these learned doctors made use of the culture of the professors of secrets, filled their books with recipes for treating imperfections of the face, and gave much more space to facial appearance in their books than their medieval counterparts.

As Mariacarla Gadebusch-Bondio has argued, this medical debate, which was unfortunately silent on the thoughts of patients, reveals that patients called upon the surgeons for psychological and aesthetic reasons, not always because the functionality of their face was compromised. Surgeons had to translate these issues into technical and medical ones. Spots on the skin, pustules, swellings, and warts on the face were of course a different thing from serious injuries and facial mutilation, but they belonged to the same culture of the face.

Galen discussed the relations between beauty and health in several passages of his works, but he dealt more extensively with this issue is the Letter to Thrasisboulos. The general question tackled here was whether “healthiness” belonged to medicine or gymnastics. The

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331 Gadebusch-Bondio, “I pericoli della bellezza ‘mangonica’,” p. 428; and Gadebusch Bondio, Medizinische Ästhetik, pp. 84-125.
physician of Pergamon defined health in a quite “modern” way as being able to perform everyday tasks. “A state in which the performance of activities undergoes no hindrance, and is not susceptible to impairment, is health ‘in condition’;” however, this state was different from a “good condition,” which was “the position of a kind of excellence of the functions.”

The theme of true vs. false beauty, or appearance vs. nature, immediately followed. For Galen, who echoed Plato, the “art of cosmetic adornment” was to be listed among the “perverted arts,” together with the art of creating an athletic condition which was considered “unnatural” in that the body became too much performing. Now, “the perverted arts provide an apparent good in each area with which they are concerned, whereas the arts proper provide that which genuinely exists in that area. We should further consider that, if what is generally known as the cosmetic art is productive of a false kind of beauty, it must be regarded as a perverted art, a form of flattery. There must be some other art responsible for the creation of genuine, true beauty, which consists in excellence of complexion and flesh, and good proportion of the parts – qualities which obtain in the case of natural good condition.”

Health was nothing but the capability of each part of the body to exercise its proper function. “Surely everyone would agree in not wanting any part unable to perform its function – eyes unable to see, for example, a nose unable to smell, legs unable to walk … In fact, none of the things we require is required in an imperfect state … In needing any of these things we also need them in their perfect form [teleios, performing its goal properly] … If, then, we require not an imperfect performance of functions but a perfect one, we shall not

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333 Plato, Gorgias 465b.

334 Galen, Letter to Thrasiboulos, p. 60 (820-22).
require an imperfect constitution of the body with which we perform these functions.” In turn, “good condition” [euexia], a state achieved through gymnastics, was the perfect form of the state called “health.” Therefore, there could be no good condition without health.

At this point, Galen displayed his almost proverbial teleological way of reasoning: everything which existed had a goal, which corresponded to “the good of that thing according to its nature.” Now, the body, as it existed, had its goal too, which was a unified goal (therefore, we cannot separate and sub-divide its goals), and we cannot separate the productive from the preservative art of the healthy body. “There is a common misconception that the good of the body is divided into health, strength, and beauty, and that one may posit a productive and a preservative art for each of these. This … must be refuted … beauty is made up of good complexion, good flesh, good proportion, and certain other factors; why should it not be the case, similarly, that the good of the body is made up of health, strength, and beauty?” It is clear that health was the good of the body itself: “the causes of true health in a body will be no different from those of strength or beauty” and “if something is going to make our body strong or beautiful it will automatically also make it healthy.” The natural function of the body – upon which beauty, strength, and health depended – proceeded from the constitution of the body, as “beauty is a necessary consequence of the former set of conditions, ugliness of the latter.” All these things went hand in hand.

The best definition of the higher good of the body was perfection of the functions; next, it was the good condition described as health; and finally, beauty followed as a necessary consequence. But Galen forcefully argued that this threefold distinction was

335 Ibid., p. 61 (823).
336 Ibid., pp. 63-64 (827-29).
337 Ibid., p. 64 (829).
338 Ibid., p. 65 (831).
somehow artificial, since all the three goods were one in practice. The point is that there was no (legitimate) art which produced beauty that did not produce, at the same time, function and health. When a physician or a surgeon produced a healthy state, restored it, or preserved it, “functioning or beauty … would follow of necessity, even if the practitioner did not want them to.” The logical conclusion of all this was that “cosmetic” medicine (ars exornatoria) restored beauty, while ars comptoria adulterated faces and deceived the bystanders: “The goal of the comptoria art is to bring about a kind of artificial beauty. The decorative part of medicine, which agrees with nature, preserves everything in the body, and from this follows a natural beauty.”

Cosmetic concerns of patients and surgeons were very much alive in the later Middle Ages. Arabic encyclopedias were explicit on the care of appearances. Avicenna’s fen on cosmetics became the model for treatises on “decoration.” Avicenna ignored distinctions between health and beauty, appearance and significance. Instead, he dealt with hair care, skin color, serious skin afflictions and issues of appearance (perspiration, body odor, etc.), obesity and cracked nails. Avicenna blended cosmetics and therapeutics, and Latin authors did not raise again the question of health and beauty before the fourteenth century. For example, both the Salernitan collection De ornatu mulierum and the Regimen by Aldobrandino da Siena (d.

339 Ibid., p. 66 (834).


mixed hygiene and cosmetics, and always targeted women on these topics. Luke Demaitre has argued that the transition from the country courts to the urban life pushed physicians towards matters of appearance, and at the same time that this increased interest on the parts of the clientele made the Galenic issue resurface.

Medieval medical texts presented an increased interest in superficial marks, especially of the face. Bernard de Gordon (c.1270-c.1330) praised the excellence of the face in terms we are already familiar with, and included a series of cosmetic dyes and ointments for women’s faces, prefaced by the caveat that all this was “acceptable if it is applied for the sake of men.” Henri de Mondeville devoted three chapters of his surgery book to the decoratio of men. He introduced this art with lots of warnings: decoratio could be contrary to God and justice and it could done for deception and fraud; but then he made a concession to realism in that he acknowledged that these practices were very profitable among wealthy ladies. Likewise, the great systematizer of medieval surgery Guy de Chauliac took up the Galenic distinction between medical and popular cosmetics and wrote that “the dispositions that appear on the face can be natural or preternatural. The natural ones require preservation if they are beautiful, and decoration if they are ugly, for example preserving whiteness or making the face whiter and redder if necessary. Those [dispositions] which are preternatural require correction, like pustules, spots, and excessive hair – this is what Galen meant when … he stressed the difference between cosmetic and decorative parts of medicine … Indeed decorative treatment is legitimate, while cosmetic treatment is not, and it is not honest either,
just like Galen said.” Those who used make-up just for their own pleasure were to be denied treatment, while women who wished to be more beautiful for their husbands could legitimately seek the physician’s help.

With respect to sixteenth century surgeons and physicians, medieval medical writers felt much less need to provide theoretical justification for “decorative” remedies, and to articulate elaborate discussions about the subtleties of the theories of beauty. Late medieval surgeons had a relatively good conscience about them. On the other hand, both theoretical discussion on the statute of cosmetics with respect to medicine, and the space devoted to practical issues of the face greatly increased in the sixteenth century, supported by a specific culture of the face. Moreover, by the second half of the sixteenth century, an increasing preoccupation with the hygiene of the body sometimes blurred the distinction between medical prevention (washing hands, combing the hair, cleaning the pores of the skin, blowing noses) and cosmetics.

The first physician who discussed these Galenic topics in the sixteenth century was Gabriele Falloppio, professor of medicine in Padua, in his 1566 booklet titled *De decoratione*. The book already contained all the topics discussed by other learned surgeons and physicians in the following decades. Moreover, Falloppio was a teacher and friend of

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Mercuriale in Padua, and thus can be placed at the beginning of the Paduan-Bolognese debates on beauty and medicine.\footnote{Giuseppe Ongaro and Elda Martellozzo Forin, “Girolamo Mercuriale e lo studio di Padova,” in Alessandro Arcangeli and Vivian Nutton, ed. Girolamo Mercuriale: medicina e cultura nell’Europa del Cinquecento (Florence: Olschki, 2008), 29-50, pp. 30-31.}

In the preface, Falloppio argued that there were two ways of treating “the art of the good: preserving the present, and restoring the desired … Since medicine is an art, it must necessarily have an end, which is the perfection of its subject, that is, the perfection of the human body … [which is given by] its strength and its potential for action … and it is this integrity of the body, and how often it can execute its actions in a perfect way.”\footnote{Gabriele Falloppio, De decoratione, in Id., Opuscula (Padua: apud Lucam Bertellum, 1566), fol. 34r-v. “ars de bono, vel praesens conservando vel desideratum restituendo … Cur medicina ars sit, necessarium est habere unum finem, qui sit perfectio subiecti, circa quod versatur: quod est perfectio corporis humani … robur & vim ad actiones obeundas … ista integritas corporis, quoties potest integras actiones perficere.”} If the body was the organ of the soul, Falloppio went on, and if its goal was action, then the highest perfection of the body was its force and strength in performing actions. Therefore, the goal of medicine was to preserve the body’s strength, namely the highest goal of the body. Health, in turn, could be defined as the virtue, or perfection, of the body. Falloppio added to the Galenic features of strength, health, and beauty a fourth one, more Aristotelian: habit, in the sense of an habit of perfoming excellence of function. “We must not neglect those who say that beauty is the \textit{summum bonum} of the body; indeed, it concerns everyone, not just women but men too, not just the young, but the old too; and it is a virtue, therefore it is good for the body.” The good appeared to be fragmented, but it was one: it was “the result of health, a good habit of the body, beauty, and strength in actions. So we can say that health and good habit are causes of beauty and strength in performing the body’s actions; beauty and strength are effects and fruits of those causes. If we consider together causes and effects, we see that the good is one.” The \textit{summum bonum} and the goal of medicine were an “aggregation of four
virtues: health, strength, beauty, and habitus.” This is why beauty was a legitimate concern for medicine.\textsuperscript{348}

But Falloppio warned his readers: beauty was double. “One is colored, counterfeit, false, and for these resons it must be called non-natural or preternatural … and this one pertains to slave dealers, prostitutes, and it is lewd and artificial; in fact it destroys natural conditions, and it brings about the worst features thorough art, that which is desired by the old, the young, and women. [Through this art] women destroy their charm, old people lose their importance, the young let go of their virility. The Other kind of beauty is called natural, and it must pertain to anyone; those who lack it are ugly…”\textsuperscript{349} The former beauty was not just associated with women, but also with men who had lost their virility; the latter beauty was a “natural composition and symmetrical connection among the parts of the body.” Fake colors and fake softness of the parts were not part of natural beauty, which only concerned “the substance, color, quantity, place, figure, and conformation of the parts.”\textsuperscript{350} In other words, classical beauty and medical beauty were a perfect match for each other. Therefore, there were two ways of restoring beauty: the “curative” and the “decorative.” Beauty could be restored in two ways, just as it could be lost in two ways: either when the part lost its health,

\textsuperscript{348} Ibid., fol. 34v-35r: “Ultimo non desuere qui dixere pulchritudinem esse bonum corporis summum. cum haec ab omnibus affectetur, non solum foeminis, sed maribus: non modo iuvenibus, sed senibus, cunque etiam virtus sit, ideo est summum bonum & perfectio … aggregatum ex his est ex sanitate, bono habitu, pulchritudine, & robore actionum videamus an res ita se habeat. accipiamus sanitatem, & bonum habitum, hi sunt causa pulchritudinis, & roboris in actionibus; pulchritudo & robor sunt fructus, sunt effectus itarum causarum. si coniugamus causas, & fructus, unum erit bonum … ex quatuor virtutum aggregato, quae sunt sanitas, robur, pulchritudo, & habitus.”

\textsuperscript{349} Ibid., fol. 35r-v: “altera fucata, adulterina, ficta, & non vera, quae non naturalis, vel praeter naturalis dicentur … & hanc appellamus magnosticam, vel comtoriam, & haec meretricia, vel cynedica dicitur; nam destruit conditiones naturae, ut artis aliquot pessimas conditiones inducat; quam si affectant senes, iuvenes, & mulieres. Mulier destruit venustatem: senes gravitatem amittunt: iuvenes virilitatem perdunt. Altera pulchritudo naturalis dicitur, quam unusquisque affectare debet: & qui non affectat, turpis est…”

\textsuperscript{350} Ibid., fol. 35v: “compositionem, & connexionem naturalem, ac symmetriam partium inter se … substantiam colorem, quantitatem, situm, figuram, & conformationem partium.”
or when an accident happened. When the physician dealt with restoring the beauty lost in an accident, that was “curative” medicine; when it treated the beauty “per se” it was “called cosmetics, or ornatoria, or decoratoria.” Of course, there was a further difference between the comptoria and ornatoria arts, since the comptoria “destroys nature and adds things that are not to be found in nature;” while the decoratoria “always looks to the things that are according to nature in one single man as in the whole human species, in this single part as in the whole body.”

We could not find a more straightforward example of the moralization of the natural and the stigmatization of the artificial, at the same time intrinsically conceived in gendered terms.

Girolamo Mercuriale not only discussed these very same topics more in depth and in a more erudite way in his 1585 De decoratione, but he also was so impressed by Tagliacozzi’s technique that he published a long letter by him in the second edition (1587) of this work. Mercuriale was undoubtedly the most influential figure in this debate on “learned cosmetics,” and a real go-between since he befriended Tagliacozzi and he was the teacher of Giovanni Tommaso Minadoi. In particular, Mercuriale devoted a great deal of space to imperfections of the face in his De decoratione, and years before the debate bloomed he had already approached the topic of medicine and cosmetics in his 1572 treatise on skin diseases, De morbis cutaneis et omnia corporis humani excrementa tractatus.

This latter work was divided in five chapters. The first was devoted to the skin diseases of the head, the second dealt with the skin diseases that affected the whole body (including leprosy); the third was titled “on excrements” but it was almost entirely devoted

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351 Ibid., fol. 36r: “comptoria destruit naturam, & addit quod non est in natura. Decoratoria semper respicit id, quod est secundum naturam in isto homine, vel in tota specie, velim in hac, velim in illa parte.”

to urine; the fourth treated excrements of the belly; and finally the fifth dealt with sweat, tears, spit, mucus, and ear wax. Clearly, there was a good deal of overlaps between the work of professors of secrets and barber-surgeons and the content of Mercuriale’s book. Besides the use of Latin, the difference was that Mercuriale discussed at length the causes of these phenomena according to the official and learned medical theoretical tradition, while the empiric practitioners’ books had a much more practical approach.

At the beginning of this work, Mercuriale asked whether skin problems were part of medicine or of the comptoria art. He discussed a serious issue: since it was not clear whether the skin performed any action – and diseases were obstacles to actions – were the problems of the skin of the head and the face proper diseases or just blows to beauty (turpitudines)? Mercuriale argued that the skin did not perform any “common” actions, but only “specific” actions, namely actions that were not relevant for the whole body, but only for single parts of it. The skin helped the nourishment of the veins by assimilating, uniting, and distributing them. Many scholars believed that these skin diseases were to be called “illnesses affecting beauty (morbos in pulchritudine),” but Mercuriale disagreed. He argued that Galen never mentioned such diseases, and that beauty was just a synonym for health, since it was present only in healthy bodies. As Plato said: “ugliness is nothing but a dissonance between things that are connected to each other; likewise, illness is a dissonance; therefore, ugliness is an illness, and beauty is health.” Beauty was, for Mercuriale, nothing but the effect, the fruit of health, and therefore the distinction between health and beauty was purely superficial. It was accurate for him to claim that “the art of medicine can deal with both beauty and ugliness, but not in themselves or directly: in fact, only indirectly. Indeed, a physician deals in the first place with health and sickness, but since, as Galen said, beauty the fruit of health, and
deformity is produced by sickness in the same way, then as Galen has written, it follows that the art of medicine deals with beauty and ugliness.”

Learned physicians wanted at the same time to write about appearances and to write about them in a way that would distinguish them from lowly practitioners and writers.

The heavily exploited theme of the two kinds of beauty was given a more concrete and literary twist by Tagliacozzi, with specific references to social life: “one [kind of beauty] is true and inborn (natiuum), and harmonizes with the ideal nature and proportions of the body (corporis constitutione & temperie), because, according to Hippocrates, we can judge it by bodily actions. This kind of beauty does not declare itself in whiteness of complexion, effeminacy, smoothness of skin, or any other such niceties. The second kind of beauty is neither true (verum) nor natural but is counterfeit, impure, and spurious (adulterina & arte accrescita); it is of use to dealers who wish to make a profit (mangonibus) and to the effeminate men who are overly concerned about their appearances.”

353 Girolamo Mercuriale, De decoratione liber, in Id., De morbis cutaneis (Venice: apud Iuntam, 1601), pp. 2-3: “turpitudinem nisi aliud esse, quam dissonantiam rerum cognatarum; sed morbus est huiusmodi dissonantia: ergo turpitudo est morbus, & consequenter pulchritudo erit sanitas … Artes medicam posse versari etiam circa turpitudinem, & pulchritudinem, sed non primum, neque per se: verum consequenter solum. nam versatur medicus primo, & per se circa sanitatem, & aegritudinem, sed quia ex sanitate pulchritudo tanquam fructus quidam nascitur, ut dicitur Galenus, ex aegritudine deformitas; hine est, quod scribit Galenus medicum, & artem medicam versari circa pulchritudinem, & turpitudinem.” On these works by Mercuriale see Sabrina Veneziani, “Le lezioni dermatologiche di Girolamo Mercuriale;” and Enrico Peruzzi, “La concezione della bellezza nel De decoratione,” in Girolamo Mercuriale, pp. 203-215 and 247-256 respectively.

354 Tagliacozzi, De curtorum, p. 15 (1:10-11), translation modified. Other faces, dark faces of other peoples – mainly the threatening armies of “Turks” and the enslaved “Turks” – were indeed part of the culture of the face. Besides this reference to practices of embellishing the slaves’ faces, I have mentioned above that there are known cases of owners mutilating Turkish slaves, cases of branding slaves in early modern Italy, and that caricature and disfiguring portraits circulated of black people. Historian Raffaella Sarti has been able to collect reliable information only about 32 “Turkish” slaves in Bologna between 1572 and 1708 but their presence was more numerous, given that figures concerning the muslim slave population in sixteenth- and seventeenth-century Italy has been estimated to be between
There were, to be more precise, three kinds of beauty: the real one, or Hippocratic, mixing together the aesthetic of the classical body and the functionalist, medical Galenic definition of beauty; the second kind, which “comes about through Nature’s generosity and careful fashioning”, sometimes obscured by the parts’ important function; and finally “artificial beauty that apes Nature (naturae simia) in order to allure and entice.” This kind of artificiality was conceived less in ontological than in social and moral terms: rather than troubling the order of nature, it induced men, like the effect of a trompe l’oeil, to take as natural that which was artificial. Tagliacozzi went on explaining that common sense suggested that “the face is the first thing we notice; it immediately engages the eye, whether pleasantly or unpleasantly. The female face attracts men’s eyes, allures them, conquers reason, and sows the first seeds of love.” Tagliacozzi’s approach was in a way not only sociological but even proto-anthropological, as he mentioned two norms of criminal law: a prohibition against writing on the faces of the condemned, while allowing it on the hands and legs, since the face was the expression of beauty; and the fact that when different parts of the body were buried in different places, the primary site of remembering and mourning is where the head is buried.

40,000 and 50,000 individuals, and given that converts also lived in Italy, sometimes in a state of semi-slavery; see Raffaella Sarti, “Bolognesi schiavi dei ‘Turchi’ e ‘Turchi’ schiavi dei Bolognesi tra Cinque e Settecento: alterità etnico-religiosa e riduzione in schiavitù,” Quaderni storici 107, 2 (2001): 437–473, p. 451; Salvatore Bono, Schiavi musulmani nell’Italia moderna (Naples: Edizioni Scientifiche Italiane, 1999). Lucette Valensi has showed that muslim slaves came not only as war prisoners (for example, after the famous 1571 battle of Lepanto 3,600 war prisoners were traded as slaves in Italy) but were also chased in real sea and land man hunts; see Lucette Valensi, Ces étrangers familiers. Musulmans en Europe, xvi-xviii siècles (Paris: Payot, 2012).

355 Tagliacozzi, De curtorum, p. 16 (1:11).

356 Ibid., p. 17 (1:12).
Later in book one, Tagliacozzi directly asked to what “category of preternatural afflictions … my procedure should be assigned?” Galen distinguished two kinds of disease: “One kind occurs as a result of a superabundance of one or another bodily part, while the other stems from a deficiency.” If some part had been mutilated or it was imperfect from birth, then one could speak of a natural deficiency (or abundance, in the opposite case). “The mutilation of nose, lips, and ears does belong to the category of deficiency,” and thus was part of therapeutic medicine (ad curatricem medicinam). This kind of medicine restored the lost health of each single part of the body. “Indeed, if we consider how ignoble and repulsive mutilation of the lips, ears, and nose can be, we might think that my procedure belongs not to the most praiseworthy part of medicine but is merely a question of cosmetics. Mutilated or missing parts confer so much shame and ugliness (foeditas, turpitudo, aspectus pravitas) on the appearance that all the nobility and elegance of the face is lost. If these parts are restored, the original grace and beauty of the face returns.” It is not without some reason that someone could say that this restoration procedure concerned not curative medicine but cosmetics (ad comptoriam pertinere). But this, Tagliacozzi emphatically stated, was wrong.

The cosmetic art provides what Nature has denied – a healthy complexion, an attractive coiffure, and any number of other niceties – while my procedure restores what Nature has given and chance has taken away. The aim of this procedure is not to please the eye (non ut oculos delectent) but rather to benefit mind and soul (sed ut animae operanti emolumento sint). This end is accomplished by admirable means (praestantibus auxiliis) and not through the use of ignoble and sordid artifice (fucis illiberalibus); the latter practice befits whoremongers and the like (mangones) but not good physicians and followers of the great Hippocrates (medicos). In fact, the main purpose of this procedure is not the restoration of the original beauty of the face in itself, but rather the rehabilitation of the part in question. Its beauty lies in the faultless performance of the functions (actiones) decreed it by Nature. This beauty is not artificial, spurious, or unworthy; rather, it is true and authentic … These are the reasons for placing my procedure in the realm of curative and no other. I would not disagree, however, with the claim that this operation does, in fact, restore the original beauty of the face (nativae pulchritudinis).

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357 Ibid., p. 57 (1:41).
It is with some badly dissimulated pride that Tagliacozzi described himself as an artist in that he gave back beauty to the human face.

THE CARE OF APPEARANCE

Learned surgeons knew that they could not dismiss a vast clientele of both men and women looking for aesthetic treatments. For example, Giulio Cesare Aranzi, discussing warts in his *De tumoribus*, made clear that the main inconvenience of warts was aesthetic. He added that sometimes, when patients became too insistent, it was ok to put the surgeon’s reputation at risk to embellish one’s face, “especially if they are women who desire to enhance the beauty of their faces: sometimes it is allowed to push them away; in fact, exhausted by such requests, we consider the idea of almost unwillingly performing the procedure.”

It is remarkable that sixteenth-century medicine and surgery books devoted much more attention than their earlier counterparts to the face and its “diseases,” sometimes blurring the distinction between health and appearance. Sixteenth-century lists of issues, vices, and imperfections concerning the face were much longer than their medieval counterparts. Giovanni Andrea Dalla Croce’s list of affections which troubled the face was much longer than those one could find in medieval surgery books. Almost the entire first book was devoted to affections that could disfigure or simply make the face ugly: “ulcere, aposteme sanguinee (abscessi, essiture, foroncoli, panarizzi, carboni maligni, antraci), aposteme

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358 Ibid., pp. 58-59 (1:43).

359 Aranzi, *De tumoribus*, in Id., *De humano foetu*, p. 177: “praesertim si mulieres fuerint quae decorandae faciei consultant, vix aliquando subterfugere licet; imo precibus fatigati curationem pene inviti aggredere cogimur.”

coleriche (erisipele, herpeti, pruni, formiche, vesiche, inflassioni, sfaceli, gangrene), aposteme flemmatiche (edemi, nodi, scrofole, absessi, glandule), aposteme melanconiche (cancri, scirri, aneurismi, echimomi, varici), es crescenze (polipi, mori, porrifici, porri, verruche, calli, sesto dito).  

Moreover, by the early Cinquecento cosmetics became more prominent since more skin surface was showed off in the face and in the neckline.

Leonardo Fioravanti’s Compendio di tutti i secreti rationali can serve as an example of the scope of the market of cosmetics. In the “Discourse on make up with many necessary information (Discorso sopra la materia de belletti con molti avvertimenti necessarii),” the seller of cosmetic secrets wrote that “there are many several material things that women use to adorn themselves and to make themselves beautiful, of which I will speak at length; indeed, this topic is no less important than medicine and surgery, because women desire so much these things, that they would suffer through any kind of torture (supplicio) to appear more beautiful than they are. Many times they use substances and remedies that accomplish the opposite and severely harm not just the face” but their whole body. Fioravanti intended to warn women from using dangerous cosmetics, and he expressed the ardent desire for women to “say good things” about him and, so to speak, to spread the word, because he loved women and make-up was “a noble and beautiful thing to use.”

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361 Dalla Croce, Cirugia universale, Sommario (pages are not numbered). This interest in cosmetic remedies for face unaesthetic spots and issues was widespread. For example, Cristina Bellorini has showed that Cosimo I de’ Medici annotated with great care such remedies against spots on the face in the first edition (1544) of Mattioli’s commentary on Dioscorides: see Cristina Bellorini, The World of Plants in Renaissance Tuscany: Medicine and Botany (Ashgate: Farnham, 2016), p. 26.


363 Leonardo Fioravanti, Del compendio dei secreti rationali [frits edition 1564] (Turin: appressi gli heredi del bevilacqua,1580), fol. 118r-v: “Sono varie, et diverse le cose materiali,
Fioravanti was of course advertising his skills and products as a make up artist and merchant, so his tone was not moralistic at all. The list of his secrets included: how to remove spots and other marks for the women’s face; how to make a plaster to remove facial hair (“Many women have their face excessively hairy, that which is very ugly to see, because it disfigures a beautiful face”); general depilation of men and women; how to darken hair, eyelids, and beards; hair coloring (“When grey or white hair start to appear on a man’s or woman’s head and face, and they want to darken them in order to appear younger, this is what they have to do”); how to turn a white beard into a beautiful blonde one; the offer to reproduce two variations of blondeness for women: the Neapolitan fashion and the Venetian fashion; how to paint women’s eyelids black (French or Spanish fashion); several recipes on how to make women’s face more red; special “waters” to wash, clean up, and whiten women’s face; how to prepare a water that cancelled or hid the marks and scars of the pox (varolo), burnings, etc.; oils that did clean and whiten the face; and many others \(^{364}\).

Men were far from abstaining from using cosmetics, but enhancing beauty remained an eminently female concern. Fioravanti described the “features women want in order to look beautiful (condizioni che vogliono havere le donne per parer belle)” as followed: women wanted “to please everyone. The first quality a woman wants is to be rich, in order not to be despised. The second is to be generous, so that she will be loved. The third is to be honest, so that she will not be blamed. The fourth is to be young, so that she will be strong and robust. The fifth is to be merry … [these conditions] are the best sort of make-up a woman can find

\(^{364}\) Ibid., fol. 123r-145v: “Sono molte le donne, le quali hanno la faccia pelosa oltra modo, la qual cosa è molta brutta da vedere: percióché disconcia, et disforma assai una bella faccia … Quando ad una donna, o ad un’huomo gli incomincia a venire i pelli canuti, e li vuol far negri per parere più giovane, faccia in questo modo.”
and use; and if the above mentioned qualities cannot be attained, women might want to whiten their face, hands and chest, so here is what she should do."

Ambroise Paré wrote too of cosmetic recipes, but less light-heartedly than Fioravanti. He talked about a wig for those who had lost their hair; of some feathered wigs for women who had grey hair and did not want to be considered old but kept “deceiving men … and in order to appear higher than they really are they wear heels like the Spanish and Italian women. They [women] do many other things to deceive men, but I don’t want to describe them, since I am afraid to wrong them.” Della Porta’s *Magia Naturalis* included many cosmetic secrets, but – echoing Guy de Chauliac – felt the need to specify that such recipes were acceptable for women only insofar they used them in order for “the wife to be fancied by her husband.”

Two early modern manuals for barber-surgeons, written in vernacular by professionals who might be called “learned barber-surgeons” give us a rather accurate description of their self-presentation and of how they viewed their professional task of caring for people’s appearance. Pietro Paolo Magni’s (ca.1525-1586) vernacular manual of phlebotomy (1584) provides the first example. The book was organized around the categories of bloodletting and cauterization, with bloodletting occupying the greatest portion of it.

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365 Ibid., fol. 141v-142r: “… piacer a tutti. La prima qualità adunque che vuole havere una donna, è che sia ricca, acciò non venga disprezzata. La seconda qualità è che sia generosa, acciò sia amata. La terza condizione è che sia honesta, acciò non venga biasimata. La quarta condizione è che sia giovane, acciò sia forte, e garglairda. La quinta condizione è che sia allegra … questa sarà la miglior sorte di belletti che si possino trovar, né usare, e quando non potessero havere le dette qualità, & si volessero fare bianche la faccia, le mani, et il petto, faccino questa seguente ricetta, & sarà bellissima.”


emphasis was on the veins, which were described, as in an anatomy manual, from head to
toe. The barber-surgeon’s view of the body was indeed decidedly vein-centered.

Of course, Magni focused on bloodletting in the first place, and warned the reader that
many people were wrong in performing the operations pertaining to bloodletting, since “this
art is indeed a dangerous art, and it is part of that branch of Medicine called Surgery.” This
was showed by the illustrious physicians who were also surgeons; but “in our times this part
[of medicine] is fallen into the hands of non-experts, who practice it in an improper and
unworthy way.”368 So this book was also addressed to scholars. Magni was echoing the
argument of learned sixteenth-century surgeons and anatomists, who all complained that
surgery, such an important art, had fallen prey to the ignorance of the empirics.369

For Magni, the good barber-surgeon had to be pious, have a “good sight (buona
vista)”, be quick, be “clean” (polito), sober with wine, of honest habits, modest and affable.
Barbers visited all sorts of people, and treated all sorts of body parts of both men and women,
and often they happened to hear many secrets, indiscretions, joys and sorrows; but above all
“they can kill women and men with their lancets and razors.” Therefore, the barber’s hand
must be “light (leggiera),” and “he will always be more praised if he is quick rather than
slow.” Politezza, the art of being precise and swift with the razor, was one of the best

368 Pietro Paolo Magni, Discorsi intorno al sanguinar i corpi humanni (Rome: appreso
Bartolomeo Bonfadino & Tito Diani, 1584), p. 2: “l’essercitar quest’arte è cosa periculosa, &
cavata da quella parte della Medicina, che chiamano Chirurgia … a i tempi nostri questa parte
è venuta in mano d’aluni imperiti, i quali sciocamente e indegnamente l’essercitano.”

369 Vesalius’ De fabrica (1543), in the dedication to Charles V, had given a standard version
of the causes of the present corruption of medicine he was aiming at correcting, in that “the
technique of surgery fell into neglect and was, as it were, handed over to laymen and people
with no knowledge of the disciplines that go to serve the healing art. No more pestilent
affliction could possibly have crept upon it.” See Andreas Vesalius, On the Fabric of the
Human Body, 3 vol., tr. William Frank Richardson (San Francisco: Norman Publishing,
qualities for a barber. Barbers had to be affable because “most of the times with their words and kind ways they convince patients to let themselves be treated.”

Barbers had also to be careful and judicious in all the other operations – washing the head, cutting hair, shaving beards, and honoring the face of the person they shaved. They had to take into the account the status of their clients “because most of the time the beard will make the man appear handsome or ugly, so they must be very able to handle the razors … and careful that their hands will not bother the patient.” Health and aesthetics were overlapping tasks for barbers.

Tiberio Malfi’s *Il barbiere* built on sixteenth-century manuals but added an even more learned self-presentation of the profession, especially by emphasizing anatomical instruction and by declaring that he had sought the help of masters of anatomy to make his art “more authoritative.” The textbook was divided into three parts, dealing respectively with “ornaments” and the general precepts of the barber’s art; the anatomy of the veins, arteries, muscles, and nerves; the practical use of leeches, scarifications, cupping glasses, cautery, vesicatories, and how to open up living animals.

In the dedication to the reader, Malfi linked the art of barbers to the “Decorator’s art” and to “Medicine,” stating that it was equally useful to both. Then he complained that so few of its practitioners have written on it. In Book I, Malfi clearly included the barbers’ art within

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370 Magnus, *Discorsi*, p. 3: “possono con la lancetta, o con il rasoio dar la morte al’huomo, o donna, nel suo operare … sia presto: perché sempre sarà più lodevole, ch’esser lento … perché il più delle volte con le parole, e gratie loro fanno, che l’infermi, & altri si lascino servire.”

371 Ibid., p. 4: “perché il più delle volte barba farrà parer l’huomo bello, e brutto, & anco di forme poi maneggiar bene il rasoio … e lor’ mani non diano noia al patiente.”

372 Maria Conforti has persuasively argued that the work was co-authored by Malfi and the professor of anatomy at the Neapolitan studio and correspondent of William Harvey, Marco Aurelio Severino (1585-1656); see Maria Conforti, “Medicine, History and Religion in Naples in the Seventeenth and Eighteenth Centuries,” in Ole Peter Grell and Andrew Cunningham, ed. *Medicine and Religion in Enlightenment Europe* (Aldershot: Ashgate, 2007), 63-78, pp. 67-68.
the body of medicine, and argued that, besides Hippocrates and Galen, very few exceptional men were able to embrace the whole body of medicine in all of its parts. He then argued that there were several ways to distinguish the parts of medicine, one of them being the distinction between dietetics, pharmacy, and surgery. But another distinction was that between curative, conservative, and preservative; some physicians added the *Evettica* (the art of reinforcing bodies), *gerocomica* (the art of caring for the old), and the art of governing little children. Some other added the *Decoratoria*, which was different and separate from the *Fucatoria*, the art of make-up (*belletti*). Malfi was clearly aware of the learned debates on medicine and beauty.

But for him the most important distinction was twofold: “Physic in the hands of philosophers,” and “Surgery in the hands of simple operators.” Malfi was also perfectly aware of the history of surgery and referred to Guy de Chauliac in tracing this separation back to Rolando, Ruggiero and “the four masters” of surgery that had so greatly advanced the field. An even most important separation medicine had to suffer was that between barbers and blood-letters, after which “Barbers were assigned two parts of medicine: the *Decoratoria*, which we mentioned above, and one part of Surgery.”

Malfi also had an explanation for the reason why many barbers practiced surgery, and it had to do with urgency, necessity, timeliness, and professional urban geography. “The other part of medicine – he wrote – is called surgery, and it was mainly practiced by physicians but later it passed (if not the whole of it, at least some of its parts) into the hands of barbers … Surgery treats wounds and evils that happen suddenly, that presents an immediate threat to patients, either for the bad effects of air or for the loss of blood, or, again, ...

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374 Ibid., p. 3. The author is here following Vesalius’ narrative of the decline of surgery which the anatomist had placed in *De fabrica*’s dedication to Charles V.
for the extreme pain, and surgeons must always be ready and never have to wait to operate; regularly, physicians are not to be found in their homes (since they are often busy away from their homes, and they do not have workshops) and therefore barbers took their place [to treat these urgent evils] since they are always ready in their workshops.”

But there was another, deeper and, so to speak, cultural reason, why barbers took over surgical tasks: “besides necessity, the other reason [why barbers took over surgical tasks] was the affinity or closeness between operations which have to do with the same subject, because barbers deal with the lack of beauty and cleanliness (politezza), and therefore little by little it became easy for barbers to perform those operations which treat dissolutions of continuity [an injury] that disfigures and ruin beauty, all of which operations is surgery’s task.”

This was a rather striking declaration of the continuity between the care of injuries and the care of beauty and cleanliness, and the field of intervention of barbers and surgeons was indicated as that which was placed in between salute and politezza.

While Malfi was aware of the fact that barber-surgeons were part of the artisanal class, nonetheless, given the special status of the object of their care, they deserved better consideration. He thus emphasized the intrinsic dignity of the object of barbers’ art: the human body, and especially its face. Among all the arts and crafts, only the barbers’ art “has for subject, as its privilege and special prerogative, the treatment of man by means of the bare

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375 Ibid., pp. 3-4: “L’altra parte di Medicina, detta Chirurgica, come che principalmente sia essercitata da’ medici, pure per alcuni accidenti fu trasferita, e riposte (se non tutta almeno in parte) nelle mani de’ medesimi Barbieri … Percioché curando la Chirurgica per ordinario ferrite, e mali, che di repente avvengono, e che portano momentaneo paricolo, o per l’offesa dell’aria, o per lo spargimento del sangue, o per gli estremi dolori, onde non patiscono indugio, nè dilation di tempo; & I medici tali non sono, che dimorino in casa (per essere ordinariamente occupati fuori, o per non tenere officina) in luogo loro successero li Barbieri, che parati sempre si trovano assistendo nelle loro officina.”

376 Ibid., p. 4: “l’altra ragione, oltre la necessità, fu l’affinità, o diciamo vicinanza dell’operations nello stesso suggeto, ciò ch’adempendo il Barbiero il mancamento della bellezza, e della politezza, con facile passaggio si riducesse di passo in passo a correggere i difetti della soluzione del continuo, che difformava, e guastava essa bellezza, nella quale versa la Chirurgia.”
sense of touch, and it is indeed all about this, and the correction of nature’s imperfections.”

Finally, the surgical part of the barber’s art was also good for men, since it soothed pain, eased anxiety, sometimes saved men from death, and preserved their health. 378

There is no better summary of the standard barbers’ self-description than the one given by Tomaso Garzoni.

Their [barbers’] art is clean and polite, since its aim and goal is the body’s good appearance, that which is brought about by shaving, washing, cutting, and rubbing the people who ask for their services. And it can be practiced with very little money, because it needs only a washbasin, a couple of razors, a lancet, a hairgrip, a comb, a scalpel … two pairs of cloths, a sponge, a brazier with some carbon, a bucket of lye [caustic soda], and a little bit of water of roses to put on the patients’ face – these tools make up the whole lot of the barbers’ architecture. Barbers also let blood from the sick and apply cupping glasses, they dress wounds, bandage, pull out rotten teeth and similar things, and therefore their art … is subaltern to the science of medicine … A dexter hand and good eyesight are the most desired qualities in a barber. 379

Politezza, one of the goals of the barbers’ art, namely the care of the superfluities and excrements of the body (hair, bad humors, bad blood, sweat, nails) was at the same time the politezza of the social body, and barbers were taking care of an orderly body which belonged to a well-ordered social world. Politezza could indicate clean and beautiful figures and

377 Ibid., p. 6: “[l’arte del barbiere ha] per proprio privilegio, e singolare prerogativa, col tatto immediato delle mani lo stesso huomo ha per suggetto, e circa l’istesso tutta si versa, emendando l’imperfettioni della natura.”

378 Ibid., p. 7.

379 Garzoni, La piazza, vol. 2, pp. 1375-76: “L’arte di questi è medesimamente netta e polita, avendo per fine e per scopo la politezza del corpo, la qual si causa dal radere, dal tosare, dal lavare, e stropricar ben bene le persone che fan ricorso a loro. E si mette in esecuzione con pochissima spesa, imperoché un bacile, duì rasoi, una lancetta, un gamauto, una molletta, un pettine …, due para di fazzuoli, una spongia, un focone con un poco di carboni, un secchio di lissiva, e una zucchetta d’acqua rosa da sbruffare in faccia, compiscono tutta l’architettura de’ barbieri. Servono anco i barbieri per cavar sangue agli amalati e per mettergli le ventose, medicar le ferite, far le stoppate, cavare i denti guasti, e simili altre cose, onde l’arte loro … è subalternata per questo alla scienza della medicina … La destrezza della mano è desiderata sopra tutto ne’ barbieri, così l’occhio bono.”
refined manners, civility, ability to appear in public and to deal with others in a civil manner. In other words, *politezza* was a hygienic, aesthetic and political virtue at the same time.\(^{380}\)

Now, this concept of *politezza* was used by a lay observer of Tagliacozzi’s work. In a passage I have quoted in chapter 2, the chronicler Francesco Galliani wrote in his notice on the death of Tagliacozzi: “Today 7 November [1599] the excellent physician Gaspare Tagliacozzi passed away, the most famous physician of our age in the art of surgery, who used to make noses, lips, and ears to those who had lost them because of they had been wounded or other things, and he used to make them with so good a *politezza* that he almost overtook nature.”\(^{381}\) The word *politezza* is very important here, since it is the term barber-surgeons used in their self definition, and that was used to qualify their art. Tagliacozzi was identified as the one person who cared for the *politezza* of the noble class.

**TRADING ZONES**

This association of beauty, *politezza*, and reconstructive surgery probably intensified in the seventeenth century. Ovidio Montalbani (1601-1671), a key character in the cultural life of Bologna in the first half of the seventeenth century, has left a testimony of the highly nuanced relationships between different practitioners of the body.\(^{382}\) In 1670 he published a


381 BUB 3839, *Cronica, o sia Diario di Francesco Galliani (1589-1600)*, fol. 83v: “Adì 7 di Novembre [1599] passò di questa vita lo eccellente dottore in Medicina Gaspare Tagliacozzo famosissimo più che alcun altro fosse di nostra età nell’arte della Cirusia, il quale faceva il naso, labra et orecchie a quelli li erano state tagliate per ferite, o altro, e li faceva con tanta politezza, che di poco di più bello crea la natura.”

382 Ovidio Montalbani was a professor of philosophy, medicine and mathematics, Prior and subsequently archivist of the College of Medicine and Philosophy. He also was a public historian, and the compiler of the annual astrological predictions of the Senate: He served as
history of the city’s guilds, titled *L’honore de Collegi dell’arti della città di Bologna. Brieve trattato Fiscopolitico e Legale Storico*, in which he reflected on the situation of the arts and crafts roughly from the mid-sixteenth century. In the chapter devoted to the barbers’ guild, ranked only at the twenty-first place in the hierarchy of the 27 guilds, Montalbani mentioned several themes in a rather haphazard manner, reflecting the confusion of categories and the continuity among practitioners of the body, as well as between the care of health and the care of *politezza*, that remained in the mind of his contemporaries despite increasing institutional and professional distinctions. Right at the beginning, barbers were linked to the practice of cosmetics and surgery and described as dependent upon the power of the College of Medicine: “The guild of barbers mainly practice cosmetic medicine, and many parts of surgery, as a liberal concession of the College of Physicians of this city.” Among the most important of the barbers’ tasks there was phlebotomy, the art of drawing blood by applying leeches and by cutting the veins, an activity which was straightforwardly defined “surgical medicine (*medicina chirurgica*).” Immediately after that, Montalbani claimed that barbers or, better, barber-surgeons, should study the Latin works of the late-sixteenth and early seventeenth century written by learned surgeons and physicians, such as Marco Antonio Olmi’s *Physiologia barbae umane* “in order to learn about the facts concerning virility, and especially the art of embellishing human bodies (*per intendere gli accidenti della Virilità ... e massimamente l’abbellimento del corpo umano*);” and Scipione Mercurio’s *La Comare*, an obstetric manual from which barber-surgeons could learn many useful things on childbirth. Most interestingly, Montalbani said that barber-surgeons must place themselves “under the

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guidance of the most excellent Dottori Arcicirurgi, who do know that most admired, and world-famous, art of remaking many body parts which have been lost, about which one of our Collegiate physicians of the past century, Gaspare Tagliacozzi, has published the most admirable volume de Curtorum Chirurgia, pro insitionem [sic].”

Barbers practice the art of “mangonizzare, that is to embellish and clean up men’s hair and beards of all their excrements and external superfluities,” something which “must not aim at a vicious end, but only at improving the patients’ health, always keeping as far as possible from womanly enhancements of beauty, an endeavour which, in contrast, must be left in the hands of maids, who unfortunately are experts in this malicious art.” Barber-surgeons, just like learned surgeons, had to attend to people’s health, not to enhance their beauty, like women asked and female make-up experts did. Going down the list of the barbers’ activities, Montalbani recalled that in ancient Rome they used to be bath and thermal spas attendants, and that this tradition had been revived in his times, as barbers worked as public and private steam-baths attendants “in order to clean up the body for the sake of health (a fine di procurar le mondezze del corpo in ordine alla sanità).” To sum everything up, Montalbani described the barber-surgeons’ goal as “procuring the pure cleanliness of human bodies (procurante la pura mondezze de’ corpi humani),” which was indeed a goal worth of the greatest honor and respect.

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384 Ibid., p. 91: “a i quali non è ignota l’arte mirabilissima, e famosissima per tutto il Mondo di restituire molti membri affatto perduti, di che uno dei nostri Dottori Medici Bolognesi Collegiati dell’andato secolo, cioè il Tagliacozzi, ha lasciato in istampa l’ammirabilissimo Volume de Curtorum Chirurgia, pro insitionem [sic].”

385 Ibid.: “mangonizzare, cioè l’abbellire, e mondare da escrementiti e estrinseche superfluità de i Capegli, e Barbe gli Huomini … non dev’esser indirizzato al fine venalicio vitioso, ma solo al migliorare la sanità del mangonizzato, lontanissimo sempre dall’intricarsi ne gli abbellimenti Donneschi, lasciando simile impaccio alle Fantesche pur troppo intrutte in quest’arte dolosa.”

386 Ibid., pp. 91-92.
I only want to highlight here a few things in Montalbani’s passage. First, the confusion of language referring to the practitioners of the body ("arci-surgeon", "barber", "surgeon"). Second, that cosmetics and surgery were placed on a continuum, or at least within the same professional culture. Third, that works of learned surgery and medicine were suggested to barbers as important sources of information for their surgical-aesthetic concerns. Fourth, the ways gender distinctions were translated into medical discourse on the differences between cosmetics and medicine. And finally, the function of cleaning and policing the human body was almost ubiquitous in barber-surgeons’ and surgeons’ self definition. Both professional categories took much pride in it since it indicated that the subject of their art was the human body and its public, visible, presence.

In her classic study of the health care system in Bologna, Gianna Pomata described a double model of perception of illnesses in early modern medicine: one based on the obstruction and evacuation of the body; the other based on the control of humors and organs through diet. These two models refer to two professional figures: "healers" and "protectors" (the latter being represented by collegiate physicians in their role of protomedici). The relationship between patient and healer was horizontal and conceptually linked to self-therapy; the patient/protector relationship was instead vertical and implied dependence upon a higher authority. “In the long run – she wrote – the vertical model of healing won over the horizontal model.” More generally, patients wanted treatments to be effective, while medical authorities wanted them to be orthodox.

Pomata argued that barber-surgeons were caught between these two fires. On the one hand, patients regarded barbers as “healers”; on the other hand, medical authorities always tried to regulate and control the barbers’ practice. “Barber-surgeons were, so to speak, doubly

387 Pomata, Contracting a Cure, pp. 140-41.
vulnerable: they could lose their fee not only if a patient was unsatisfied with therapy but also, even in case of successful treatment, if they had not abided by the Protomedici’s rule.” Pomata argued that this was one of the main reasons for the decline of the cure agreement in the seventeenth century: barber-surgeons tried to get rid of the agreement model to lower the pressure on their performances.\textsuperscript{388} In this way, the liminal position of barber-surgeons played a crucial role in the transformation of the medical profession and the decline of the juridical form of the “agreement for a cure” – the form of a contract between patient and healer in which the former paid the latter only when and if felt cured – by the late sixteenth century, and in the “waning of a view of medicine which allowed for self-diagnosis and self-therapy.” This change was linked to the pressure that patients were exerting on barber-surgeons from below, and, on the other hand, and that pressure which to the medical authorities were exerting from above. On the one hand, barber-surgeons were required to practice under a physician’s supervision, and not simply upon patients’ request; on the other hand, their business depended upon a view of healing and the body widely based on self-perception and self-diagnosis. For example, people who were feeling sick asked barber-surgeons to draw blood, without consulting a physician, thus pressing barber-surgeons to act outside of the boundaries of the law. Many barber-surgeons found themselves in this difficult position. Indeed, there had always been a link in the early modern world between barbers and “the tradition of self-therapy”, in which knowledge and skills were perceived as something that could be evaluated by the patients themselves, not only by medical practitioners.\textsuperscript{389} I would add to this picture the fact that barber-surgeons were often the first health care professionals patients got in touch with when sick, and that as such they could also act as mediators and go-betweens, putting in contact patients with other figures of healers, including the physicians.

\textsuperscript{388} Ibid., p. 148.

\textsuperscript{389} Ibid., pp. 152-53.
My use of the phrase “practitioners of the body” to refer to all kinds of surgeons is somehow anachronistic, since the actors would have always kept in mind the difference between a graduate physician and a barber-surgeon. But my use of the phrase has the goal of underlining the continuity, in terms of skills and technical competence, between the most advanced empiric surgeons and the learned surgeons. When understood as different kinds within one and the same category of practitioners of the body, surgeons do not clearly fit this dichotomy between healers and protectors. Among barber-surgeons and physicians there was not only a relationship of subordination and unrest but also of collaboration and division of labor. The relationships between empiric surgeons and learned surgeons could be described in terms of “trading zones,” as sites in which a two-way exchange – not always peaceful, often conflictual – of knowledge and skills took place. This will become particularly evident in the rest of my work, which focuses on specific reconstructive techniques that were the realm of empiric surgeons, learned surgeons, and all sorts of natural historians, gardeners, and farmers.

One of the memorials dedicated to Tagliacozzi on the walls of the Archiginnasio presents a rather unique feature: it mentions by name Tagliacozzi’s teaching assistant Pompilio Tagliaferri (1559-1639) from Parma. Tagliaferri was not a simple assistant. He had studied medicine in Padua and graduated in Rome. Probably he acted as a dissector while Tagliacozzi dealt with the most theoretical aspects of the demonstrations, according to a script that, despite the appearances, did not cease to exist in the century of Vesalius. Indeed, in the memorial inscription Tagliacozzi is described as someone who explains human anatomy, and the dedication includes Tagliaferri “on account of his special ability and adroitness in accomplishing [dissections] most skilfully and in most beautifully demonstrating [human anatomy] with the best generosity and diligence.” Interestingly enough, this Tagliaferri, who is never mentioned in the official roll of the Bologna studio lecturers, was a professor of botany in Rome for a while and had studied botany along with anatomy. By 1601, he also held the chair of anatomy and the custody of the botanical garden at the newly founded University of Parma.

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392 Despite the innovations of title pages, the structure of anatomical dissections remained divided into three different roles throughout the whole sixteenth century: see Andrea Carlino, Books of the Body, pp. 85-92.

393 Imago Universitatis, vol. 1, p. 411: “ob eandem singulari industria et solertia peritissime administratam benignitate et diligientia maxima pulcherrime demonstratam.”

recalled that he was an expert practitioner of obstetrics, that he was marvelously skilled in the art of surgery, and that he performed a wondrous but unspecified treatment in Ferrara on a certain Signora de’ Bentivogli. He is also said to have been a virtuoso musician, a scholar very skilled in preparing recipes and pharmacopeia, and for composing several botanical manuscripts and herbals, which were all lost after his death. An interesting partnership with a botanist for Tagliacozzi, who took one botanical practice, grafting, and transferred it to surgery.

The natural/artificial opposition occupies a central place in an analysis of Renaissance reconstructive surgery, not only with respect to the moral perception of the face and conceptions of beauty, but even more so at the level of epistemology and ontology. This surgical procedure was at the same time a way of knowing the human body and a way of approaching a bundle of thorny ontological issues that ultimately challenged, even against Tagliacozzi’s intention, the traditional natural/artificial distinction. The reconstructive procedure of the damaged parts of the face was one of the several sites in which the conceptions of nature and art – understood as techne, as man’s work on and with nature – underwent a deep crisis in the late sixteenth century. It is well known that the historiographical construct once called “the Scientific Revolution” is nowhere to be found.

8-10; Grendler, The Universities, table 4.6; Roberto Lasagni, ed. Dizionario Biografico dei Parmigiani (Parma: PPS, 1999), vol. IV, pp. 505-06.


396 My reference to “ontology” is anachronistic, as it is not an actors’ category. With this term I intend to underline the relevance grafting had in the eyes of sixteenth-century people for the actual constitution of the world, as it was believed to bring about new entities.

and that “there is no such thing” in history, and I embrace the alternative conception of slow, non-linear transformation in practices and concepts that concerned several domains of early modern knowledge. Surgery, agriculture, gardening, and horticulture are examples of those practices that have been for a long time considered marginal, but in which a process of blurring of the boundaries took place regarding the most serious and important concepts that are associated with the changes of this period. It is not possible to argue that in early modern Europe there was a precise moment in which, for example, the idea of nature as a personified creative force gave way to the idea of nature as a law-governed, impersonal set of processes, or that nature and art ceased all of a sudden to be hierarchically ordered. But it is possible to show that, in practice as well as in theory, the natural/artificial opposition became an issue.

By following the history of a practice – grafting – rather than a discipline – surgery – I approach Tagliacozzi’s text from the point of view of ontology and epistemology. I describe the classical distinction between art and nature which, in its various meanings, constituted the background for several concepts and practices of the sciences of man, plants, and gardens. I discuss the many contradictions and oscillations concerning the natural/artificial opposition that are to be found in Tagliacozzi’s book and the respective roles of the human artifex and of nature in this surgery procedure. I argue that these difficulties were linked to the practical example he chose as the main guide for the operation itself: grafting. Then I discuss classical and contemporary practices and theories of grafting that were in place by the late sixteenth century, as well as the contexts in which they originated and developed in new vernacular and Latin genres: the rise of natural history, commercial exchanges, novelties from the new world, and the process of taking back the countryside by a leisureed noble class. Finally, I clarify the main epistemological and ontological issues in Tagliacozzi’s book.

ART AND NATURE

The most important and often repeated conceptualization of the difference between nature and artifice in early modern European intellectual circles came from Aristotle’s *Physics*. In book II, the philosopher had claimed that natural products have an innate or internal principle of motion or change, while artificial objects precisely lack precisely such inherent internal principle of change.\(^{399}\) However, Aristotle introduced a nuanced distinction between two ways in which art worked with respect to nature. Either the arts “carry things further than Nature” or they “imitate Nature”: the arts either perfect nature, or they simply imitate nature without altering it.\(^{400}\) The paradigmatic examples of the former kind of “perfective” arts were medicine and agriculture, and it was in the Hippocratic tradition that art first appeared as the “servant of nature.”\(^{401}\)

From the very beginning, the trope of art imitating nature implied an ambiguous relation between the passivity and the activity of human makers, between art as a mirror and art as production. In classical antiquity this relationship implied two features: art was dependent upon nature – it used nature’s material, imitated its functions, processes, and appearance, followed its regularities – and ancillary to nature – it cooperated with nature to help it reach its full potential. The idea seems to be rooted in medical thought from the beginning, as it was understood that medical arts imitated bodily functions and processes. Medicine itself was said to copy nature, or to aid and support nature’s power to heal. At the


\(^{400}\) Aristotle, *Physics* II.8.199a, 15-17.

same time, nature guided humanity to develop the arts.\textsuperscript{402} To perfect nature in the Aristotelian-medical sense did not mean to create an artificial product as perfect as a natural object, but rather to help nature display its potential. Galen contrasted the works of nature and art by considering sculpture and painting as purely superficial \textit{mimesis}, which left the inner structure of objects intact. Therefore, by elaborating on the Aristotelian idea of the inner principle of change, Galen made the art vs. nature a matter of surface and depth.\textsuperscript{403} For Galen, despite the appearances, art could not work on matter and transform it the way nature did.\textsuperscript{404}

These first two intertwined meanings – art imitating nature and art perfecting nature – were the most important ones for Tagliacozzi, who entertained a complex conceptual game with them in an effort of justifying his procedure in traditional terms. But other meanings played a role too. Following Close’s essay, we find the idea that art is based on experience, or study, of nature, an idea which was indeed very much tied to the trope of art imitating nature.

The idea of art and nature in rhetorical education is more interesting, in that classical Roman rhetoric exercised a deep influence in humanistically trained medical writers, and also in the fact that it started to blur the boundaries between the two poles of the artificial and the natural. This was the idea according to which art, conceived as training, skill-building, discipline, practice, could perfect individual nature or talent.\textsuperscript{405} This rhetorical conception

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was closely tied to the idea that art operated by using nature’s material, again a variation of
the conception of the perfective art which was particularly employed in classical examples on
politics and medicine.406

It was a classical commonplace to claim that art had its beginning in nature, and this
idea played a fundamental role in discussions on grafting. Partly for these reasons of logical
and ontological derivation of art from nature, art was conceived as inferior to nature by
Renaissance thought. This idea of the inferiority of art was linked, in turn, to the idea that
nature was a skillful artist.407 A.J. Close left out of his remarkable list the contribution of
ancient and Renaissance engineers, machine-makers, and alchemists, which is now
universally recognized as one of the most decisive sources for the conceptualization of art and
nature in the “age of the new.”408 Ancient writers on mechanics introduced the idea of the
“conquest” of nature, in that they thought they could make nature behave differently, and
alter its natural course. This meant that the four natural elements were forced to behave
against their natural inclinations.409 The theme of placing nature under violent investigation,
test, and even torture in order to make her confess the truth can also be found in the
alchemical tradition. Alchemists introduced a different conceptual relationship between art
and nature: an art capable of altering the structure and matter of nature, and of replicating –
not just imitating or perfecting – nature’s processes.410

406 Aristotle said that the art of accumulating wealth was concerned with using provisions
given by nature, and that for this reason it resembled the art of government, which “does not
create men, but takes them from nature already made and makes use of them. Ibid.
407 Ibid., pp. 478-80.
408 See for example Paolo Rossi, I filosofi e le macchine 1400-1700 (Milan: Feltrinelli, 1962).
Engineering, natural history in its connection with the “discoveries” of the New
World, commerce, the culture of collecting, medicine, and alchemy have all been
mentioned in recent historiography of early modern science as working on the slow and non-
linear subversion of the classical art vs. nature distinction that is associated with the novelties,
and the sense of novelty, so widespread in sixteenth century scientific culture. There are
many examples of excellent recent works on the several ways in which the natural/artificial
epistemological and ontological boundaries came to be an issue. Daston and Park have
showed that at the conceptual level the natural came to be opposed, or at least compared to,
not only the artificial, but also to old and new ontological states: the unnatural, the
supernatural, and above all the preternatural. The latter was a state given by the rare
conjunctions of natural causes that produced strange effects, which were understood as
singular exceptions rather than violations of the natural order. Paula Findlen has argued

410 Ibid., pp. 30-33. A notable case in which surgeons and barber-surgeons were involved, and
whose outcome questioned the borders between natural and artificial, was that of castrati,
popular in Italy by the late sixteenth century. For an account of castrati’s voice as a hybrid of
art and nature see Bonnie Gordon, “It’s not About the Cut: The Castrato’s Instrumentalized

411 Paula Findlen, Possessing Nature: Museums, Collecting, and Scientific Culture in Early
Modern Italy (Berkeley: University of California Press, 1996); Bernard W. Ogilvie, The
Science of Describing: Natural History in Renaissance Europe (Chicago: The University of
Chicago Press, 2006); Mary Baine Campbell, Wonder & Science: Imagining Worlds in Early

412 Harold J. Cook, Matters of Exchange: Commerce, Medicine, and Science in the Dutch
Golden Age (New Haven: Yale University Press, 2008).

413 Lorraine Daston and Katharine Park, Wonders and the Order of Nature, 1150-1750 (New

414 Harold J. Cook, “The History of Medicine and the Scientific Revolution,” Isis 102, 1

415 Pamela Smith, The Body of the Artisan: Art and Experience in the Scientific Revolution

that the importance assumed by the concept of *lusus naturae* allowed scholars and practitioners to highlight “man’s ability to match nature’s complexity with his own artifice,”

and suggested that it is in the practices of experimentation and playfulness of natural historians, gardeners, anatomists, surgeons, natural philosophers that the boundaries between natural and artificial came into question in sixteenth-century science, also under the long-lasting influence of Pliny and of Ovid’s *Metamorphoses*.

One of the most celebrated figures of this age of the new was Francis Bacon (1561-1626). Bacon’s natural history program suggested to investigate nature under three categories: (1) nature in its unrestrained state (*natura in cursu*); (2) nature in accidental conditions, such as in the production of monsters (*natura errans*); (3) nature as “constrained, moulded, translated, and made it as it were new by art and the hand of man” (*natura vexata*).

Bacon’s reformation of natural history was of course based on *natura vexata*. The Englishman claimed that “things artificial differ from things natural not in form or essence, but only in the efficient [efficient here means the agent].”

This remarkable passage has been interpreted in different ways. Paolo Rossi has seen in it the influence of a centuries-long tradition of mixed mathematics, engineering, and all sorts of technical cultures of machine-making, which strongly emphasized the ability of art to change the natural course of the phenomena.

Daston and Park argued that Bacon was abolishing the distinction between the natural and the artificial under the influence of the culture of collecting and the reports on singular wonders, coupled with the ways of arguing of seventeenth-century gentlemanly

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culture. In their account, Bacon realized that art and nature mutually imitate each other and that the opposition between art and nature was best overcome by looking at the marvels produced by each.\textsuperscript{420} Newman has showed that Bacon was actually citing almost literally common tropes of the alchemical tradition, which were based in turn on a radical interpretation of the broad Aristotelian definition of the perfective arts.\textsuperscript{421} In any case, by the late sixteenth century the roots of the ontological and epistemological crises of the natural/artificial distinction were firmly grounded.

GRAFTING HUMANS

Gaspare Tagliacozzi claimed that his elaborate procedure of skin grafting was molded upon the ancient art of grafting plants and trees. He had read about it in the sixteenth-century humanistic editions of the Roman writers of \textit{res rusticae}, or agriculture, husbandry, and country lifestyle. The learned surgeon made reference only to this literature, and especially to its most accomplished first-century author, Columella (4-70 CE) and his ten-volume \textit{De re rustica} (fig. 5.1). However, fascination with grafting and the reach of the practices of playing with branches, trees, and fruits were far broader and reflected contemporary passions for agricultural and horticultural knowledge and practice.

In chapter ten of the first book of \textit{De curtorum}, the Bolognese physician recalled the main stages and principles of his reconstructive procedure. The material – the skin – and its


\textsuperscript{421} Newman, \textit{Promethean Ambitions}, p. 261. These historiographical discussions are fascinating. I believe that Newman is right in seeing an echo of Aristotle in Bacon, but that the collapse of the ontological distinction is more radical than what he believes. Craig Martin has described the impact of critiques of Aristotelianism on early modern natural philosophy and the sciences as paradoxically stemming from religious motivations. In his account, early modern natural philosophers were pushed to develop alternative forms of scientific methods by the fact that Aristotelian philosophy could be interpreted as impious. See Craig Martin, \textit{Subverting Aristotle: Religion, History, and Philosophy in Early Modern Science} (Baltimore: Johns Hopkins University Press, 2014), pp. 1-10.
site had to be close, ready, and at hand, if surgeons wanted to successfully connect it to the mutilated part. Once connected to it, the material had to reproduce the shape of the part in order to be similar to its original state. “The material of which I speak is simple skin; before it is joined to the mutilated part, it must be carefully marked out and raised up.” The site where this “material” was taken from was, as we know, the anterior part of the upper-arm. The skin flap was then joined to the mutilated parts with sutures; several ligatures and bindings were then employed until the skin and the mutilated part “grow together.” Once these parts were firmly joined, “the skin is removed from the arm and molded into the shape of the missing part; then, it must be carefully observed and cared for so that it may at least become strong and stable.”

Tagliacozzi went on: “I have derived the principles of this surgical procedure from agriculture, specifically from the process of grafting.”

The surgeon believed that it was important to understand what the ancient classical authors had said about grafting practices in order to clarify the surgical procedure. In this way, he wanted to account for the origins of this practice and its development up to the present, since his goal was “to defend [this practice] from the calumny of those spiteful men who believe that it was born of chance instead of reason.” Tagliacozzi was simply saying that this was not the art of an empiric, and this was why he took up the learned antique tradition of agriculture and horticulture in the first place. Indeed, the ancients – Tagliacozzi went on – discovered this art with great difficulty, because the procedure was new, but they rationally elaborated on their own experiences.

Tagliacozzi was pushing his interpretation of the “ancients” to its limits, glossing over their insistence on chance. Latin writers such as Pliny and Lucretius both had written that

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422 Tagliacozzi, *De curtorum*, p. 54 (1:39). Translation is slightly modified.
423 Ibid., p. 59 (1:42).
424 Ibid.
men discovered the art of grafting by pure chance while observing the varieties and wonders of the infinitely creative nature. Pliny (23-79) had argued that “Nature has herself been our instructor; but grafting was taught to us by Chance (casus), another tutor and one who gives us perhaps more frequent lessons.” In this passage chance figured as a teacher, and a teacher who helped nature’s teaching. Pliny also invented an origin story: “a careful farmer, making a fence round his house to protect it, put under the posts a base made of ivy-wood, so as to prevent them from rotting; but the posts when nipped by the bite of the still living ivy created life of their own from another’s vitality, and it was found that the trunk of a tree was serving instead of earth.”

In a similar vein, about a century earlier, the Roman poet Lucretius (c.99-c.55 BCE) had explained that from observation of the natural operations of grafting, man domesticated nature and created a cultivated human landscape. Man imitated the creativity of nature, used its material, and at the same time produced humanized natural products.

But the pattern of sowing and the beginning of grafting (insitionis origo) first came from nature herself the maker of all things, since berries and acorns falling from trees in due time produced swarms of seedlings underneath; and this also gave them the fancy to insert shoots in the branches and to plant new slips in the earth all over the fields. Next one after another they tried ways of cultivating the little plot they loved, and saw wild fruits grow tame in the ground with kind treatment and friendly tillage. Day by day they made the forests climb higher up the mountains and yield the place below to their tilth, that they might have meadows, pools and streams, crops and luxuriant vineyards on hill and plain, and that a grey-green belt of olives might run between to mark the boundaries, stretching forth over hills and dales and plains; just as now you see the whole place mapped out with charming variety, laid out and intersected with sweet fruit-trees and set about with fertile plantations.

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However, Columella was Tagliacozzi’s polar star. Historians consider Columella the moment of “maturation” of ancient Roman agronomy and husbandry, and his book has often been described as a breakthrough in the history of agriculture, given its systematic nature and its blend of practical and theoretical approaches to farming lands and gardens. The opening of the preface of De re rustica shows that Columella endorsed an image of nature as a creative force which gave man abundance, and needed only to be helped out and cultivated. Columella wrote that “those politicians” who complained about the unfruitfulness of the soil, the inclemency of the weather, and the scarcity of crops, were all wrong. Indeed, “it is a sin to suppose that Nature, endowed with perennial fertility by the creator of the universe, is affected with barrenness as though with some disease; and it is unbecoming to a man of good judgment to believe that Earth (Tellurem), to whose lot was assigned a divine and everlasting youth, and who is called the common mother of all things – because she has always brought forth all things and is destined to bring them forth continuously – has grown old in mortal fashion.”


427 See Antonio Saltini, Storia delle scienze agrarie. Venticinque secoli di pensiero agronomico, 4 vol. (Bologna: Edagricole, 1984), vol. 1, pp. 47-57. Living in the first century CE, contemporary of Seneca and Pliny the Elder, Columella was native of Southern Spain, and he spent most of his life in the surroundings of Rome as an agricultural entrepreneur, owning several farms. His De re rustica was printed for the first time in 1472 by Nicolas Jenson in Venice in a collection of agricultural texts, and then again in 1482. The first Venetian critical edition of the by Aldus Manutius dates to 1514, and a second to 1533, while the first vernacular translation was printed, once again in Venice, in 1544, translated by the Modenese humanist Pietro Lauro.
Tagliacozzi almost transcribed Columella’s passages on grafting, describing the four modes of grafting the classic writer talked about, based on slips, shoots, buds, or vine branches (*furculum, semen, gemmam, or traducem*).\(^{429}\) The skilful grafter had to be able to use sharp tools, just like a surgeon, such as a scalpel and a knife, and then he needed to learn how to bind together the grafted parts with special plasters, ointments, and bandages to protect the parts from “wind and heat.”\(^{430}\)

The third method of grafting, based on manipulating buds, was a delicate and difficult procedure, “not suited to every kind of tree” but only to those who had “moist, juicy and strong bark, like the fig-tree; for this both yields a great abundance of milk, and has a stout bark, and so a graft can be very successfully inserted by the following method.” It was the most relevant method as far as human skin grafting was concerned. The instructions given by Columella were indeed remarkably similar to Tagliacozzi’s procedure.

(1) The farmer must select a young and healthy branch of the tree from which to take a graft, “and you should look out on them for a bud which has a good appearance and gives sure promise of producing a sprout.” (2) Farmers must make a mark on it which encloses the bud, which must be in the middle, “and then make an incision all round it with a sharp knife and remove the bark carefully” in order not to damage the bud. (3) They must choose the


\(^{429}\) Columella had said that up to his times, farmers had given men three methods of grafting. (1) The tree, which has been cut and cleft, receives the scion, which has been cut in turn; (2) the cut tree takes in grafts between the bark and the hard wood; (3) the tree receives actual buds with some bark attached into a part that has been stripped of the bark. The first two had to be practiced in the spring; the last was called “emplastration” or “inoculation” (*emplastratio* or *inoculatio*), and was to be implemented in the summer. Columella mentioned a fourth method which he had “discovered,” concerning vines and based on either a “split” technique – putting a scion with its shaped extremity into a split made in the main tree – or a “drill” technique – putting a pointed scion into a hole made on the main tree with a drill; see Ibid., vol. 2, pp. 101-03.

\(^{430}\) Ibid., vol. 2, pp. 103-07.
healthiest branch of the other tree (the one which must receive the graft). (4) Farmers must then cut out a part of the bark of the same dimension of the graft and strip the bark off. (5) They must make sure that the shoot prepared from the first branch fits the receiving tree “so that it exactly corresponds to the area on the other tree from which the bark has been stripped.” (6) They must bind the bud well all round, and “daub the joints of the wound and the ties round them with mud (commissuras et vincula luto oblinito), leaving a space, so that the bud may be free and not constricted by the binding.” (7) Skilled grafters must cut away the shoot and upper branches of the tree which has received the graft, “so that there may be nothing to which the sap (succus) can be drawn off or benefit from the sap to another part rather than the graft.” (8) “After the twenty-first day [they must] unbind the scutcheon” – note that the time-length of the operation is the same as in human grafting.431

Tagliacozzi valued the fact that Columella demonstrated that plants and trees with nothing in common could indeed be grafted together. The surgeon made precise reference to the analogical correspondence between human skin and bark, and placed humans within a cosmological continuum including plants and animals.

A perceptive person will realize that the last two methods [buds with bark attached to branches; and one shoot placed into a cleft on another tree] provide the evidence that led the founders of reconstructive surgery (artis nostrae fundatores) to believe, as I do, that the restoration of mutilated parts could be accomplished in a similar way … The skin of the upper arm (from which the graft is taken) is, after all, very similar in nature to the skin of the parts for which restoration is possible. Moreover, if the bark of one tree can coalesce with the bark of another, as in the case of inoculation, there is no reason to believe that skin, which is analogous to bark (cutem ipsam, quae cortici respondet), cannot be firmly and safely joined to other parts of the same body.432

431 Ibid., pp. 106-09. I have modified the translation: the Loeb translators’ version reads “daub the joints of the wound,” introducing an analogy between plants and humans which the Latin text lacks.

432 Tagliacozzi, De curtorum, p. 61 (1:45).
There is a complete map of analogies at work in Tagliacozzi’s commentary on Columella. Facial mutilations were comparable to the tree cleft; the skin taken from the arm was comparable to the olive branch; the excised skin corresponded to the olive branch once it had been inserted in the fig tree.433

Another crucial feature of both procedures concerned the time of the year they had to be carried on. Tagliacozzi recommended practicing human skin grafting in the spring, but he added that, unlike plant grafting, his procedure could be also performed at different times of the year. The reason was that human heat was more constant and powerful than plants’ heat.434 In explaining according to what physiological principles the procedure worked, Tagliacozzi took almost for granted that the success of the procedure was based on the doctrine of “generative heat” of both vegetal and animal bodies. The success of grafting in both humans and plants, he wrote, “depends on the presence of heat.” Heat nourished the graft if the procedure was made on plants – and this is why it was more successful if practiced in the spring – and “the first practitioners of skin grafting, mindful of these precepts, wisely emulated nature in their investigations of how amputated or mutilated parts could be restored or reshaped.”435

Tagliacozzi also took the time to reply to what he considered naïve criticisms. He claimed that his procedure was not a matter of generating new nerves and arteries, which everyone who was learned in medicine deemed impossible; rather, it was either a matter of joining together already existing vessels or of reviving the transplanted veins.436 This issue was connected to interpreting correctly the Galenic theory of generative heat. For example,

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433 Ibid., p. 63 (1:46).
434 Ibid., pp. 74-75 (1:57-58).
435 Ibid., p. 62 (1:45).
436 Ibid., pp. 111-14 (1: 90-92).
the greatly influential Giovanni Andrea Dalla Croce had written: “When one part of the nose is completely amputated and taken away – especially if it is the cartilage – then you must abandon all hopes to heal it, since those parts are made of blood and spermatic parts, which don’t grow and don’t conglutinate when they are removed. Galen said that it is not impossible that the missing parts, which are generated by blood, can be regenerated, but those that are generated from the semen [i.e., the so-called spermatic parts], cannot really be regenerated.”

According to the Galenic tradition, the spermatic parts of the body, generated in utero through a mixture of male and female semen by several successive concoctions of blood, could not be regenerated. Only “fleshy” or “sanguinary” parts were believed to be able to grow again.

Spermatic parts were the hard and structuring parts of the body, while fleshy or sanguinary parts were the soft flesh and fat placed in between the spermatic. “Those who claim that they can regenerate a completely severed nose – Dalla Croce went on – are not even worthy of being heard. There is neither natural artifice nor human artifex that can enjoy such high privilege of being able to attach a nose which has been entirely severed from the face. For this reason, if you find a nose which is wounded and only half dead, do not cut it off and throw it away, since I have seen some of those half-detached noses healed, attached, and restored.”

437 Dalla Croce, *Cirugia universale*, fol. 56v-57r: “Quando poi è totalmente amputata, & portata via un particella del naso, & tanto più la cartilaginosa, bisogno è perdere della sua sanità ogni speranza, essenda essangue, & parte spermatica, la quale nè cresce, nè si conglutina, quando è rimossa. Tutte le parti, diceva Galeno, che sono generate dal sangue, quando mancano, non è impossibile, che rinaschino, ma quelle, che nascono dal seme, è quasi impossibile, la sua regenerazione … non sono degni d’esser uditi coloro, che hanno professione di regenerare uno naso totalmente perduto: conciosia, che non si trovà artificio di natura, nè meno dono di artice, che goda di così ampio privilegio, che possi un naso intieramente separato dalla faccia nè unire, nè rigenerare. per questo non vi essorto, trovando un naso ferito, & mezzo morto, risecarlo in tutto, & gettarlo via, imperoche ne ho veduti di simili ristaurati, agglutinati, & guariti.” On this important Venetian surgeon see Berardo Di Matteo, Vittorio Tarabella, Giuseppe Filardo, Anna Viganò, Patrizia Tomba, and Maurilio Maracci, “The Renaissance and the Universal Surgeon: Giovanni Andrea Della Croce, a Master of Traumatology,” *International Orthopaedics* 37, 12 (2013): 2523–2528. On the spermatic and sanguinary members in Galenic physiology see Karine van’t Land, “Sperm and Blood, Form and Food. Late Medieval Medical Notions of Male and Female in the Embryology of Membra,” in Manfred Horstmushoff, Helen King, and Claus Zittel, ed.
Giovanni Battista Cortesi, Tagliacozzi’s pupil, writing in 1625, was careful in addressing the issue and specified that nature could not regenerate the spermatic parts which constitute lips, noses, and ears;” instead, he invoked a collaboration between art and nature in regenerating the fleshy parts only.438

Farmers and gardeners were not the only artisans to which the learned surgeon compared himself. No matter how learned surgery was, it was a manual art after all. While discussing the quantity of skin to be chosen for the graft – a rather delicate matter, since a lesser or bigger quantity of skin could really affect the positive outcome of the procedure and damage the patient – Tagliacozzi made use of an interesting sartorial analogy. Just like clothes must fit the body perfectly, so the skin of the graft must fit the mutilation – he wrote.439 Indeed, this whole discussion is interesting in that Tagliacozzi had to deal with uncertainty and empirical observation, but still had to get a rule for action. The problem was that in many cases, once cut off, the skin flap reduced in size. Therefore, surgeons had to study the mutilated part as well as the skin of the upper arm region in order to understand the causes of this reduction and to be able to predict the right size of the flap. But Tagliacozzi admitted that there was no unique method to know the exact dimension of this reduction in size of the skin graft. Careful and repeated observation was therefore the method recommended to surgeons if they wanted to overcome this lack of certitude. More specifically, surgeons had to pay attention to the texture of the skin.

Tagliacozzi presented human grafting as a variation on plant grafting, whose history was old and dignified by the great men who were able to extract norms out of a fortunate

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438 Cortesi, Miscellaneorum, p. 82.

439 Tagliacozzi, De curtorum, pp. 66-67 (1:49).
observation of natural phenomena. Surgeons had to imitate the farmers who imitated nature in their task to perfect natural forces, and to second nature’s immense creative power. Unfortunately for Tagliacozzi, however, things were not so simple, and the relationship between art and nature was much more complex. The Bolognese surgeon ended his discussion on Columella and plant grafting by pointing out that his procedure was not supposed to produce new objects. Reconstructive surgery was not interfering with the make up of the world. This is a clear sign that he was worried about the implications of the analogy with agriculture: “Skin grafting, on the other hand, does not attempt to create a whole new life; rather, it is concerned with the restoration and renewal of a particular part.”

But was it really so? And where did this anxiety come from?

Grafting Plants

The second half of the sixteenth century witnessed, on a European scale, a wide flourishing of vernacular and Latin works on agriculture, horticulture, botany, and natural history of plants, which targeted, in different ways, the upper classes, the middle class landowner or renter of land, the scholar, and the peasant.

With respect to agriculture and land cultivation, the late sixteenth century was a period of revolution. Fueled by the reorganization of classical and medieval botany, a new

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440 Ibid., p. 62 (1:45).

agriculture began to take shape based on continuous rotation, alternation between agriculture and farming, and the beginning of a massive cultivation of forage. In economic terms, the period was characterized by an essential tension between two “systems of agriculture:** one which was based on the transformation of work into capital; the other which consisted in the maximization of land exploitation. This period has also been described in terms of “refeudalization,” because the urban nobility became more and more invested in the countryside, buying land, renting it. Moreover, noblemen cultivated the lifestyle of the country villa, far away from the masses of urban poor begging in the streets, the dangerous miasmas of the city, the pressures from the new centralized states, and the vulgar people making a living by practicing the mechanical arts.

By the middle of the Cinquecento, several factors generated a rise in the prices of crops, such as the excess of gold and silver coming from the Spanish ships sailing from the New World, the constant population growth, which was stopped only by the famine of the 1590s, and a renewed intensity of commerce – a consequence of both the abundance of goods and the increase of population. Urbanized Northern Italian noblemen were struck by the rise of crop prices, and massively decided to invest in land, sometimes even deciding to establish their residence in the countryside. In turn, this socio-economic process was mutually syntonic with the process of cultural isolation and cultivation of class-specific sentiments of honor that were characteristic of the sixteenth-century noble ideology. As Stefano Guazzo (1530-1593),

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humanist lawyer at the Gonzaga court of Monferrato, noted in his famous manual of manners *La Civil Conversazione* (1574), gentlemen were much more happy in the countryside, where they were treated as kings, rather than in the city, where they were simple citizens just like many others.  

Parallel to this culture of country lifestyle, a vernacular how-to literature developed by the middle of the century. This literature was more rich in technical detail and targeted not just the landowner or the playful nobleman but also the renter and the manager of the land. The explosion of commerce, a new empiricist sensibility, new systems of patronage which made the court a center of learning, and the opening up of university courses to the teaching of *materia medica* in newly funded botanical gardens were all circumstances that fueled the development of natural history. Natural history, botany, and the arts of agriculture, horticulture, and gardening were closely intertwined, linked by a new sensibility for the representation of nature given by geographical broadening, travels, the rediscovery of the classical sources, and the valorization of direct observation. By the beginning of the sixteenth century, gardens were used as sites of instruction to complement lectures on medicinal plants. Botany became more and more important for agriculture too by the second half of the sixteenth century, while gardens and orchards became the space for experiments that would have been too risky to practice directly in the fields (fig. 5.2).

Three major features regulated the typology of gardens in sixteenth-century Italy. First, middle-sized gardens produced for the landowner’s table; second, vegetable patches were valued as part of the peasants’ salary; and finally, suburban and urban market gardens provided for urban populations. Besides field cultivation, gardens and orchards became a

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regular feature in Renaissance Italian dwellings. Moreover, commercial market gardening
developed everywhere just outside the city walls of northern Italian cities. A new class of
property managers emerged, who employed peasants in regular ways, especially exploiting
the chances offered by these market gardens. For suburban small towns and villages in
particular, such gardens became a necessity, and the borders between gardens, vineyards, and
orchards were blurred. In this context, gardens had to produce income, not just pleasure. Just
as they did in medicine, the languages of beauty and of usefulness blended in the literature on
gardening. It is important to underline that, despite divisions of class and labor, peasant
gardeners’ manual skills – these open-air “invisible technicians” – were a determinant factor
in the cultivation of excellent local varieties and exotic plants in the gardens of the wealthy
and the natural historians.\textsuperscript{446}

From a wider cultural perspective, gardens and orchards symbolized the complex
relationships between the natural and the artificial. Mid-sixteenth century Italian gardens
were not just places of peace and serenity – according to the imagery of the \textit{locus amoenus} –
but also places where hybridization, monstrosity, and violence were staged.\textsuperscript{447} It was

\textsuperscript{446} Ambrosoli, “Cultivation and diffusion.” On the typology or Renaissance gardens see
Raffaella Fabiani Giannetto, “Types of Gardens,” in Elizabeth Hyde, ed. \textit{A Cultural History
social characters gathered around villas and fields see Elide Casali, “Catechesi di villa tra
\textit{oeconomica e res rustica},” in Luisa Avelini, Roberto Finzi, and Leonardo Quaquarelli, ed.
\textit{Testi agronomici d’area emiliana e Rinascimento europeo} (Bologna: CLUEB, 2007), pp. 7-34.

\textsuperscript{447} Luke Morgan, \textit{The Monster in the Garden: The Grotesque and the Gigantic in
Renaissance Landscape Design} (Philadelphia: University of Pennsylvania Press, 2016), pp. 1-
\textit{Renaissance Studies} 25, 1 (2011): 1–23; Claudia Lazzaro, \textit{The Italian Renaissance Garden:
From the Conventions of Planting, Design, and Ornament to the Grand Gardens of Sixteenth-
Century Central Italy} (New Haven: Yale University Press, 1990), pp. 8-19 and 26-27; on
Aristotelian tradition of including plants and animals within the same kingdom of living
beings see Morton, \textit{History of Botanical Science}, pp. 27-43.
specifically in the second half of the sixteenth century that the presence of plants and flowers in Italian gardens increased, and a new role for gardeners emerged.\footnote{Andrew Cunningham, “The Culture of Gardens,” in Nicholas Jardine, Emma Spary, and Jim A. Secord, ed., \textit{Cultures of Natural History} (Cambridge: Cambridge University Press, 1996), 38-56, especially pp. 47-52.}

This was a sort of a golden age for Italian gardens. Renaissance art and garden theory required that art imitate nature, and that nature offered art the raw materials that had to be shaped into artificial forms. In this context, nature was conceived as a reflection of the cosmic order: imitating nature meant that art must imitate not only nature’s appearance and form, but also its underlying order. Sixteenth-century agriculture literature often repeated that “nature produces better fruit if planted and cultivated,” and gardens were one of the most prominent places where the categories of art and nature became more porous. In gardens, the relationship between the natural and the artificial was seen not as the victory of one over the other, but as a competition among equals, and sometimes as cooperation. The interaction of art and nature, their “conjunction, or incorporation” was ubiquitous in the context of both gardening and agriculture.\footnote{Lazzaro, \textit{The Italian Renaissance Garden}, pp. 2-11; Eugenio Battisti, “\textit{Natura artificiosa} to \textit{Natura artificialis},” in David C. Coffin, ed. \textit{The Italian Garden} (Washington DC: Dumbarton Oaks, 1972), pp. 63-80. Philippe Morel, \textit{Les Grotesques. Les figures de l'imaginaire dans la peinture Italienne de la fin de la Renaissance} (Paris: Flammarion, 1997), pp. 139-204 has insisted in a very convincing way on the relationships between the visual language of the grotesque and hybrids between animals, plants, and humans and, on the one hand, the juxtaposition of naturalia and artificialia typical of the late-sixteenth-century culture of collection; and, on the other, the innovations of medicine and natural history.} As John Dixon Hunt has written, gardens are “cultural landscapes,” namely “sites where human beings discover and realize whole patterns of belief, authority, and social structure”\footnote{John Dixon Hunt, \textit{Garden and Grove: The Italian Renaissance Garden in the English Imagination, 1600-1750} (Philadelphia: University of Pennsylvania Press, 1996), p. xiii.} – and, I would add, patterns of distinction and hybridization between nature and art (fig. 5.3).
Tagliacozzi’s map of analogies between plants and humans came from a long way and had broad cultural resonances. A tight network of analogies and symbolic connections tied together plants and humans in the Renaissance. Aristotle had written that “just as in animals there are homogeneous limbs, so also in plants. All the composite parts of the plant are like the limbs of the animal; the bark of the plant resembles the skin of the animal in nature, and the fibres correspond to the sinews of the animal. And so on with the rest of its parts.”

There existed a strong pre-modern strong tradition which imagined man as arbor inversa, a reversed tree, with hair compared to the roots, the chest to the trunk, the leaves to the words, the flowers to the intentions, the branches to force and power, and the bud to the thoughts. In sixteenth-century Italy Torquato Tasso (1544-1595) saw a deep analogy between the life cycle of men and plants: “What is truly wondrous is that I find in them, when I look closely, all the accidents and examples of human youth and old age, because plants when are still new and green, have a clean (polita) and smooth bark, but when they grow old, their bark gets full of wrinkles, curls up and gets harsh.”

The vegetal and the human belonged to a life system of correlated powers, to a mutually integrated system in which the natural and the human communicated and were recognizable through many signs: one was the mirror of the other. In

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452 Spanish natural philosopher Oliva Sabuco used the metaphor in the late sixteenth century to claim for the preeminence of the brain on the liver and to advance a new theory of how food became blood in the human body. This use of the metaphor of the inverted tree has important iatrochemical ramifications; see Gianna Pomata, “Introduction,” in Oliva Sabuco de Nantes Barrera, *The True Medicine*, ed. and tr. Gianna Pomata (Toronto: Center for Reformation and Renaissance Studies, 2010), pp. 42-48.

both human and plant anatomy alike the thread of life passed through juices, saps, nourishment, etc.\textsuperscript{454}

Writers of agricultural treatises agreed on the fact that plants had feelings too. Natural historian Pietro Andrea Mattioli (1501-1578) attributed some kind of religious feeling and sensibility to plants, noticing that they turn towards the sun early in the morning as in prayer.\textsuperscript{455} Metaphors of plant life were employed by Henri de Mondeville, as part of a tradition of learned surgery that can be connected directly to sixteenth-century medical education. In general, medieval religious symbolism was marked by the vegetal symbolism for the events of birth, and the intertwining of men and plants was a symbol of generation. The two main metaphorical functions of plants were generation, and the flux of vital stuff in the body. However, the parallel between the farmer and the surgeon was lacking in Mondeville and in medieval surgeons, who on the other hand employed very frequently the metaphor of the roots, especially referring to human veins and how they nourish the body.\textsuperscript{456}

Sixteenth-century natural history took up this theme in the same terms. Besides the discourse on plant and animal transmutations carried on by Ulisse Aldrovandi in his \emph{Monstrorum Historia},\textsuperscript{457} another example that was surely very much in the mind of Tagliacozzi and the other surgeons was the Bolognese naturalist’s \textit{Dendrologia}, a work on plants and trees published posthumously by Ovidio Montalbani in 1668. The book is composed of two volumes. The first one opens with a chapter on “trees in general,” then each

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\textsuperscript{454} Camporesi, \textit{Le officine}, pp. 26-27.
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\textsuperscript{455} Ibid., p. 42.
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\textsuperscript{457} Ulisse Aldrovandi, \textit{Monstrorum Historia} (Bologna: Bernia, 1642); on this topic see Enrico Baldini, “Prodigi, simulacri e mostri nell’eredità botanica di Ulisse Aldrovandi,” in Giuseppe Olmi, Luca Tongiorgi Tomasi, and Attilio Zanca, ed. \textit{Natura-cultura: L’interpretazione del mondo fisico nei testi e nelle immagini} (Florence: Olschki, 2000), pp. 215-43.
\end{flushright}
chapter is devoted to one single plant. All chapters follow the natural historical order, composed by the following elements: name, etymology, denominations, shape, description, cultivation, birthplace, illnesses and remedies, medicinal uses, symbolism, emblematics, fables, moral meanings, and mirabilia.

The first part of the first book is eloquently titled *Dendranatome*, the anatomy of trees. Aldrovandi’s arguments were very similar to the summary of similitudes between humans and plants that he had read in Giovanni Battista Della Porta’s *Phytognomonica* (1588), a book entirely devoted to “the method for investigating the forces that animate plants though their parts and their way of living, of which they are fixed and mobile signs.”⁴⁵⁸ (fig. 5.4) There, Della Porta had summarized the main points on such similarity according to the classical sources, from Theophrastus to Pliny to Plato’s trope of man as inverted tree. Della Porta had also mapped the benefits humans could gain from these plants by virtue of these similarities, both in health and in sickness, through a close reading of the inner essence of plants as reflected by their external appearance.

Aldrovandi claimed that, like men, trees are either “urban” (*urbani*) or “wild” (*sylvestri*). “All plants, and trees in particular, are most clearly composed by not just similar, but also composed parts; we are persuaded of this fact by demonstrative reason, and we are convinced by anatomy.” Aldrovandi explained that in both plants and humans there was an innate generative heat, from which “vegetative actions” proceeded. Like humans, plants had veins as an instrument for nutrition through the passage and transportation of juices. Plants also had non-motory and non-sensory nerves which were robust and steadfast. Just like men, Aldrovandi went on, trees were protected by a sort of skin under which a membraneous substance was to be found, just like human flesh. As far as “the whole conformation of trees

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⁴⁵⁸ Giovanni Battista Della Porta, *Phytognomonica* (Naples: apud Horatium Salvianum, 1588), pp. 10-12: “virium plantarum investigandi methodus, ex partibus, & vitae, quae insunt signis fixis, & mobilibus.” I have consulted a copy that presents Ulisse Aldrovandi’s maginalia.
(Arborum totali conformatione)” was concerned, trees had limbs like humans, “which can be recognized, whence we call one part of tree head and brain, other parts we ofte take notes on as feet, arms, fingers, nails, hair, ears, and eyes; and all of them partipate of the tree’s perfection, as most noble vegetative complements.” And if we go on and make a proper dissection of a tree – Aldrovandi goes on – we will find “the hardest bone, flesh, nerves, veins, and muscles … and all plants and trees have a dermis and an epidermis, as well as parts of skin which circle them as a protective layer, from which layers all natural faculties come and they perform their tasks through the proper organs, as varied, specific and individual as it can get.”\(^{459}\) Aldrovandi analytically commented upon an eloquent image (fig. 5.5) and explained the point-by-point analogy between a plant and a human. Moreover, trees could be beautiful and suffer injuries on their surface that could make them ugly.\(^{460}\) Finally, Aldrovandi listed many occurrences of moral comparisons between men and trees, clearly showing a certain familiarity with Renaissance man-tree tropes (fig. 5.6).\(^{461}\)

Grafting is defined today as “the natural or deliberate fusion of plant parts so that vascular continuity is established between them ... and the resulting genetically composite

\(^{459}\) Ulisse Aldrovandi, *Dendrologiae naturalis scilicet arborum historiae libri duo* (Bologna: ex typographia Ferroniana, 1667), pp. 3-5: “Plantae igitur omnes, maximeque Arbores similaribus non solum, sed compositis constant evi dentissime partibus, quas ratio demonstrativa suadet, convincitque autopsia ... unde a liquam in Arboribus partem Caput, & Cerebrum appellamus, aliam Pedes, & sic Brachia, Digitos, Ungues, Capillos, Aures, & Oculos saepe saepius adnotamus; quae omnia faciunt totius ad Arboris perfectionem, vegetat iumque nobilissimum complementum ... sic Plantae omnes, & Arbores Dermata, & Epidermata, cutaneas scilicet, atque cuticulares partes, veluti fascias totius conservatrices habent vitae, ubi nat urales omnes facultates vigent, & propriis mediantibus organis exercuntur, variis quae illae praerogativis tum specificis, tum individualibus insigniuntur.” Like almost all of the works by Aldrovandi, this one was composed in the late sixteenth-century and published posthumously. On Renaissance readings of classical botanical works see Karen Meier Reeds, “Renaissance Humanism and Botany,” *Annals of Science* 33, 6 (1976): 519–42.

\(^{460}\) Aldrovandi, *Dendrologia*, pp. 5-6.

\(^{461}\) Ibid., p. 60.
organism functions as a single plant.” Besides the reference to genetic make up, which points to modern correlate of pre-modern ideas of radical ontological alteration, the first part resonates with early modern interpretations of the practice. Grafting through external offshoots – a technique probably known since the first millennium BCE – is one of the major technologies in the history of agriculture.

By the Middle Ages grafting became one of the favorite examples of advocates of alchemy. In the Book of Hermes, a treatise on alchemy which might be a translation from


463 Saltini, Storia delle scienze agrarie, vol. 1, pp. 285-98; Douglas Fairchild Ruggles, Gardens, Landscapes, & Vision in the Palaces of Islamic Spain (University Park: The Pennsylvania State University Press, 2006), pp. 15-32; George Sarton, Introduction to the History of Science; 3 vols. Washington: The Carnegie Institute 1927-48, vol. II.1, p. 425. I have already shown that by the time of Lucretius and Pliny the Elder grafting was already a topic for naturalists. Greek sources indicate that grafting was practiced by the fifth century BCE. The Hippocratic text On the Nature of Child is the first Greek reference to grafting, where it was described as a common technique. There emerged the notion of a “specific fluid” responsible for the success of grafting, which remained in currency throughout the early modern period. Theophrastus in the fourth century BCE reiterated the Hippocratic view about grafting as a propagation in another tree. Then came the Roman writers of husbandry: the first one was Cato’s De agric cultura, which described grafting in the second century B.C. Jewish tradition presents important traces of the technique as well. In several Talmudic parables, grafting is compared to marriage. In the third century CE the Talmudic school of Shmuel compared grafting to breeding, and in general grafting became a matter of debate in Jewish religious culture down to the sixteenth century, when grafting medicinal citrus on lemon was prohibited. The first reliable evidence of practices of grafting in China dates to the first century BCE. The great synthesis of Arabic agronomy, written in twelfth-century Seville, the Book on the art of the farmer (Kitāb al-fīlāḥ) by Ibn al-‘Awwam (d. late twelfth century), also described classical grafting techniques, and represented the peak of an intense flourishing of the botanical sciences in medieval al-Andalus. Grafting was practiced throughout the Middle Ages, and a thirteenth century text by Albertus Magnus, titled De vegetabilibus, described it as an important agricultural technique. See Mudge et al., “History of Grafting.”

464 Indeed, alchemy and medicine had a long history of shared techniques of manipulating natural matters and conceptions of the human world; see the essays in Chiara Crisciani and
Arabic that existed in several manuscript copies from the thirteenth to the fifteenth century, the author took issue with the opinion according to which humans could not reproduce the products of nature. “The natural wild tree – the author claimed – and the artificially grafted one are both trees ... Nor does art make all these things; rather it helps nature to make them. Therefore the assistance of this art does not alter the nature of things. Hence the works of man can be both natural with regard to essence (secundum essentiam), and artificial with regard to mode of production (secundum artificium).” 465 This passage, a broad interpretation of Aristotle’s conception of the perfective arts, became a topos in medieval alchemical literature, and shaped early modern debates on technology. Now, alchemists had always maintained that the creation of grafted plants was no different from natural creation of plants. Both wild trees and artificially grafted trees were the product of the same natural causes: in one case, the agent was chance, in the other, it was human intervention.

Sixteenth century alchemists pushed forward the limits of this art/nature ontological equivalence. Unlike physicians, alchemists claimed to use nature not only to heal, but also to produce entirely new substances. Unlike farmers and gardeners, who believed they could transform nature through grafting, alchemists claimed they could vastly accelerate nature’s productive process. 466 In any case, few alchemists made the strongest ontological claim that they could produce entirely new objects that had never existed before, and most often they were more cautious in dealing with such a dangerous distinction, also possible of demonological interpretation. For example, in De la pirotechnia (1540) metallurgist Vannoccio Biringuccio’s (c.1489-c.1540) mentioned certain alchemists who claimed they

465 Quoted by Newman, Promethean Ambitions, p. 64.

466 Ibid., pp. 112-13.
could make trees and grass grow without their seeds being planted, and could give fruits form, color, and odor different from their natural ones.\(^{467}\) Also very interesting was the distinction between a good and a bad alchemy made by Biringuccio: the good one helped natural processes, the bad one was deceptive, “founded only on appearance” and produced intentional fakes, making things “appear at first sight to be what they are not.”\(^\text{468}\) It is interesting here to note more than a strong echo of the distinction between vulgar cosmetics and reconstructive surgery.

One of the most significant examples of the literature on the lands, gardens, and country lifestyle for the upper classes is La villa, published in 1559 by the Milanese humanist lawyer Bartolomeo Taegio (c.1520-1573). The book was dedicated to the Emperor Ferdinand I, and the author introduced himself as a devotee of agriculture and the science of stars. The context was the narrative of a dinner party in the country villa of the Milanese gentleman Camillo Porro, where the “hortolano” told many “secrets” to the guests. Among the many marvelous things discussed in the book with literary prowess as well as scientific rigor, Taegio recalled the habit of playfully shaping fruits, mainly citrons and pumpkins, also mentioned by Biringuccio. “I am telling you – Taegio had the gardener say – that if you wish to see in pumpkins, in cedars (if you have them) new and strange faces, you should have someone make a crystal jar of the shape you like, and then place them [the fruits] inside these jars when they are still very young, and you will see that the pumpkin will grow up similar to the jar, and the thing should work.”\(^{469}\)

\(^{467}\) Vannoccio Biringuccio, *De la pirotechnia* [1540] (Milan: Polifilo, 1977), fol. 8r.

\(^{468}\) Ibid., fol. 123r-v.

\(^{469}\) Bartolomeo Taegio, *La villa* (Milan: dalla stampa di Francesco Moscheni, 1559), p. 157: “Et io vi dico che se bramate vedere nelle zucche marine, o cedri (se n’havete) novi, & strani volti, debbiate far fabbricare un vaso di cristallo di quella forma, che più vi piace, e poi
The discussion went on and focused on grafting, in a tone that alternated between technical language and the language of wonder and medicine: “on this pear tree and on this red blackberry bush you can graft oranges, whose sourness you can sweeten by making a hole in the midle of the trunk, thus channeling out the bad humor, to the point that the fruits are well formed, and then you must dress their wound with lotus; from all this you will see a wondrous effect.”

Taegio was fully aware of the fact that nature changed under the repeated, patient, gradual work of men, since in the most beautiful gardens “one clearly sees that nature gives way to industry, and that it changes its way after a patient work.” While describing the marvelous garden at the villa of Castellazzo, property of a Senator of Milan who used to flee from the city whenever he could, Taegio penned a striking passage on the creation of a “third nature” through grafting. “Here are without end the ingenious grafts that show with great wonder to the world the industry of a wise gardener, who by incorporating art with nature brings forth from both a third nature, which causes the fruits to be more flavorful here than elsewhere.” Taegio was not the only one who brought up the theme of a third nature in the sixteenth century. Indeed, there was a widespread conception of grafting and horticulture as an incorporation of art and nature which was productive, which brought about something new

chiuderle dentro quando sono nella loro più acerba età, onde vedrete a poco a poco la zucca crescendo farsi simile al vaso, & reuscir l’effetto ch’io vi dico.”

470 Ibid., pp. 157-58: “sopra di questo pero e di quel vermiglio moro si possono innestar gli aranzi, l’agrezza de quali volendola voi addolcire fa di mestieri, che foriate mezzo il tronco da basso, dando in questa maniera luogo al tristo humore fin tanto, che i pomi si veggano ben formati, poi bisogna con loto fermar la piaga loro; onde ne vedrete effetto meraviglioso.”

471 Ibid., p. 55: “chiaramente si vede come la natura cede alla industria, & per longo uso muta costume.”

472 Ibid., p. 58: “quivi sono senza fine gl’ingeniosi innesti, che con si gran meraviglia al mondo mostrano, quanto sia l’industria d’un accorto giardiniero che incorporando l’arte con la natura fa, che d’amendue ne riesce una terza natura, la qual causa, che i frutti sieno quivi più saporiti, che altrove.”
in the world by challenging the traditional natural/artificial distinction.\textsuperscript{473} Moreover, all these writers were echoing Ovidian themes that were ubiquitous in contemporary culture, shaping iconographic programs of “grotesque” hybridizations of the human and the natural, such as the Holy Wood of Bomarzo near Rome, designed by the architect Pirro Ligorio (1513-1583) in 1547, and the famous paintings by Arcimboldo (1526-1593) in the late sixteenth-century (fig. 5.7). Such grotesque iconography, far from being an expression of the unbound fantasy of the artists, was actually part of a culture of scientific collection and a quest into the limits of the natural world.

Natural historians all across Europe shared both a technical competence with the manipulation of plants and a feeling of amazement and wonder towards the hybrid and new products of grafting. Pietro Andrea Mattioli’s commentary on Dioscorides mentioned the “natural brotherhood (\textit{naturae germanitas})” of all plants, to the point that they could transform into each other. Mattioli also recalled that plants and trees could be wild or cultivated, and that the wild became cultivated when appropriately transplanted, treated and grafted in the domestic garden.\textsuperscript{474} Dutch naturalist Rembert Dodoens (1517-1585) in his \textit{Histories of Plantes} (1578) noted that early modern gardeners cultivated “several flowering plants … into showy varieties not originally found in nature.” Dodoens’ carnation is a good example. His “small tulpia” resembles tulips, but “florists were able to cross-breed them to produce the striking varieties avidly collected and painted in seventeenth-century still lives.”\textsuperscript{475} Aldrovandi’s \textit{Dendrologia} also played with the theme of the “learned hand” of the


\textsuperscript{474} Mattioli, \textit{Commentarii in/ex libros Pedacii Dioscorides Anarzabei de materia medica} (Venice: apud Vincentium Valgrisium, 1554), I, p. 8.
gardener who grafted apple trees, remarking upon the product of grafting techniques as being a “union” of art and nature.\textsuperscript{476} Even when not explicitly noticed, a constant challenge to the natural/artificial distinction ran as an undercurrent in the literature on natural history as well as on the country lifestyle of the leisured classes. In his most visionary work, the reformer of natural history, Francis Bacon, enthused about grafting in his description of the Atlantis gardens:

We have also large and various orchards and gardens, wherein we do not so much respect beauty, as variety of ground and soil, proper for divers trees and herbs: and some very spacious, where trees and berries are set whereof we make divers kinds of drinks, besides the vineyards. In these we practice likewise all conclusions of grafting and inoculating, as well of wild-trees as fruit-trees, which produceth many effects. And we make (by art) in the same orchards and gardens, trees and flowers to come earlier or later than their seasons; and to come up and bear more speedily than by their natural course they do. We make them also by art greater much than their nature; and their fruit greater and sweeter and of differing taste, smell, colour, and figure, from their nature. And many of them we so order, as they become of medicinal use. We have also means to make divers plants rise by mixtures of earths without seeds; and likewise to make divers new plants, differing from the vulgar; and to make one tree or plant turn into another.\textsuperscript{477}

Even if he does not mention grafting explicitly, Vincenzo Viviani (1662-1703) – the first biographer of Galileo Galilei (1564-1642) – tells how Galileo loved to experiment with plants at his villa of Bellosguardo near Florence, for the sake of both pleasure and knowledge. “He himself – Viviani wrote – used to prune and bind the vineyards in his villa, and he used to do so with more than ordinary observation, industry, and diligence; and always he liked to farm, which was for him at the same time a pastime and a way of philosophizing about the life and nutrition of plants, about the generative power of seeds, and about all the other

\textsuperscript{475} Rembert Dodoens, \textit{Histories of Plants} (Antwerp, 1578), pp. 154 and 213; quoted by Daston and Park, \textit{Wonders}, p. 262.

\textsuperscript{476} Aldrovandi, \textit{Dendrologia}, p. 344.

\textsuperscript{477} Francis Bacon, \textit{The New Atlantis}, in \textit{The Works}, vol. 5, p. 401.
admirable operations of the divine maker." The interest in grafting and in experimenting with plants of two of the godfathers of the seventeenth-century “scientific revolution” should be further investigated in the context of the previous century fascination with the marvels of plant cultivation.

The same fascination, and the same conceptual and ontological uncertainties, can be found in the more technical agronomy literature. Agostino Gallo (1499-1570), a nobleman from Brescia who moved to the countryside, published his *Vinti giornate dell’agricoltura e de’ piaceri della villa* in 1550 (with only ten giornate), then edited many times with significant additions (the final edition is from 1570). This is arguably the most important work of agronomy of sixteenth-century Italy. The book has clear links with Columella, but a new idea of agriculture emerged from it: more intensive, focused on reduced times of rest for the soil, emphasizing the development of specialized cultivations to answer the demands of the market, and pushing for a move-away from foodstuffs for direct consumption and towards foodstuffs for manufacture and transformation. The book has the form of a dialogue. A few noblemen gathered at a villa in Poncarale near Brescia (in Venetian territory), invited by Vincenzo Maggio, who went to visit his friend Giovanni Battista Avogadro to see his lands. The fifth, sixth, and seventh days were devoted to the topic of gardens and orchards.

Gallo mused on why agriculture, “the most noble and necessary art in the world,” was not held in higher esteem among Princes and noblemen. Among the most beautiful features of agriculture, Gallo already listed “seeing abundant crops develop from a seed, big trees

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develop from a slender trunk, and flavorful fruits from a tender graft:" grafting was mentioned from the start as one of the most marvelous accomplishments of the art. The issue of grafting then came up because Vincenzo asked Giovanni Battista whether it was better to plant wild trees or domestic trees, which could be grafted with wild ones at a later stage. Giovanni Battista replied that it was better to graft a wild tree on a domestic one, because “it will produce bigger, tastier, juicier fruits than the other one." Gallo then described the four methods of grafting, with only small changes from the traditional description by Columella, including an illustration of the main procedure and the relative tools to be employed (fig. 5.8). The technical description was followed by one paragraph titled “in praise of grafting (elogio dell’incalmare).” In this passage, the author described all the benefits of the art, with a special emphasis on ontological transformation, the high-class quality of the procedures, and the practical purpose of importing new species from the newly discovered faraway lands.

VIN. Truly, the art of grafting is one of the most beautiful things in agriculture, since one can transform wild trees into domestic ones, the sterile into the fertile ones, the tasteless into the tasty ones, the old into the mature ones. And not only can one transform one species into the other so that different fruits can be accommodated on one single tree, but we can also bring foreign plants among us, and our plants among the foreigners. GIO. BAT. Who could be so good to explain all the usefulness and the convenient things, and the great joys one can feel while grafting, and in picking up the first fruits with the very same hands that have nourished, cultivated, and grafted them? If I were to tell you how much this glorious art has been celebrated by Princes, Dukes, and the most ancient Lords of this world, I do not not know when I would end.

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479 Agostino Gallo, Le vinti giornate dell’agricoltura (Venice: Appresso Camillo Borgominiero, 1578), p. 2: “il veder da una semenza uscir tanto numero di grani; da una sottil verga, grossissimi alberi; & da un tenero innesto, saporiti frutti.”

480 Ibid., p. 102: “produrrà frutti più grossi, più saporiti, e di maggior licore, che non farà quell’altro.”

481 Ibid., p. 106: “VIN. Veramente che l’arte dell’incalmar’è una delle più belle cose, che siano nell’Agricoltura, poiche tramutano gli arbori selvatici ne i domestich, gli sterili ne i fruttiferi, gli insipidi ne i delicati, i tardi ne i temporiti, & e i temporiti ne i tardi. Oltra che non tanto si tremuta una specie nell’altra, e s’a commodano piu frutti diversi sopra d’un arbo re, ma anco si tarsportan le sorti forastiere a noi, e le nostre ne i paesi alieni. GIO. BAT. Chi potrebbe mai esplicare le utillità, le commodità, & i gran contenti che si prendono
In the same years, Ravenna-born agronomist Marco Bussato (d. around 1600) could describe himself as a specialist of grafting and claim that he was able to make a living mastering these techniques for villa gardens.\textsuperscript{482} Bussato actually described grafting and the cultivation of fruit trees one of the two “branches” of agriculture, along with the cultivation of soil. But while the latter is hard and only provides humans the necessary nutriment for life, “on the opposite, cultivating trees is not hard at all: and then trees which have been well cultivated, and with good judgment, how much beauty, grace, and pleasure do they give to man’s sight!”\textsuperscript{483} Grafting trees was part of a wider culture of aesthetic pleasure and technical enhancing of natural beings. Bussato’s book does not present any specific innovation in the art of grafting, but it is illustrated by 30 good-quality engravings, some of them showing gardeners at work and gardening instruments (fig. 5.9). Moreover, Bussato told his readers that the engrafter had to make sure the trees and branches have good “humor … because if they lose too much humor, they are not good for grafting.”\textsuperscript{484}

nell’incalmare, & nel racogliere i primi frutti con le medime mani, che gli hann’incalmati, nutriti, & allevati? Che se dovessi dire quanto fu sempre celebrata questa così gloriosa arte da’ Principi, da’ Duchi, & da’ primi Signori del mondo, non so quand’io potessi finire.”

\textsuperscript{482} Marco Bussato, \textit{Giardino di agricoltura... nel quale con bellissimo ordine si tratta tutto quello, che s’appartiene a sapere a un perfetto Giardiniero} (Venice: appresso Giovanni Fiorina, 1592). Very little is known of Bussato. He published a fortunate \textit{Giardino di agricolutura}, a relatively brief manual almost entirely devoted to grafting techniques. The book went through three further editions (1593, 1599, 1612), and had been published in Ravenna with less material in 1578 with the title \textit{Prattica historiata dell’inestarre gli arbori}. See Giuseppe Olmi, “L’agronomia illustrata. Osservazioni sull’iconografia dei trattati agronomici della prima età moderna,” in \textit{Testi agronomici}, 89-126, especially pp. 101-03.

\textsuperscript{483} Bussato, \textit{Giardino}, “Ai lettori,” pages not numbered: “all’incontro poca fatica basta a coltivar gli arbori: i quali poi bene e giudiciosamente coltivati quanta vaghezza, quanta gratia, quanto piacere arrecano alla vista dell’uomo?”

\textsuperscript{484} Ibid., fol. 16r-v: “humore … perché perendo l’humore, elle non sarian bone da innestare.”
The immensely influential book by Olivier de Serres (1539-1619), the son of a Huguenot pastor in Provence, was even more explicit. De Serres highly praised grafting. He said that grafting could be done in several ways, and that it could serve to “refine fruits… It is universally understood that this science is the most excellent in agriculture, as that which ennobles the rest of the art of the management of the fields, and it has been not only appreciated, but almost venerated by the most important men, amazed at the contemplation of its supernatural effects. And he went on: “it is not by chance that the science of grafting ravishes human intellect. Since what could man do which more closely resembles a miracle than to put one extremity of the branch of a tree, preserved for a long time, transported from far away lands, on to the bark of another tree, giving it life and making it grow, and, by communication of substances, even making it fructify?”

Grafting allowed men to change the natural make-up of fruits, speeding up the blooming of some, delaying that of others – in other words, grafting let the artificial take over the natural.

Tommaso Garzoni’s opinion on the “professors of secrets” can serve as an introduction to the genre of which Giovanni Battista della Porta represented the learned side, and Leonardo Fioravanti the more “popular” one. Garzoni wrote that the “finder of secrets” had to follow three rules: “he must make experiments concerning different things, but things that in the end obey one single goal;” he must know the six things that can be useful to people: generation, “preparation – like grafting (la preparazione, come nell’inserto)” –, putrefaction, separation, purgation, manual operations “by means of which things are adapted, cleaned up, and joined (con le quali s’adattano, si poliscono e si congiungono le cose).”

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Finally, they had to know how to provide medicine of the body or the soul, ornament, or gain, or cunning, etc.  

Leonardo Fioravanti – certainly not a socially and professionally appealing precedent for Tagliacozzi – repeatedly insisted on the parallel between surgery and agriculture. This parallel was not entirely reducible to the traditional pairing of medicine and agriculture as perfective arts. Fioravanti did not mention agriculture in his description of the procedure of the Vianeo brothers, but in his 1570 *Cirugia*, where the reference took on a rather marked naturalistic, anti-establishment, and anti-technology meaning (fig. 5.10). Fioravanti praised agriculture as “the first of the arts which have been cultivated by Man, without which the world would not survive.” But the analogy was made in connection with the treatment of wounds: “He who wants to be a good surgeon must be learned and expert in agriculture, because in the treatment of wounds one must imitate agriculture, and one must be a servant of nature.” For example:

when a farmer finds in his field some plant which is broken by wind, rain, etc., right away he puts it back in its place, he ties it, it bandages it, and he fortifies it with a wooden stick; once he has done all that, he lets nature act, and if the surgeons of our times could be farmers, then we could really call them the ministers of nature. But many of them could be more appropriately called destroyers of nature … and where the poor patient has a wound they cut his body some more, and while they should imitate farmers and simply join the edges together, they open the wound and fill it with stoup, threads, etc. … that which is contrary to what farmers do and to the order of nature itself.

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486 Garzoni, *La piazza*, vol. 1, p. 325: “che iperimenti molte cose fra lor diverse a un tratto, ma tutte tendenti ad un fine … ”

487 Leonardo Fioravanti, *La cirugia*, fol. 1v: “che fu la prima arte che al mondo si facesse, senza della quale il mondo malamente si potrebbe sostentare.”

488 Ibid., fol. 8v: “chi vuol esser buon cirugico, & intender bene la cirugia, bisogna essere esperto agricoltore, perciòche nella cura delle ferrite, bisogna imitare la agricoltura, & esser ministro della natura.” More on Fioravanti’s naturalistic approach in chapter 4.

489 Ibid., fol. 8v-9r: “quando lo agricoltore truova nel suo campo alcuna sorte di piante, che sia rotta o scavezzata, dal vento o dalla pioggia, subito la rimette al suo luoco, la liga, la
This implied that treating wounds was easier than it appeared and than learned surgeons made it appear.

The same analogy between agriculture and surgery, this time based on chronological precedence, was repeated Fioravanti’s Secreti: “Surgery is a manual art with which surgeons dress wounds and treat ulcers and aposteme. And it was discovered by shepherds and experimenters of natural things.” Fioravanti then proceeded to write down a list of crafts that surgeons must know, with agriculture in the first place, most necessary “in order to understand the natural things that are necessary in surgery.”

One very interesting passage is to be found in Book V, devoted to agricultural secrets. Among these many “farming secrets,” Fioravanti discussed grafting trees, and claimed to have observed and performed a new technique, less invasive and demanding for the tree, based on grafting corteccia, not legno.

“Therefore, while doing the anatomy of agriculture in order to understand the natural things that concern philosophy, I have found new methods to graft plants more easily and without so greatly tormenting them, unlike what all farmers do today … The secret of grafting and making one plant produce different fruits lies only within its surface bark, and not in its wood. It is enough to graft the plant in its surface bark… and with this kind of secret one can

infascia, e la fortifica con un legno, & fatto tutto questo, lascia poi operare alla natura. ma se i cirugici del nostro tempo, fossero agricoltori, si potriano dire ministri della natura. ma molti si potrino chiamare distruggitori della natura … & dove il poveretto ha una ferrite, gli ne danno un’altra, & dove a imitazione dell’agricoltore doverieno unire le parti separate, & strenger la ferita, loro la aprono, & dentro vi mettono stoppa, fila, & taste … il che è tutto in contrario dello agricoltore, & contra l’ordine di natura.”

490 Leonardo Fioravanti, Del compendio dei secreti, fol. 38r: “La cirugia è un’arte manuale, con la quale i cirugici curono ferrite, ulcerè, & aposteme. Et questa fu trovata da Pastori, & esperimentatori delle cose naturali … per havere cognition delle cose naturali, che nella Cirugia si convengono.”
make a tree producing different sorts of fruits, in so wonderful a way that it will appear miraculous and somehow impossible.”

From the point of view of a history of reading, this passage is very interesting. It must be noticed how Fioravanti tried to minimize the trees’ pain and torment, as if trees were surgical patients. Most importantly, we may recall Tagliacozzi’s insistence on grafting only skin and not flesh, which seems to be a precise parallel to the professor of secrets’ insistence on *corteccia over legno*. As far as I know, at that time information on the surgical procedure as performed by the Vianeo in Tropea had circulated all over Europe, but no specific reference to grafting was current. We know from Ozcho, the Polish student of Aranzi, that the Bolognese anatomist was teaching reconstructive surgery in Bologna in the 1560s, but the Polish physician made no specific reference to grafting. Ambroise Paré made such a reference, but only to oppose the analogy between plants and humans. Paré argued that there was a difference between surgery and agriculture because grafting portions of the body would need additional nourishment: “The nose, or parts of it, can be completely cut off, and in this case the parts can never be joined together again … the reason is that for joining and consolidating the parts of such a nose, it needs to be nourished, and to receive life and sensation from the major members, contrary to what happens to the grafts that are attached to the trees. Therefore, those who lose their noses need to have someone make an artificial one for them, be it of silver, or made with paper and glued pieces of cloth, of the same figure and color as the natural nose.” In this remarkable passage, Paré broke down the analogy between plants and humans that was so popular among scholars, and argued – albeit in a

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491 Ibid., fol. 148r-v: “Ma imperò facendo la Notomia dell’Agricoltura per venire in cognition delle cose naturali della filosofia, ho trovato altri nuovi modi da insitire le piante con maggior facilità, & senza dare un così gran tormento come oggidì fanno tutti gli Agricoltori … Il segreto adunque dell’insitire & far produrre altre sorte di frutti ad una pianta è solamente nella scorza e non nel legno … & con questo segreto si potrà far produrre ad un arbore diverse sorte di frutti, che parerà cosa miracolosa, & che habbia dell’impossibile.”

rather elliptical fashion – that plants were different from humans because the juices running through their bodies did not need to be directly connected to major organs, while in humans they had to communicate with the liver and the heart.\textsuperscript{493}

Della Porta mused on grafting both in \textit{Magia naturalis} and in several other works (fig. 5.11). For Della Porta natural magic was based on observation of the operations of nature and an imitation of them, a definition which resonated with what many writers on grafting had said. “It appears to us that Magic is nothing else than a kind of contemplation of nature. The reason is that by examining the motions and trasmutations of the heavens, the stars, the elements, as well as of the animals, plants, minerals, their births and deaths, in this way one can discover the hidden secrets which our science uncovers from the face of nature.”\textsuperscript{494} Della Porta talked about grafting as one of those “marvelous operations” that appeared to be “contrary to the course of nature” but that could be repeated thorough precise rules.\textsuperscript{495} Della Porta was very fond of describing grafting as the coitus of plants, exploiting to its limits the metaphor of grafting as a generating technique. Even though there was a constant reference to learning from creative nature, Della Porta’s emphasis was not just on how to perfect nature

\textsuperscript{493} Ibid., pp. 605-06.

\textsuperscript{494} Della Porta, \textit{Magia naturalis}, p. 2: “Nobis vero non nisi universae Naturae contemplationem esse videtur. Ex coelorum enim motus consideratione, stellarum, elementorum corumque transmutationibus, sic animalium, plantarum, mineralium, corumque ortus, & interitus occulta vestigantur arcana, ut tota scientia ex Naturae vultu dependere videatur, ut latius videbimus.” In the Renaissance tradition of natural magic, the magician was often compared not only to the physician, but to the farmer too: see Paola Zambelli, \textit{White Magic, Black Magic in the European Renaissance: Ficino, Pico, Della Porta to Trithemius, Agrippa, and Bruno} (Leiden: Brill, 2007), pp. 24-26. For a synthetic but excellent overview on Della Porta’s epistemology and practical endeavors see Eamon, \textit{Science and the Secrets}, pp. 194-233 and the relative bibliography; Gabriella Belloni, “Conoscenza magica e ricerca scientifica in Giambattista Della Porta,” in Giambattista Della Porta, \textit{Criptologia} (Rome: Centro Internazionale di Studi Umanistici, 1982), pp. 45-101; and the old but extraordinarily relevant and up-to-date Luisa Muraro, \textit{Giambattista Della Porta mago e scienziato} (Milan: Feltrinelli, 1978), especially pp. 21-58.

\textsuperscript{495} Della Porta, \textit{Magia naturalis}, p. 84.
(better taste, color, grow plants and fruit out of their season, bigger fruits, etc.) but aso on how to create new fruits. The art vs. nature divide was clearly put into question.  

Della Porta also insisted on the fact that natural magic, in the form of grafting, only imitated and perfected nature, but he operated within the framework of a mutual imitation of art and nature in the name of creative forces and abundance. “But first we are going to describe the monstrous transmutations of plants, because agriculture has so many of these noble and pleasant experiments … [and] plants easily change their nature into another nature.” Some plants wanted to be cultivated, other hated it and wanted to remain wild. “If you will like to let something grow thorough a seed that which usually grows through a branch, or through the root, or that which grows thorough grafting … you will see that they will bear strange fruits, and you will see that these are fruits grown outside of their own nature.” For Della Porta, nature worked through hidden procedures, and the magician-farmer had to discover them. In this way, he would bring about the hidden and marvelous potentialities of nature, and he would improve by “forcing and trying nature.” Improvement gave way to new natural entities, to ontological novelty.

In Della Porta’s hands and mind, grafting became a gate towards a consideration of the unbound transformative and challenging possibilities of agriculture. An example is given by the cultivation of melons, one of the most desired and dangerous fruits of the early modern

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497 Della Porta, De i miracoli et miracolisi effetti dalla natura prodotti (Venice: appresso Ludovico Avanzi, 1560), fol. 31r-v: “Ma prima insegniamo le mostruose trasmutazioni delle piante, percióché l’agricoltura ha di molti nobili esperiementi, & dilettevoli … con facilità le piante si mutano in una natura aliena … Ma se tu vorrai far nascere per via di seme, quello che nasce per via di ramo, o di radice, o quello che per innesto … darà frutti stravaganti, & vedrai che sono venuti frutti fuori della natura sua.” This book is the vernacular version of the first edition of Della Porta’s Magiae naturalis (1558).

498 Ibid., fol. 32v.
period. “In the same way it will happen with watermelons, that is if in the summertime, when the seed is fresh, you will put their seed, the melon’s seed, into the blood of a healthy man, the red blood of a mature man, since the more the warmer the blood the stronger it becomes: change it frequently, so that it does not rot, because it must be preserved in good state, and let it there for a week, then take the seed as you pull it out of the blood, and plant it in a fertile and well-fertilized hole in the ground.” The interaction between humans and plants is made through the human blood which nourishes the seed of melons. In this example, scientific culture mixed up with symbolic culture and social forces (fig. 5.12).

499 Ibid., fol. 34v-35r: “Et similmente l’istesso de’ cocomeri avverrà, se il seme suo, overo de’ meloni, lo metterai la state, quando il seme è fresco, dentro del sangue dell’huomo sano, che sia huomo maturo, & sia di color rosso, perciòché è più caldo il suo sangue, e più gagliardo: muttalo spesso, che non si marcisca, che bisogna che si conservi buono senza marcire, lassavelo stare per una settimana, poi piglia il seme così come lo cavi del sangue, e farai le buche in terra che sia fertile, & bene spolverizzata.”

500 Melon was a special fruit for sixteenth century aristocratic families, easy to produce in southern-European regions and object of complex artificial procedures in the north. The cultivation of melon represented one of the first examples of “forced horticulture” in early modern history, based on fertilization and artificial heating of the soil. For example, De Serres explained that in cold climates people let melons grow in the muck, “with no fear that the decomposition causes bad taste in the fruit” (see Saltini, Storia delle scienze agrarie, vol. 1, p. 454). At the same time, melons were considered a very dangerous foodstuff by many physicians, including most notably Girolamo Cardano; see Siraisi, The Clock and the Mirror, p. 74; on the complexity of the social perception of melons in the Renaissance see Allen J. Grieco, “The Social Politics of Pre-Linnaean Botanical Classification,” I Tatti Studies 4 (1991): 131–149, especially pp. 141-46. I have found a quite precise reference to the fascination for artificiality of melon cultivation and the worry for the dangers of decomposition in a Bolognese decree on public health in times of plague, showing how widespread were these feelings about the cultivation of melons. This July 29, 1580 decree specifically dealt with the cultivation of melons in times of “suspicion.” Notice the language employed by the officials of the Legate: “We understand that some people, and maybe not a few farmers of this lands of Bologna, pushed by greed alone and thirst for money, cannot wait for the benefice of the weather and of nature, and for this reason they dare taking down unripe melons from the plants, placing them into wooden or clay jars, or directly into the earth, and then burying them; they do this because they want them to ripe faster with the biggest damage and danger for the universal health of the whole city … [the city government, in agreement with the Assunti di Sanità] prohibit and explicitly commands that in the future none of these farmers dare [to do these things] … under the punishment of 50 golden scudi, 3 blows, and if they are women 50 strokes of whip in public in the square (Intendendosi, che alcuni, e forse non pochi Hortolani di questa Guardia, & Territorio di Bologna spinti da mera avarità, & avidità del guadagno non potendo aspettare il beneficio del tempo, & della
There is a more direct link between grafting plants and surgery in sixteenth-century culture. Della Porta’s *Natural Magic* also contained a striking passage linking agriculture and surgery, plants and humans, through a reflection on grafting. While discussing how to make the two parts of plants adhere to each other, Della Porta wrote: “The first usefulness is that just like human flesh (*quemadmodum humanae carnis*), when wounded, can be restored by anointing it with some mixtures, in the same way the bark of the wounded plants heals more quickly when you apply this mixture.” The parts had to be attached together and tied tightly, with no air passing in between them, so that their “native juice (*natìa saliva*)” did not dry out. The farmer was encouraged to be active and “industrious”: he had to “learn to resemble nature.” 501 This is a very important passage, for the grafting technique was clearly believed to work as a bridge between humans and plants, and the analogy between plants and humans was not just made in metaphoric, anatomical, or symbolic-cosmological terms, but was grounded in a practical, technical, operative level.

Della Porta’s *Phytognomonica* was first published in 1588, and we can be reasonably sure that Tagliacozzi knew the book, which is a true map of all the possible analogies – physiological, superficial, structural – existing between humans, animals, and plants. In that book, the Neapolitan natural magician never made any reference to the operative principles that one could put into practice by observing and imitating the operations of plants. There was no surgery in Della Porta’s book on plants. But in the same years 1580s Andrea Cesalpino (1519-1603), professor of *materia medica* and botany at Pisa and pupil of Luca Ghini (1490-
1556), the founder of the botanical garden in the same studio, was writing about the analogies of the pathways of blood in humans and of sap in plants in his *De plantis* (1583). In this work he identified a network of small vegetal veins which greatly contributed to the specification of the morphological analogy between plants and animals.\textsuperscript{502} The second edition of *Magia naturalis* was published in Naples, in Latin, in 1589. It is entirely possible that Della Porta had read the letter Tagliacozzi sent to Gerolamo Mercuriale in 1586 and the latter published in the second edition of his *De decoratione*.\textsuperscript{503} In that letter Tagliacozzi first described the procedure in terms of *inistio*, grafting.

In sixteenth-century literature on gardens, farming, agronomy, natural history, and country lifestyle (not to mention alchemy), both in Latin and in the vernacular, a slow erosion of the clear-cut distinction between art and nature was set in motion. This erosion was mediated by the reference to grafting. Either pushing to the limits the Aristotelian distinction, or directly challenging it, new ideas on the ontological status of artificial entities emerged. At the same time, a few empirically-minded writers made reference to agriculture as a model for surgery in a way that, albeit differently, challenged the image of learned Galenic surgery but offered inviting points of reflection for developing ideas on human grafting. The reference to grafting plants and trees allowed Tagliacozzi to insist on the technical necessity to use only the skin of the arm and not the flesh, thus replying to critics of the procedure who had written before him. Against this background, one can understand Tagliacozzi’s difficulties in trying to frame his procedure in terms of the traditional natural/artificial opposition.

\textsuperscript{502} Andrea Cesalpino, *De plantis libri XVI* (Florence: apud Georgium Marescottum, 1583), pp. 1-30, with particular reference to grafting on pp. 6-8.

RECONSTRUCTIVE SURGERY AND THE ONTOLOGY OF NATURE

This vast and far-reaching culture of grafting sheds some light on the uncertainties and the problems that emerged from Tagliacozzi’s *chirurgia curtorum*. Such difficulties concerned, on the one hand, the relationship between art and nature and, on the other hand, the shifting conception of the natural order.

At the beginning of *De curtorum*, Tagliacozzi tried to describe reconstructive surgery as included in the traditional classification of medical specialties. He insisted on this issue in several passages of the book. The learned surgeon recalled the Hippocratic idea according to which medicine consisted in “addition and subtraction.” The art of “restoring mutilations (*curtis reficiendis*) abundantly proves this assertion” since, on the one hand, it eliminated the abundant or at least that which could be missing without damaging the body and, on the other hand, through adding, it reconstructed the parts.\(^{504}\) This was a rather simplified and schematic version of a procedure that was much more complex than a simple treatment of a wound, and that implied a management of time completely unknown in surgery, which was supposed to deal with urgent or present conditions. Tagliacozzi’s procedure was actually based on acting on a disfigurement or a mutilation months or even years after the incident had happened, by reopening wounds (on the mutilated parts), and creating new ones (on the flesh of the upper arm). This kind of reconstructive procedure based on skin grafting was, if not completely alien, at least very different from standard descriptions of surgical techniques.

Medieval and early modern surgery textbooks generally described three “intentions” (*intentiones*) characteristic of surgery. Bruno da Longobucco wrote in the thirteenth century that surgery “does three things: it joins separate things; it separates things that have been

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\(^{504}\) Tagliacozzi, *De curtorum*, p. 1 (1:1).
joined against nature; it eliminates the superfluous.” Dalla Croce echoed this passage three centuries later when he explained that the proper surgical “intentions” were cutting or dividing the continuity of a part (incisions of apostemes, dilatation of fistulae, etc.); joining the separated parts and preserving them in their renovated unity (wounds, fractures, etc.); removing all superfluous part (a sixth finger, removing flesh in excess like in polyps, etc.).

In this threefold partition of surgical operations there is no place for curtorum chirurgia. Ambroise Paré went further and broadened the array of surgical intentions, describing five of them: “removing the superfluous; putting in its place that which was lost; separating the continuous; joining the separated; adapting and helping that which is missing, by nature or by accident.” Examples of this last category were “procedures such as adding an ear, an eye, a nose, one or more teeth, substituting a platinum tongue … a hand, an arm, a leg …”

Even when the French surgeon seemed to be making epistemological room for reconstructive surgery, he had prosthetics rather than human grafting in mind. Even when the conceptual possibility of correcting disfigurements was contemplated, this possibility did not offer a robust epistemological warranty for skin grafting.

The most important difficulties emerged when Tagliacozzi faced all the philosophical dimensions of the comparison with agriculture and horticulture. Tagliacozzi underlined that, despite the similarities, human grafting and plant grafting were also deeply different endeavors. The farmer’s only preoccupation was to make plants take root. But in human surgery, once the parts were joined together, the surgeon had to model them, to shape their

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506 Dalla Croce, *Cirugia universale*, fol. 5r.

507 Paré, *Oeuvres*, vol. 1, p. 27.
figure through “the ingenuity of the artist (ex artificis industria).” This was the main goal and the specific task of grafting human body parts: “eventually the grafted parts take on the form and beauty of the parts that they replace. Although the rest of the precepts of our art can be attributed to Nature, and although the ideas borrowed from agriculture are commonplace enough, there is one aspect of our practice that is unique and remarkable. The perfection of the procedure, as performed by “a careful, dexterous diligent and benevolent practitioner of the art is such that surpasses by far the learning, generosity, and ingenuity of Nature herself (naturam ispam doctam, ingeniosam, liberalem, artifex prudens, solers, & benignus non leviter superat).” In other words, Tagliacozzi defended himself, human grafting did not really create new things in the world, that it did not alter the ontological makeup of the world.

At the same time, Tagliacozzi had to admit that he was dealing with a practice that went beyond nature. In fact, reconstructive surgeons not only used nature as a resource, but they also needed to master a specific component of “human ingenuity” that complemented the principles of heat, nourishment, and the self-healing power of nature. Surgeons had to be skilled enough to shape distinctly human forms that nature alone would not be able to reshape. Tagliacozzi tried to place restoration surgery within the framework of medicine as the servant of nature, but a certain ambiguity was ineliminable. Was this improving upon nature, creating new parts of the body, or just helping nature out? The surgeon not only perfected nature but also imitated natural shapes, like in sculpture, using the real human body as its material.

The same question emerged from the practical part of the book, discussed in the second volume. Once again, Tagliacozzi tried to frame the procedure in terms of the Aristotelian-Galenic definition of medicine as a perfective art, but failed. After having

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508 Tagliacozzi, De curtorum, p. 62 (1:46).

509 Ibid. Translation modified.
recalled that the surgeon’s work, unlike the gardener’s, did not end when the grafts took root, Tagliacozzi wrote that the surgical art had to

make improvements on nature (natura superari) … It is therefore more fitting that our art, being Nature’s most trustworthy handmaid, serve as her midwife and offer welcome help. Once it has been cut away from the upper arm, the formless mass of skin must be reshaped in the image of the missing part, and the nose or lip must be modeled in such a way that it restores glory and honor to the face (decorum suus, & gravitas). If one considers the condition of the material [the graft] it will be clear that Nature alone cannot accomplish this, because her laws decree that the material be pure, carefully wrought, and able to fulfill its special functions while being assigned to individual parts neither prodigally nor stingly.\[^{510}\]

Later, Tagliacozzi contradicted the notion of medicine as servant of nature. The chapter devoted to how surgeons could shape the skin in order to “represent (ut repraesentet)” the nostrils introduced the topic of art challenging nature, or the competition between art and nature. “Now, for the first time there was a way for our art to find access to places previously open only to Nature, to enter the same arena, and to compete with her, on equal footing, for the palm of glory.”\[^{511}\] This was not an easy game, since after all nature provided the principles for joining the parts together, as well as the model surgeons strove to imitate. Art, on the other hand, tried to represent the nostrils with artificial procedures, and to ensure the health and safety of the reshaped parts. “Although Nature and our art have similar intentions and use equal zeal in accomplishing their special missions, our art takes the place of Nature by providing nourishment and perfectly emulating maternal actions. In fact, it reverses the usual order by reproducing what Nature has already wrought, creating a fruit, so to speak, that is quite similar to its antecedent.”\[^{512}\] A sort of “new nature” came out of art,

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\[^{510}\] Ibid., p. 119 (2:3).

\[^{511}\] Ibid., p. 195 (2:73): “Qua de causa factum est ut inconcussis in hoc usque aevi naturae foribus, ad cuius penetralia accedere impossibile fuerat, haec una aditus primum perrumpere, eadem in arenam provocare, & de gloria decertare cum illa non erubuerit.”
commented Tagliacozzi, possibly referring to the debates on grafting and the “third nature.” And he made clear that it was not just a matter of restoring function, but beauty as well. Just like nature, which gave beauty as an ornament to the function and usefulness of the organs, this art shaped the parts so that they could regain their original utility and beauty.\textsuperscript{513}

Art did not achieve the same perfection and majesty of nature, but it got close. Indeed, there was a constant oscillation between the product of the surgeon-artist who made new human shapes surpassing nature in her self-healing power, and the ontological subordination of art to nature as the source of all shapes, usefulness, and beauty of human bodies. In several passages Tagliacozzi talked about art forcing and subjugating nature, with a proto-experimental jargon. This art “almost subjugates nature (\textit{quasi naturam sub iugum mittit}),” since “nothing can exist outside the laws of Nature (\textit{nec extra naturae leges aliquid posse persistere}).” The fact was that as soon as they created the graft, “surgeons have already overstepped the bounds of Nature (\textit{quasi egressus naturae limites}), and the flap will slowly perish” without subtle artificial care.\textsuperscript{514} In other passages, on the contrary, Tagliacozzi made clear that nature was superior to art. While discussing the limits of reconstructive surgery, he said that “the limits of our art demonstrate the unparalleled majesty of Nature, which is by far superior to any artifice (\textit{artis termini... & quanta sit naturae maiestatis... & quam longe\ ad artem superet}).”\textsuperscript{515}

As in all artwork, to perfectly imitate nature was impossible. Surgeons had to realize that, as it happened to other arts, they had to pick up a model, a norm of human and animal beauty and perfection. Even the most skilled painters and sculptors could not perfectly imitate

\textsuperscript{512} Ibid.

\textsuperscript{513} Ibid., pp. 195-96 (2:74).

\textsuperscript{514} Ibid., p. 160 (2:41).

\textsuperscript{515} Ibid., p. 109 (1:88).
nature, so one could not ask to do so to a surgical method, which was constrained by all sorts of material obstacles. And a restored face was indeed different under many aspects from a natural face, Tagliacozzi admitted, in the “color, softness, sensitivity, size, and hirsuteness, as well as in the magnitude of the nostrils.” Skin from the arm was always whiter, the restored nostrils were always softer and more pale. Sensitivity of the restored nostrils was also very different: with time it became more acute than the original. “Animal virtue” was propagated to the whole body through the nerves according to a threefold aim: transmitting “motion (vix motrix),” the “capacity for sensation (virtus sentiendi),” and the faculty of perceiving pain and injuries. Now, after a first phase of complete lack of sensitivity, this latter one increased, due to the fact that the skin coming from the arm was more sensitive and that the new nose had more vital spirits flowing in it. Moreover, the skin of the new nostrils tended to shrink with time. Hair could grow on the restored nose. Finally, the holes of the nostrils were generally narrower than normal. 516

Tagliacozzi even attempted to establish a division of labor between human and nature’s work. While discussing which was the noblest part of his surgery, whether the union of the parts or the shaping of the new skin in the form of a new nose, he wrote that “the first is the work of Nature, the second is the product of human ingenuity … I admit that Nature unites the graft with the nose, but the harmony, seemliness, and grace of this union is due to the physician alone … If we entrust such important work to Nature, it cannot but become well known but she often produces unsightly and unstable scars.” 517

In its best intentions, reconstructive surgery dealt with the distinction between the natural and the artificial under three respects. The first was the moral problem of natural

516 Ibid., pp. 110-11 (1:89).
517 Ibid., p. 169 (2:49-50).
appearances: reconstructive surgery should respect the natural traits of the face and it did not deceive the eye with artificial means. The second was grafting: surgeons should not create completely artificial beings, they should not alter the ontological order of nature – however, in practice they became part of the slow process of the erosion of the distinction itself. The third was artistry: surgeons used natural principles but added human ingenuity to shape human forms by imitating nature. It is never clear in Tagliacozzi if art is to be considered superior to nature or vice versa.

This confusion was a sign of the times. For example, Tagliacozzi struggled with the idea of forcing natural limits. In the phase of shaping the nostrils, nature was forced, but it could not be forced for long, so it was crucial to act in timely fashion with the graft. For a limited time-span, surgeons effectively went outside of nature’s boundaries. It was clear that Tagliacozzi’s human grafting did not fit the traditional distinction between art and nature, since it involved not only an imitation of nature, not only aiding and supporting nature, but also a human activity of reshaping which went beyond the self-healing power of nature.

Galen and Aristotle thought that art could not alter the inner constitution of the natural matter, since it lacked the formative power to reshape nature internally and to create something entirely new. Cosmetics altered superficial appearances. Medicine helped nature display its self-healing power. *Curtorum chirurgia* not only helped nature but overcome the borders of the distinction and reshaped the structure of nature to the point of creating new natural forms.

The passivity or activity of the work of the artist was one of the most debated issues of Renaissance art theory. For example, in the fifteenth century Leon Battista Alberti (1404-1472) claimed that art was not just a passive imitation of nature, but “an imitation of the rules of nature, choosing that which appears most beautiful in the order of the cosmos.”518 The sixteenth-century theory of mannerism, with its emphasis on the fact that art and nature

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merged into one another, is even closer to Tagliacozzi’s remarks. Art theorists who devoted part of their reflections to the genre of the grotesque such as Anton Francesco Doni (1513-1574), Pirro Ligorio, and Giovanni Paolo Lomazzo (1538-1592) insisted on the “assimilation of the artist to nature” in that they both created new objects in the world. Tagliacozzi seemed to join art theorists in embracing an oscillating and shaky ontology: in his work there was an “excess” of art in that nature alone could agglutinate the parts but not reshape them. In a way, perfective and mimetic art were combined together. This could also mean that the surgically grafted nose could be considered a natural-artificial hybrid in ontological terms, while at the same time it was fully natural in moral terms because it stood in opposition to a cosmetically modified nose. In other words, Tagliacozzi believed that Aristotle was right and that only nature had an internal principle of motion. However, the Bolognese surgeon claimed that his reconstructive procedure went beyond nature in that it restored not just the essence of the part but its appearance, its aesthetic form. It still was a matter of restoring, and not of producing, but with an excess, a surplus of human artistry that – against the learned surgeon’s intention – challenged the art vs. nature divide.

Facial reconstructive surgery was both part of medicine as a science of natural bodies, and a mechanical art, in that it artificially constrained nature, and in particular the nature of the human body. And that which was really troubling in the comparison with grafting was the uncertain status of its outcome: was there a new face, just like there were new fruits and flowers?

In Tagliacozzi’s surgical practice one can see two concepts of nature at work. On the one hand, nature personified as a creative, generous, virtuous, insuperable artist. On the other

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519 See Morel, Les grotesques, p. 312.

520 Ibid., pp. 85-110, quotation on p. 89.
hand, nature as a set of law-like impersonal processes that helped the reconstruction procedure, offering the principles that had to be channeled through human ingenuity. It was this second concept of nature that Tagliacozzi thought the surgeon surpassed in perfection, while the original natural creation remained divine and unattainable. This “scientific revolution” trademark concept of nature as a set of impersonal laws co-existed side by side with a conception of creative, divine nature, which is usually labeled as “pre-modern.” Ultimately, the conceptualization of reconstructive surgery had to do with changing ontologies and changing ways of knowing the order of nature. All these epistemological and ontological changes were grounded in very specific social needs, in manual techniques of performing surgical procedures, and in the fascination of hybrids, playfulness, and marvels of art and nature.
Surgeons had to cut and prepare a skin flap on the upper region of the arm, make it adhere to the defective nose by keeping the two parts bound together for about three weeks, severe the flap from the arm, shape the new parts of the nose, and finally make sure that the outcome would last by using special molds. Tagliacozzi comments: “We all know that extreme pain not only causes prostration but also interrupts the normal functions of the body. I have yet to see this happen during my operation. But if by some change a patient were to faint, I would attribute it not to the violence of the procedure but rather to the patient’s abject soul. This type of effeminate and weak man (molles, & effoeminatos) is terrified at the prospect of suffering pain, and the only virile thing about him is the appearance. The cowardly man should not participate in this procedure.”

Tagliacozzi both denied that his procedure was extremely painful and argued that only morally defective men – men who were not masculine enough – were not able to endure it. This is just one example of the gendering and moralization of pain and pain endurance which are characteristic of Tagliacozzi’s book and reflect his attitude to his patients. In this chapter I investigate whether this attitude towards patients in pain was something common in sixteenth-century surgical literature, or whether it was specific of reconstructive surgery.

PAIN IN HISTORY

I will not consider pain primarily as the object of medico-theoretical definitions, but rather as something inherent to surgical operations and, as such, as a tool for mediation in the surgeon-patient relationship, as it can be read between the lines of texts written by

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521 Tagliacozzi, *De curtorum*, p. 105 (1:83-84).
surgeons. To employ an anachronistic concept, my focus is on cultures of “pain management” rather than on theoretical thinking on pain. I consider pain as part of a social negotiation involving both feelings and social status.

Historiography on pain forms a relatively new and expanding body of literature (even though histories of pre-modern pain in surgery are still very few). It has been argued that in Renaissance Europe medicine and surgery were neither the exclusive, nor the most important places where reflection on painfulness was produced. This remark contains some truth. Nevertheless, the history of surgical management of pain can tell us something about the history of pain in general. It must also be noticed that Renaissance medicine and surgery were much broader and culturally richer endeavours than their modern “scientific,” laboratory-based, and neuro-biologically driven counterparts. Renaissance medicine and surgery were concerned with many “non-medical” affairs. One must not make the mistake of projecting back the coherence of a present-day discipline to past practices.

The history of pain – and in general the history of the body – in pre-modern contexts does not belong to the history of medicine by its own right. Nonetheless, surgical pain can


be treated as a historical object independent and different from medicine in its present form, as part of a history of experience. In the early modern, pre-anesthesia period, techniques for easing pain were generally not meant to suppress pain as such, as in modern times. Rather, such techniques and medicaments aimed at suppressing pain as a symptom and as something that would endanger patients. Twentieth-century French surgeon René Leriche has written about a “living pain” experienced outside of the laboratory and impossible to be reduced to a universal code of neural impulses. This living pain is the only kind of pain sixteenth-century women and men were experiencing, in and outside surgery.

The present chapter follows the methodological approach adopted by some recent literature on the history of pain, particularly by Esther Cohen, Joanna Bourke, and Javier Moscoso. These historians all suggested that pain must be treated as a historically determined social event, or a complex experience that takes place among people in specific political, linguistic, gendered, and epistemic contexts. Joanna Bourke espoused Ludwig Wittgenstein’s approach to pain as a language game and argued that such an approach can be extremely fruitful for historians. According to her view, the essence of pain is not the point, since pain is always caught in performing social functions. In other words, pain always refers to ways of feeling, and not to the incommunicable, subjective content of feeling. Speaking and expressing pain are ways of describing a social and cultural experience. In a similar way, Javier Moscoso treated the history of pain as part of a “historical epistemology of

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528 Interestingly enough, with the exception of Moscoso, they are not historians of science and medicine.

experience” which makes use of the methods of, but is not the same thing as, history of science, on the one hand, and history of emotions, on the other. According to him, the history of pain is rather a history of the ways in which pain has been made intelligible and representable.\textsuperscript{530}

The official 1979 definition by the International Association for the Study of Pain – “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” – allows for considerable conceptual flexibility and avoids a rigid distinction between “physical” or “bodily” pain, and “mental” or “psychological” pain.\textsuperscript{531} I try to avoid this distinction too. I ask how, why, and in what contexts the distinction itself could be articulated, built, and enforced.

Tagliacozzi made surgical pain (an intense “bodily” pain) a matter of social honor and masculine identity (the matter of what moderns would call “psychological” pain) in unprecedented ways, playing with early modern conceptions of surgical pain that included both fear of expected pain, and reaction to inflicted pain. I will highlight Tagliacozzi’s strategies in replying to accusations of performing a much too painful procedure. Then I will take a look at some ways of treating pain caused by surgical treatment in the second half of the sixteenth century, trying to focus on the following question – why was Tagliacozzi’s attitude towards patients in pain so different?

**TAGLIACOZZI’S VIEW**

Surgical technology that would eventually be re-shaped by Tagliacozzi was already in place by the sixteenth-century, like metallic cannulas to be inserted in the nostrils, and


\textsuperscript{531} Morris, *The Culture of Pain*, p. 16.
rounded forceps to operate on the interior parts of the nose with swiftness and finesse. But in
general, among the most learned and famous surgeons of the sixteenth century, skepticism
about reconstructive surgery was the norm.

As we have seen, Ambroise Paré was skeptical about the case of the cadet de Saint-
Thoan. In a very interesting passage, Paré seemed to imply that it was ethically disturbing and
epistemologically ambiguous to wound the patient in his healthy parts, inflicting patients a
great pain, given that the outcome would be ugly to see anyway. It was one thing to cut near
the wound to treat it directly, or to cut in order to extract a bladder stone, and quite another to
wound a healthy arm once the wound to repair was already distant in the past, and for the
sake of a dubious outcome. The second example is Gabriele Falloppio’s sentence in De
decoratione: “I would rather have my nose cut off than to suffer through such torments.”

Tagliacozzi felt the acute need to defend and justify his procedure. First of all, he
distanced himself from the southern Italian empirical practitioners who performed the
operation “casually and not rationally.” He then went on to claim that, contrary to what
some illustrious physicians were writing, only a portion of the superficial skin of the arm
should be used for the graft, thus avoiding the much more painful asportation of flesh and
muscles. And he added a step-by-step review of his procedure, showing that the pain was
inevitable, but bearable. Most interestingly, he embarked on a revision of past and present
surgical literature up to his times, with the purpose of showing that facial surgery was much
less painful and demanding that many other operations advocated for by glorified authors
such as Celsus, Paul of Aegina (c. 625-690), Albucasis (Ibn al-Abbas Al-Zahrawi, 936-1013),

532 Falloppio, De decoratione, fol. 43v: “ego teneo, quod maximus est cruciatus, et vellem
totum admittere nasum potius, quam, hunc subire laborem”.

533 Tagliacozzi, De curtorum, p. 3 (pages in the original edition are not numbered; my
translation).

534 Ibid., pp. 80-81 (1:64).
and even Galen. Tagliacozzi described all sorts of eye, hernia, and stone treatments, notoriously the most painful ones, and paused to criticize such medically insignificant and purely aesthetic operations as the reconstruction of the prepuce and the reduction of exaggeratedly big male breast. “Good Lord! What kind of practices are these? The ancient physicians had no fear of subjecting their patients to the most savage torment and obvious peril. And why? For a minuscule gain in dignity in a part that no one should even see [the prepuce], and whose absence is not even remotely life threatening!” Compared to these cases, Tagliacozzi argued, the pain patients suffer during his surgery was minimal.

This contumacious reference to a purely aesthetic procedure is particularly interesting. Tagliacozzi was referring to the Byzantine surgeon Paul of Aegina, who discussed “male breasts resembling the female.” In most cases, Paul argued, puberty brought about a certain swelling up of the female as well as the male breasts, but then the situation normalized. There were cases, however, in which “having acquired a beginning they go increasing, owing to the formation of fat below. Wherefore, as this deformity has the reproach of effeminacy, it is proper to operate upon it. Having, therefore, made a lunated incision below the breast, and dissected away the skin, we unite the parts by sutures.” This procedure was also described by in Albucasis, Haly Abbas (Alī ibn ‘Abbās al-Majūsī, d. 982-994), and Rhazes, thus indicating an Arabo-Byzantine agreement on the necessity to treat such a condition. But for Tagliacozzi this was only a cruel, worthless procedure. This implies a shift in the history of cultural sensibility to pain: for Tagliacozzi the balance between the painfulness of the procedure and the desired outcome did not make the procedure itself worth the attempt.

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535 Ibid., p. 91 (1:72).
536 Ibid., p. 85 (1:67).
538 Ibid., p. 335.
From Tagliacozzi’s passage, another shared feature of late Renaissance learned surgery emerges: a sense of the historicity of techniques and of the progresses of human sympathy. This is confirmed by one of the most important Italian physicians and anatomists of the time, Girolamo Fabrici D’Acquapendente. In his Observationes chirurgicae (1617) Acquapendente showed the same historical sensibility in reviewing past operations. Acquapendente wrote that some operations were “so cruel, and horrible” that it was not by chance that they were not practiced anymore: “If they are in use today, only Barbarians and Turks practice such things as making a hole in the forehead and inserting a feather for aesthetic reasons, or wounding themselves as a sign of love.” In such cases, inflicting pain was not connected to saving lives but to useless aesthetic procedures and “barbarian” rituals. Only “inferior” civilizations from the past and from foreign lands could tolerate such painful procedures. “We do recall these surgical operations, which are cruel and cause horror and pain; even if they are described by Celsus, he does that more to report others’ opinions than to state his own.” Excruciating (atroce) and cruel were the words used by the Padua professor to describe eye surgery. “Up to our times we can read about such excruciating and painful operations, to the head and other parts, which I believe are not practiced, because patients prefer to suffer from the evil of their eyes for their whole life than to subject themselves to these cruel procedures. But in our lands physicians are more modest and merciful.”

539 Girolamo Fabrizi d’Acquapendente, L’opere chirurgiche (Padua: appresso Giacomo Cadorino, 1671), p. 197. The first edition of Acquapendente’s surgical works, published in Latin, dates 1592. As it is well known, Edgar Zilsel argued that the sense of collaboration and progress of early modern science derived from the artisans’ attitude; these humanist and learned surgeons seem to be another source for this idea. See Edgar Zilsel, “The Genesis of the Concept of Scientific Progress and Scientific Cooperation,” in Id. The Social Origins of Modern Science (Dodrecht: Springer, 2003), pp. 128-68.

540 Girolamo Fabrizi d’Acquapendente, L’opere, p. 197: “Memoriamo però noi queste operazioni chirurgiche, le quali son crudeli, & apportano orrore, e dolore; che tuttoche proposte da Celso, egli lo fa più tosto per opinione d’altri, che per la propria.”
delicate procedure such as that of removing cataracts (suffusione), Fabrici suggested “to abstain from surgery, whenever possible.” He also claimed to have seen some specialized eye-surgeons performing the procedure with a needle, sometimes successfully, sometimes blinding their patients, and more often operating empirically rather than according to a rule. He himself tried such operation two or three times, “then I stopped performing it, because patients used to hate me, and also because in such operations one has to look with painstaking attention and for a long time into the patient’s eyes, and I felt that I was damaging my own sight, so that while I was restoring a patient’s sight I was losing mine at the same time,” and finally because the risk of damaging the eyes was too high. The learned surgeon showed that both for the sake of the patient and for the sake of his reputation and physical integrity he had to refrain from performing too painful procedures. Pain represented a practical obstacle for both patients and surgeons. Moreover, empiric practitioners were exposed as those who inflicted pain on patients due to their lack of proper medical education.

Besides correcting technical errors, reviewing past painful surgery, and appealing to “real men,” Tagliacozzi employed as a fourth strategy: a broad moralization of the pain felt in surgery, casting it as one instance of the adverse and painful circumstances of life. Uncharacteristically, it looks like our author began to address not his fellow physicians and learned surgeons, but patients directly. Tagliacozzi mixed up the fashionable Stoic moral philosophy, the example of the Christian martyrs remaining impassible in torture, and chivalric ethics of bravely facing pain and danger. The teaching of Stoic ethics showed that a

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541 Ibid., p. 198: “Sin qui si leggono appresso molti autori si atroci, e dolorose operationi, tanto nel capo, quanto altrove, le quali affermo non esser praticate, perché gl’infemi vogliano più tosto portare tutto il tempo della lor vita i mali d’occhi, che sottoporsi a queste crudeli operationi. Mà nei nostri paesi i Medici sono più modesti, e pietosi.”

542 Ibid., p. 206: “le quali poi ho tralasciate, si perché questi tali mi havevano in odio, si ancora perché bisognando in coteste operationi guarder fissamente con gli occhi, lungo spatio di tempo, sentiva da questa fissatione negli occhi una offesa di rilievo, ho temuto, che mentre desiderava di giovare all’altrui occhi, perdessi i miei.”
moral man knew that pain was not a real evil, since his willpower could make him endure it. According to this view, pain depended – at least in part – on the state of mind of the sufferer.\textsuperscript{543}

Michel de Montaigne, in his famous description of his experience with bladder stones, more subtly explained that there could be pleasure associated with bearing pain.

There is pleasure in hearing people say about you: There indeed is strength, there indeed is fortitude! They see you sweat in agony, turn pale, turn red, tremble, vomit your very blood, suffer strange contractions and convulsions, sometimes shed great tears from your eyes, discharge thick, black, and frightful urine, or have it stopped up by some sharp rough stone that cruelly pricks and flays the neck of your penis; meanwhile keeping up conversation with your company with a normal countenance; jesting in the intervals with your servants, holding up your end in a sustained discussion, making excuses for your pain and minimizing your suffering. Do you remember those men of past times who sought out troubles with such great hunger, to keep their virtue in breath and in practice?\textsuperscript{544}

Tagliacozzi echoed these ideas: “Because there is nothing the physician can do, the patient must simply endure the pain. Is there anyone so cowardly and pathetic that he cannot accept an immutable and universal fact of life, and expects, even in misfortune, that everything will be pleasant and agreeable, and cannot bear the thought of suffering in any circumstance?”\textsuperscript{545}

And he went on by saying that the projected outcome, namely the restoration of the dignity of the human face, was more than enough to elicit bravery.\textsuperscript{546} But there was more: “anyone who cannot withstand three or four days of the mildest discomfort is obviously of ignoble and


\textsuperscript{545} Tagliacozzi, \textit{De curtorum}, p. 186 (2:65).

\textsuperscript{546} However, Tagliacozzi admits that the outcome can hardly equal the beauty of the “original” face, and that problems can arise: the skin of the new nose can become more sensible, it can shrink, the holes of the nostrils are generally smaller, and sometimes hair can grow on the nose, which will need to be shaved: Ibid., pp. 109-11 (1:88-89).
dishonorable origin.” Tagliacozzi appealed to his patients’ pride and prompted them not to act like a lower kind of men. Finally, a few examples of ancient martyrs should have humbled patients facing the much bigger torments holy men and women faced with an impassible demeanor. But examples of martyrdom were also meant to uplift the patients’ spirit: “Who can object to my procedure, which offers wonderful recompense in exchange from minor suffering?”

Torture was actually an analogical figure which ran under the surface of sixteenth century surgery. This illustration taken from the Venetian surgeon Giovanni Andrea Dalla Croce’s European best seller *Chirurgiae universalis opus absolutum* (1573) may serve as an example. The image shows a Christian soldier heroically enduring the work of battlefield surgeons, who are extracting an arrow from his chest (fig. 6.1). The visual analogy with the catalogue of illustrated martyrdom contained in a 1591 work by the Oratorian Brother Antonio Gallonio (1556-1605) is striking. Specifically, the expression of impassibility is very similar. (fig. 6.2) It is also interesting to notice that Della Croce had a parallel illustration of what looked like a Turkish soldier, beardless and agonizing in pain with eloquent gestures and contortions of the body (fig. 6.3). While the Christian knight was represented as impassible like a martyr, the Turk was represented as not being capable of enduring pain with dignity.

It would not be correct, however, to say that Tagliacozzi had only an aggressive and moralizing attitude towards his patients. He also showed a certain will to minimize pain. First of all, the Bolognese surgeon recognized pain as a fundamental site of difference between

547 Ibid., p. 187 (2:65): “hoc servile est, & indignum…”

548 Ibid., p. 188 (2:66).

humans and plants. Human grafting was different from plant grafting in that plants did not experience any sensation of pain. The need for more time and the many more difficulties to overcome in human grafting did “not make our art less noble.” On the contrary, “the worthiness of an act is proportional to the thought and attention required to perform it,” and usually what takes longer had also more dignitas, added Tagliacozzi. The emphatic beginning of book II of De curtorum underlined this very same proud attitude. Enough with beauty and theory, wrote Tagliacozzi, “now is the time for us to sharpen our knives and prepare our needles, razors, and cautery irons, for the skin must be cut and parts must be wrenched or removed. These actions are inevitably accompanied by pain, damage, and serious symptoms … I wish to render drowsy minds alert to make the surgeon’s hand readier to undertake this mission.” Tagliacozzi chose a rather masculine epic and military tone to emphasize the manual work of the surgeon, and the fact that pain was something inevitable which the surgeon had to be ready, and equipped, to manage. The learned surgeon wished to show that he was not only learned, but a surgeon too: he was perfectly capable of combining erudition with the specific physical and moral skills required for an activity which involved inflicting pain on other human beings.

Tagliacozzi claimed that the most painful part of the procedure was caused by the artificial position of the arm, that had to be fixated to the face for three weeks. The procedure was gradual and took time, so it “must be accomplished with the least possible amount of inconvenience (incommode) to the patient.” But “if we consider how much the arm, when it is raised to the face, deviates from a middle posture (which is painless), the answer to our

550 Tagliacozzi, De curtorum, pp. 159-60 (2:41).
551 Ibid., p. 160 (2:41).
552 Ibid., p. 117 (2:1).
553 Ibid., p. 64 (1:47).
question will be evident.” However, once the procedure ended, this part – the internal part of the upper arm – was particularly safe because there were no nerves, no arterial channels or blood vessels. As a counter-example, Tagliacozzi showed how ridiculous would have been to take the skin from the leg and the attach the leg to the face, thus causing “unbearable pain.”

In any case, children and old men could not bear the procedure: “Not every single age is suitable for this operation: its success in old age and childhood is by no means assured.” Old age brought about a lessening of the vital heat and an increased desiccation. Childhood, on the other hand, “possess great heat and purity of humor,” two favorable conditions, but “their [of children] continuous movement and exquisite sensitivity to pain are serious impediments (obl motus impetus & sensuum vivacitatem). A child would find it unbearable to be immobile; moreover, the pain of the incisions and sutures, although short-lived, is severe. Constancy and fortitude can overcome pain, but children lack these attributes.” The perfect pain-bearer was a young man capable of focusing on healing, of being immobile for a long period of time, and strong enough to stand still without screaming and kicking while in severe pain.

Pain behavior was codified in a series of bodily structures and gestures in the late sixteenth century. These bodily schemes of pain behavior can be grasped by looking at art theory. One of the most famous art treatises of the century, Giovanni Paolo Lomazzo’s Trattato dell’arte de la pittura, scoltura, et architectura (1584), detailed how to represent pain. According to Lomazzo, Pain induced the body to make painful movements, according to the kind of torment it made people suffer through. For example, Prometheus tied to the rock with the vulture eating up his liver “pulled back his belly and his ribs, for the acute pain

554 Ibid., p. 65 (1:48).
555 Ibid., p. 66 (1:49).
556 Ibid., p. 74 (1:57).
he held his thigh … he stretched his nerves down to the tip of his toes, showing pain in the
rest of the body too, by reclining his eyelids, closing his lips, and uncovering his teeth.”

Pain was also made visible through the contortions of the body and the eyes, as it could be
seen in the Laocoon statue (fig. 6.4). Lomazzo said that in those who are prey to pain one
sees: “pulling back of body parts, abandoning of arms, wrapping of the eyelids, twisting,
closing up the eyes, tightening and opening mouths, trembling, screams, agitations,
inflammations, fears, sweats, howls … fainting, crying, loosing of the self, opening up the
arms, despairing, closing up the hands, and other similar gestures.” Tagliacozzi’s ideal
male, self-controlled, upper-class patient was someone who was able to control all this.

Pain played a role in the discussion on whether it was advisable to take the skin graft
from a donor or not. “Some have argued that one motive for taking the graft from another
person lies in sparing the patient as much pain as possible. I will now enumerate all the
painful aspects of the procedure so the reader can make an informed decision about the best
source of the graft.” Tagliacozzi believed that this would be acceptable in principle but
impossible in practice. In fact, two persons – the patient and the donor – could not be forced
to be attached to each other for three weeks. However, what followed was indeed a catalogue
of painful procedures. Lifting and preparing the skin flap was not possible “without causing
violent wrenching and severe pain.” Surgeons “must excise the skin with a knife, pierce it

557 Giovanni Paolo Lomazzo, Trattato dell’arte de la pittura (Milan: appresso paolo Gottardo
Pontio, 1584), p. 166: “ritirava adietro il ventre, & il costato, & a suo danno raccoglieva la
coscia … distendeva a basso i nervi dritti fino all’estremità delle dita, dimostrando anco
dolore nel resto del corpo coll’inclinar le ciglia, stringer le labra, & discoprire i denti.”

558 Ibid.: “ritiramenti di membra, abbandonar di braccia, incarnamenti di ciglia, travolgimenti,
chiuder d’occhi, stringer, & aprir di bocca, tremor, gridi, agitationi, infiammationi, paure,
sudori, gemiti … svenire, gridare, smarrirsi, piangere, aprir le braccia, disperarsi, chiuder le
mani, & simili affetti.” It is remarkable that Lomazzo described what we would call moral
and physical pain in the same terms, and said that both forms of pain should be represented
with the same palette of movements and emotions.

559 Tagliacozzi, De curtorum, p. 76 (1:60).
with needles, and suture it; he must force the arm into unnatural position and immobilize it.”

The arm which suffered the cut was temporarily weakened and impaired. Finally, “the flow of irritating humors (excrementa) causes the arm to swell and ulcerate,” thus causing further pain.  

Tagliacozzi did not abstain from quoting the Galenic surgical mantra (De methodo medendi 14.13), according to which in surgical operations, one had to take into the account “the swiftness with which the treatment can be completed, its freedom from pain, and its safety”. The surgeon then showed that it was rare to find all these three conditions united in one kind of surgery, and that, despite this rarity, his surgery actually complied with the Galenic prescriptions. Contradicting himself, the Bolognese physician argued that the stage of taking up the skin flap was “so swift that some patients do not notice it until the act is accomplished. The surgeon uses a very small blade to cut the skin, which is held with a forceps. The incision can be completed very quickly, often before the senses perceive it.”

But “the grafting of the skin to the base of the nose cannot, however, be carried out without pain. After all, parts that are endowed with acute sensitivity must be excoriated, incised, and pierced with needles.” In any case, the pain of this phase was still lesser than that one had to suffer through in other operations.

Tagliacozzi always accompanied his description of painful procedures with the claim that such pain was far from unbearable, thus implicitly reinforcing his appeal to men to show their masculine strength of body and soul. While in Tagliacozzi’s book there is a certain respect for the patients’ suffering, and a sense of the historical progress of surgery based on

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560 Ibid. Although these are serious reasons to choose another person as a donor and the physician is free to choose, as we have seen in chapter 4, Tagliacozzi’s strong suggestion is not to do it.

561 Ibid., p. 105 (1:83).

562 Ibid.
its ability to minimize pain, he also vigorously appealed to his patients’ sense of upper-class masculinity and moral values in order to invite them to bear pain for the sake of the highest goal: the restoration of their face.

SURGICAL PAIN

Respect and concern for the patients’ pain was common in sixteenth century surgery books. Galen and Avicenna (Ibn Sinā, c. 980-1037) had provided standard definitions and physiological models of pain, individuating its causes in humoral imbalance and in a “solution of continuity” of the soft or hard parts of the body. As showed by the Neapolitan Aristotelian philosopher Simone Porzio (1496-1554), professor of philosophy at Pisa in the 1540s and physician at the Medici court, there was a certain consensus about what pain was, and what caused it. Porzio recalled that there were three basic conditions for a human being to feel pain: the body had to able to receive impressions and to feel sensations; a sudden and violent mutation had to happen; and finally, a change “against nature” had to take place, contrary to pleasurable feelings of the body.

The five medieval “rational surgeons” all dealt with the painfulness of surgical operations, agreeing upon the precept that one of the most basic duties of surgeons was to minimize patients’ pain. The treatment of wounds, fractures, ulcers, as well as more complex operations like the extraction of bladder stones and the elimination of cataracts, were all accompanied by in-passing remarks on easing pain, cheering patients up with artful conversation, and preventing patients from moving, so as not to put their lives in danger. It is

563 “I remember often saying that the two types of pain are the sudden change of temperament and the rupture of continuity”: Galen, Of the Affected Parts, quoted by Cohen, The Modulated Scream, p. 88.

564 Simone Porzio, De dolore (Florence: apud Laurentium Torrentinum, 1551), p. 7.

true that surgical pain never became the object of explicit focus, but the concern for it, albeit indirectly expressed, was there and formed something like a tradition for Renaissance and early modern surgeons.

The manual for examining aspiring university-trained surgeons found in the papers of the College of Physicians of Bologna, written by the Roman surgeon Mariano Santo (1488-1577), summarized contemporary conceptions of pain. What is pain? – it asked in the pedagogical format of question and answer. “Pain is a thing contrary to sensibility, or contrary to the quality of a body part. Or I will say that pain is that which happens through sensibility by a dissolution of continuity or an alteration of the substance, affecting one particular sense or the common sense.” What are the causes of pain? “Pain is caused either by a dissolution of continuity or by a sudden alteration.” How can a dissolution of continuity happen? “By incision, corrosion, tumefaction, or fracture.” How can an alteration can happen? “Because of heat, cold, dryness, humidity, or a mixture of them.” Finally, spasms, “illnesses of the nerves that dilates or breaks them,” could be caused by repletion or evacuation. Spasms could be of two kinds: “proportionate” or “not proportionate” with the material, namely caused by some kind of noxious humoral impediment from which the nerves tried to get away to expel it. Among the causes of this second kind of spasm “there is pain.”

Pain in surgery was considered to be a liability from a purely technical-medical point of view. Physicians and surgeons believed it was accompanied by dangerous inflammation,

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566 ASB, Studio, 234 [pages are not numbered]: “Dolor est rei contrariae sensibilitas, aut contrariae qualitatis existentii in membro. Vel dicas, quod dolor est quodam adveniens ex sensibilitate, & re contraria solutionem, aut alterationem faciente, sensum particularem vel communem affligens … Causa doloris aut est solutio continui, aut subita alteratio … Aut solvitur incisione, aut corrosione, aut tumefactione, aut fracture … Fit aut caliditate, aut frigiditate, aut siccitate, aut humiditate, vel horum mixtionibus.” See also the summary of the causes of pain given by Porzio, De dolore, p. 10: “Pain is an bad, preternatural sensation caused by bad temperament, with dissolution of continuity (Dolor est sensus asper, praeternaturalis, consertim factus a mala temperie, cum solutione continui).”
and that it attracted bad humors to the damaged parts of the body. Moreover, it was a symptom of the patients’ weak state and inability to undergo treatment. In a few particularly serious cases, pain could be the cause of death too. Dalla Coce wrote: “When pain is powerful it attracts to the wounded part other materials and causes inflammation, and there is not a more powerful cause of the filtering of evil humors than pain; fever can cause a strong pain too, when it produces a sudden change in natural operations … When pain is cruel, it weakens the vital virtue, corrupts digestion, hinders sleep, and sometimes causes death: for all these reasons it is commonly said that pain is an evil accident, and one must take care of it with great solicitude and before attending to other things.”

More specifically, from sixteenth-century literature on surgery emerges a peculiar use of the term “virtue” (virtus) to indicate the patients’ physical and physiological state, their strength and acceptable temperament. This use of the term can be found in Avicenna already, and it became more developed in the Renaissance. Avicenna, while explaining the procedures of bloodletting (which among other things he thought could be used as painkiller), discussed “syncope,” or fainting, during phlebotomy. Syncope was rare – he said – unless a great amount of blood was lost. The cases in which the patient was more likely to faint were fevers, apoplexy, inflammatory swellings, and severe pain. The physician had to make sure “the strength [virtus] of the patient was adequate” before attempting a demanding treatment.

Guy de Chauliac defined syncope as “a sudden and acute decrease of virtue which usually follows excessive evacuation and pain, and which you will know by weak pulse, paleness, and slow and difficult mobility (especially of the eyelids and the extremities, as it would be impossible for them to move about), and cold sweat.” Dalla Croce recommended that the

567 Dalla Croce, Cirugia universale, fol. 27r.

568 Avicenna, Canon medicinae (Venice: industria ac sumptibus Juntarum, 1608), p. 219 (1.4.5.20).
first thing surgeons had to take into account before starting such a demanding procedure as trephination of the skull had to be “the patient’s virtue, that is the one which governs every other operation, and that can be weakened by cruel and unbearable accidents, by the great quantity of blood lost by the patient, or by the size of the fracture itself.”

Commenting upon the treatment of inguinal hernias, Paré described a long and painful treatment with a cannula to be inserted into the penis and pushed inside an incision made in the peritoneum. He then remarked: “However, this operation cannot be performed unless the patient’s virtues are strong enough to bear it, and also unless you have made a favorable prognostic to his friends and relatives before touching him.”

In the physiological models dominating in the sixteenth century, surgical pain weakened the patients’ strength and could generate powerful responses, ranging from kicking and screaming to fainting. Typically, one or two strong male assistants were required for particularly painful procedures. Descriptions of the assistants’ role were ubiquitous in surgical literature, from antiquity up to Tagliacozzi (fig. 6.5). Paré, when giving instruction on how to extract kidney stones, one of the most painful pre-anesthesia surgical procedures, offered precise suggestions about how surgeons could make use of their assistants. In this case, there were four of them.

You must place the patient on a stable table – he wrote – the kidneys on a pillow, a folded cloth under the buttocks; he must be half-reclining, his tights folded, heels almost touching the buttocks: you must tie his feet at the height of his ankles with a

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569 Chauliac, *Inventarium*, vol. 1, p. 154: “subita et acuta concisio virtutis que consuevit sequi inmoderatas evacuaciones et dolores, quam cognosces per pulsum deficientem et per colorem pallidum et motum (precipue palpebrarum et extremorum) difficilem, et per sudorem frigidum.”

570 Dalla Croce, *Cirugia universale*, fol. 25v.

resistant bandage three fingers wide, which must pass behind his neck two or three times; from there, his hands will be tied against his knees, as you see in this figure. Having placed and tied the patient this way, you need four strong men who are neither afraid nor shy: two of them have to keep the patients’ arms, and the other two will block his knee and feet, so firmly that he will not be able to move his legs or his buttocks, but he will remain immobile.\textsuperscript{572}

Pain is never mentioned by the author in this passage, but patients can almost be heard screaming and seen moving around, trying to free themselves from the assistants’ hold.

Tagliacozzi gave a long description of the role of assistants in rather similar terms. At least two assistants were needed for reconstructing noses, “who are not only agile and dexterous with both their hands and bodies, but also extremely vigilant and obedient.” They had to prepare a comfortable bed over which the patient would be placed. The room had to be “well illuminated,” above all for the purpose of outlining the skin flap. The bed had to be in the middle of the room, far from the wall, because the surgeon and his assistants had to be able to go around it. The patient had to lie in bed, with one of the assistants holding his arm, which had to be kept perfectly still. Making the patient sit on a chair would ensure better illumination, but that would be the only advantage; moreover, “when he sees the scalpel approaching he will resist because of the anticipated pain and will pull his arm back no matter how tightly he is restrained.”\textsuperscript{573} After the incision, patients had to lie down and rest for several hours in order for their excited humors to calm down. The surgeon had to handle forceps and knives with a sharp edge, placed on a special plate in order to be easily grabbed. “The patient must not be allowed to see these instruments, so the surgeon should cover them with a cloth or some other item.”\textsuperscript{574} In the scene of complex surgical procedures, pain –


\textsuperscript{573} Tagliacozzi, \textit{De curtorum}, pp. 127-28 (2:10-11).

\textsuperscript{574} Ibid., p. 130 (2:13).
anticipated pain, fear of pain, and the actual painfulness of the cuts – was always the silent major character: no one talked about it, but it governed the whole ritual.

Surgery books also included recipes, classifications of painkillers, and remedies to ease operatory pain, but much more often post-operative pain and collateral pain. From the times of Avicenna, things had changed very little. The Persian physician explained that pain relief was based on the use of contraries. According to him, “pain is relieved either by modifying complexional balance, or by eliminating the material which causes it, or by stupefying by destroying the power of sensation in the part.” Some medicinals could have a relaxation effect, such as dill, linseed, melilot, chamomile, celery seed, bitter almond, especially when mixed up with the gum of prunes, starch, lead carbonate, saffron, marsh mallow, cardamom, cabbage, turnip, and various kinds of oils. The most powerful of the stupefacients was opium, to be used with great caution, said Avicenna. Phlebotomy, cupping, poultices, etc. were also listed as remedies to ease pain. Avicenna also mentioned a series of psychological remedies as well: patients could be encouraged to “walk about gently,” listen to “pleasant songs,” since in general to be “occupied with something that cheers you up removes the severity of pain.”

Sixteenth-century health care culture was not indifferent at all to pain, as surgery textbooks, remedy collections, and recipes all attest. Giovanni Battista della Porta listed in his *Magia Naturalis* a series of sleep-inducing plants and recipes explaining that such remedies “are in high esteem among physicians, because with them they can soothe many pains.” These were mandrake, already described by Dioscorides, poppy seeds, and a special essence gained by mixing together poppy, opium, mandrake and hemlock juice into a device called

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576 Avicenna, *Canon*, p. 234 (1.4.5.30).
“little lead basket (*plumbeis vasculis*),” which had to be placed under the nose of the patient or the sufferer.\(^{577}\) Surgeon Tarduccio Salvi da Macerata devoted several chapters of his vernacular surgery book to painkillers. Standard ingredients were: “seasoned olive oil, almond oil, egg yolk; milk, fatty butter, chicken fat, rabbit fat, duck fat, and similar things.”\(^{578}\) Other resources were the “stupefacients, which had a nature cold and dry in the fourth degree, and were used to induce sleep when pain became extreme; because when a great pain has neither been eased by removing its cause nor by the anodyne medicaments, then we are forced to use stupefacients.” There were strict conditions for this use: the patient had to have his “able virtue (*valida*)” in the whole body as well as in the affected part, he had to be purged, and the medicaments had to be of very modest quantity. Ingredients for the common stupefacient were poppy seeds and leaves, “the condensed juice of poppy, which is called opium,” mandragora (both roots and leaves), hemlock, etc.\(^{579}\) Standard remedies in the sixteenth century included oil of roses, egg’s white, several other kinds of oils, lettuce, cabbage, turpentine (pine distilled raisin), and warm baths. Dalla Croce systematized the whole matter of painkillers. Painkillers could be of three kinds: anodyne medicaments (the above mentioned oils and local agents and ointments); medicaments that acted on the cause of pain and change the altered balance of humors (pharmacy and diet); medicaments which made the hurting part dull or insensitive. If the cause of pain was occult, or hidden, Della Croce suggested phlebotomy. As all medieval and Renaissance surgeons did, he finally


\(^{579}\) Ibid., pp. 155-56.
warned that “narcotic medicaments” – mostly compounds with opium – had to be used only in extreme cases of absolute necessity, since they could prove to be lethal.\textsuperscript{580}

Pain treatment was directed mostly at post-operative states and not at the actual surgical procedure. Physician Elideo Padoani’s collection of cases, published in Frankfurt in 1607 but compiled in the mid-sixteenth century, included a telling example. Padoani narrated that he extracted one arrow from the hand of a patient and then prescribed a series of recipes and a plaster to help his patient cope with the pain, but no mention is made of techniques to ease the pain during the procedure itself.\textsuperscript{581}

COGNITIVE INNOVATION

Besides the historicizing attitude described above, I have indentified three other models according to which surgical pain entered the discourse of surgeons and acted as a mediator in the doctor-patient relationship which are specific of the sixteenth century:


\textsuperscript{581} Elideo Padoani, \textit{Processus, Curationes et Consilia in curandis particularibus morbis, quae prosperos habuerunt eventus ... Medicinae Candidatis in praxi cum sequentibus communicata} (Leipzig: Nicholas Nerlicht, 1607), pp. 308-10. Licensed empirics provide another way to understand how widespread was the culture of pain relief, and how important it was for patients, well beyond official medical written culture. I mention just one letter, written in 1613 by a professional actor to the College of Bologna, a Joseppho Scarpetta, perhaps a mountebank performing in the piazzas. Scarpetta was petitioning to obtain an official license to sell “an oil called Balm by him, which has been given to him by a learned man in Paris, which is a wonderfully excellent remedy for all kind of pains, and which has been administered to several people, who were all freed from pain … Therefore, he wishes to obtaining a licence from your Most Illustrious Lords, as you have given to others; and asks that no one but him and his heirs can administer this balm.” As the letter made clear, this was not an isolated case, and Joseppho had prepared and sold his balm for a long time. He even attached a “certification of a cure (\textit{fede di guarigone})” prepared by one of his patients. See ASB, Assunteria di Studio, 100 [pages are not numbered].
cognitive use of pain; pain as seen by barber-surgeons; and pain as a subject for professors of secrets and empiric surgeons.

The Bolognese physician and professor of surgery Bartolomeo Maggi (1477-1552) exemplifies what can be called a cognitive use of pain as a marker of innovation. In his 1552 book on gunshot wounds, Maggi corrected the widespread view according to which harquebus balls were poisoned or heated, thus burning the flesh. In doing so, he advanced two claims. First, the pain felt by patients came from the bruises and lacerations caused by the bullet, not by its inherent heat. Maggi came to this conclusion by making use of his patients’ accounts, gathered on the battlefield. “I did not hear from any of the many wounded soldiers in the siege of Mirandola [a city nearby Modena where he was serving as military surgeon] any complains about suffering burning of a feeling of heat when injured by harquebus, but rather they all said that they were feeling a sense of heaviness, like that coming from a severe bruise.” Maggi went on replying to an anticipated objection: critics might counter that – following Hippocrates’ aphorism that of two pains, only the stronger is perceived – the stronger pain caused by the bruise silenced the less acute pain caused by the burning. Maggi replied that since the two pains were felt in the same place, the burning sensation should have been perceived before the second one kicked in: but this was not the case.

582 Bartolomeo Maggi, De vulnerum, a bombardarum, & sclopetorum globulis illatorum, & de eorum symptomatum curatone, & medicamenta ipsis ulceribus curandis idonea [1552], in De sclopettorum et tormentariorum vulnerum natura, et curatone, libri IIII (Venice: apud Guglielmum Valgrisium, 1566), fol. 2v: “Principio nullum audivi, (licet quamplurimos in Mirandulensi obsidione perconctatus fuerim) cui a bombardicis, seu sclopetaritis globulis, ictus infixus fuerit, qui in ipso ictu, caliditatem se percepisse, dixerit, sed contusionem quondam, perinde ac si trabs aliqua, vel ruina ingens, in se ictum fecisset.” This book is a collection of short treatises on gunshot wounds circulating independently in the middle of the sixteenth century by Maggi, Francesco Rota, Alfonso Ferri, and Leonardo Botallo, and signals the novelty of, and the growing interest for, the treatment in question. On Maggi’s life and work see Giulio Gentili, La vita e l’opera di Bartolomeo Maggi (1516-1552) (Bologna: Università di Bologna, 1967).
Secondly, Maggi combined his patients’ narratives with an experiment. He explained that if you fired a bullet with an harquebus to a highly inflammable substance hanging from a tree (like straw or wool), this substance would not be set on fire, as it should have according to the Aristotelian theory of heat. Moreover, there were no signs of burning on the clothes and armor of the people who were shot.\

Ambroise Paré’s famous 1575 discourse on gunshot wounds narrated the events of his first experience with these injuries when he was serving as a war surgeon in Piedmont in 1536. Paré recalled that at that point he had only read about such wounds in Giovanni Da Vigo’s (c. 1450-1517) manual, which taught that there was poison in the cuts, due to the poisonous nature of gunpowder. Da Vigo recommended cauterizing such wounds with oil of elder and theriac. Paré noticed that other surgeons did the same with boiling oil, causing “extreme pain to patients.” One day he found himself short of oil on the battlefield, and he simply put oil of roses, eggs, and turpentine on the wound. Greatly fearing that the patient would die poisoned, the morning after Paré rushed to his bedside and, to his great surprise, he found the patient “feeling very little pain, with neither inflammation nor tumor.” After having repeated the procedure on several other patients with the same successful outcomes, he concluded: “From that moment I decided not to burn anymore those poor men injured by shots of harquebus in such a cruel way.” In Paré’s case, inflicting less pain to patients was both a sign and an outcome of progress and technical innovation.\

Sixteenth-century surgery books are filled with similar examples of how minimizing pain accompanied technological innovation. Famous French empiric surgeon Pierre Franco

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583 Maggi, *De vulnerum*, fol. 2v-3r. On the lack of incorporation of patients’ pain narratives in scholastic medicine see Fernando Salmon, "From Patient to Text? Narratives of Pain and Madness in Medical Scholasticism," in *Between Text and Patient*, pp. 373-95.

584 Maggi, *De vulnerum*, fol. 3v-5r.

(1505-1578) described a method of his invention for extracting bladder stones. Surgeons had to make an incision close to the peritoneum, and insert a silver cannula into the penis to push the stone towards the bladder and the open cut. Franco then suggested the use of a “gorgeret,” a hollow and pointed tube. Surgeons would insert the extraction forceps through the cut into the gorgeret; the forceps then would grab the stone, which had to be extracted “with the greatest dexterity.” The extraction forceps and the hollow tube were new inventions. Franco proudly described their action as much less painful, as it had the effect of keeping the incision small-sized.586

Another similar meaning of pain in surgical procedures can be inferred from the passages concerning a sort of modulated use of pain. Pain could be a guide for the progress of the procedure. Military surgeon Crasso, when treating the setting of the bones broken by firearms, described a procedure involving the help of two “ministries” holding the patient. He considered surgical pain as a guide for the success of the operation: “Once you are done lightly bandaging the sick part, it is necessary to make sure that the part keeps still until the bone is consolidated and repaired; and if the patient feels pain, you will know for sure that the bone is not well repaired yet, or that some pointed fragment causes an alteration. The sign of the bone being repaired is the absence of pain.”587 Pain could be a sort of plastic matter to mold and use for cognitive purposes concerning the outcome of the whole procedure.

In his Latin book on “tumors,” the learned Giulio Cesare Aranzi devoted four chapters (on polyps, ozenae, warts, and herpes) to tumors affecting the nose. In the chapter on nose polyps Aranzi claimed that, historically, more pain than relief had come from surgeons and


587 Crasso, Diario empirico, fol. 5r-v: “Finito ch’havrai di legare leggiernemente il luogo offeso con qualche fascia, bisogna che non si muova, ma che stia fermo, & riposato perfino alla consolidatione, & fermezza dell’osso: Et, se il paziente, stando in questa maniera, sentisse dolore, in tal caso sarai certo, o che l’osso non sia ancora ben riposto, o che per qualche fragmento acuto proceda tale alterazione. Il segno, che l’osso sia ben riposto … è, che sia levato il dolore.”
physicians. In fact, the internal parts of the nose were very sensitive and likely to feel pain when invasive remedies such as red hot cauteries were employed. Paul of Aegina had suggested the use of scalpels when it came down to manual operations, but scalpels “easily injury the healthy parts, and most seriously so, if the patient moves.” Aranzi boasted the invention of a special instrument for nose polyps: “for this reason, as a long practice has taught me, I have invented an oblong forceps, which erases the majority of the polyps with very light pain.”

Interestingly enough, Fabrici d’Acquapendente too claimed to have invented a new instrument for treating nose polyps. This was supposed to be one single instrument which did all the procedures (cutting, extracting, cleaning the remnants, and cicatrizing) on the polyp in one single step, “with no pain, quickly, and safely: and with positive outcome, while, on the contrary, the tools described by the ancients make the operation slow, painful, dangerous, and only sometimes successful.”

Less pain, more effectiveness: innovation was measured against the minimization of surgical pain.

THE VIEW OF THE BARBER-SURGEON

Pietro Paolo Magni’s vernacular manual of phlebotomy (1584) provides an example of the barber-surgeons’ view on pain. Magni’s book showed a great deal of attention to minimizing pain in cutting veins and to reassuring frightened patients, much more than his learned Latin-writing counterparts. Contrary to medieval writers on bloodletting, Magni addressed the issue of its inherent painfulness (fig. 6.6). The barber-surgeon treated Roman

588 Aranzi, De tumoribus, p. 172.

589 Acquapendente, L’opere, p. 217.

cardinals and noblemen, and thus, writing from a much lower social standing than his patients, he was very respectful and eager to put into practice the Galenic prescription of performing painless, swift, and safe procedures. For example, when evaluating the tools of the trade – lancets – and making suggestions to the apprentice barber-surgeons, he argued that the lancets had to be “very well sharpened, so that they do not inflict too much pain on patients.” Bandages had to be soft “so that they do not cause pain.” Barber-surgeons always needed to have some oil at hand, to anoint the veins: “oil has the property of being a lenitive … barbers should dip in it a piece of cloth and then they should put it on the cut, so that they will not let the patient feel pain at all.”

In a chapter devoted to suggestions on how to cut the veins of “frightened and pusillanimous” men, Magni told the story of a man who was supposed to be the epitome of virility but fainted only at hearing the barber mention bloodletting. Another case involving a soldier had more explicit implications.

[In 1558] I was called to bleed an ensign-bearer at the hosteria del sole al paradiso … and while I was tying the band around his arm, he was taken by the strongest syncope [here it means fainting] I have ever seen, and indeed I had told him many times to lie down on the bed, but he had replied me that he was a soldier, and that he was not afraid of harquebus shots, so bloodletting was nothing for him. But to cut it short: he was taken by this syncope and suddenly fell down, making awful grimaces with the eyes and the mouth, and water, wine, or vinegar in his wrists were not nearly enough to calm him … [he then stood for a while quite still, as if dead] There were in attendance two nephews of him, who were knights, and at this sight they threatened

short books and pamphlets on phlebotomy written by learned physicians and surgeons usually are commentaries on Galen and Avicenna’s De sanguinis missionis opinions, closer to scholastic discussion than to pain management manuals.

591 Magni, Discorsi, p. 8.

592 Ibid., p. 9.

me saying: you killed our uncle, we will bring you to court; but in that moment God decided to wake up the ensign-bearer.  

Magni noted that “even if some people claim that only pusillanimous men can be taken by such syncope, in my opinion they are wrong: I have seen several strong men (valenti uomini) be taken by a syncope during bloodletting, and the same thing I have seen happening to men much experienced in war affairs and who overcome many tests in their lives.”  

Fear and painfulness of surgical operations were not moral issues, but physical ones. In other cases, Magni suggested that the barber-surgeon simply trick his patients whenever he realized that they were too afraid and at risk of fainting. He told the case of a patient who was angry because a few barbers had tried to bleed him with no success, since he did not want them to use the lancet. Magni recounted that “in a very friendly manner” he told the patient that he had no intention to use the lancet, but he only wanted to check his arm. In order for the patient to believe him, he gave him his case containing the lancets and said: “you see? I don’t have any intention to bleed you, and without these tools I couldn’t, even if I wanted to.” At this point, the patient relaxed and showed the barber-surgeon his arm, and the operator, who had a small lancet hidden in his robe, all of a sudden made the incision without the patient having the time to notice it.  

Ambroise Paré described similar tricks, for example is a case of cauterization of a “phlegmon” (a hardened swelling) with a red hot iron (1572). “There are patients who are so afraid of having their phlegmon opened that they run away at the mere sight of it, and they greatly fear the pain: they will kick and move, hiding the part in question, and the incision

594 Magni, Discorsi, p. 11.
595 Ibid., pp. 11-12.
596 Ibid., p. 13.
cannot be made in the necessarily precise way.\textsuperscript{597} To this, Paré’s reaction was to fool the patients. He claimed that the surgeon had to trick the patient by covering the point of the lancet, hiding the lancet with a poultice, and then suddenly making the incision without leaving the patient time to react. “Another way of fooling the patient is this: let the Surgeon wear a ring, on which he must have placed a little lancet, suitable to make the incision of the aposteme.”\textsuperscript{598} Just like Paré, barber-surgeons did not judge patients; they simply reassured them, and tried to figure out methods for minimizing pain, strengthening their physical forces, and occasionally overcoming their fear with a few tricks.

Barber-surgeons’ books usually present another striking tendency: a form of naturalism.\textsuperscript{599} They generally considered the human body as part of a cosmological conception of nature, in touch with other life forms. Human bodies were endowed with an innate power of self-healing that practitioners had simply to support through bloodletting and the purgation of the flow of bad humors traveling in the blood. For example, Salvi’s definition of phlebotomy reads as follows: “a universal evacuation of the whole body, and of all humors, made through the cutting of a vein: indeed, it evacuates blood, choler, phlegm, and melancholy from all the veins of the human body.” Moreover, it was a method of evacuation and purgation which was safer than oral remedies, because it was entirely in the physician’s hands to draw bad blood and to let good blood stay – while with oral drugs “we

\textsuperscript{597} Paré, \textit{Oeuvres}, vol. 1, pp. 333-34.

\textsuperscript{598} Ibid., p. 334

\textsuperscript{599} Besides Magni’s, the other early modern famous manuals for barber-surgeons were published by Tarduccio Salvi da Macerata in 1613, by Tiberio Malfi in 1628 and by Cinthio D’Amato in 1669. For the sake of diachronic consistency, I will discuss briefly some of the aspects of Savi’s and Malfi’s books.
do not have the same grasp on humors.” There followed a brief anatomical description of the principal veins of the body, originating in the liver and carrying nourishment.

And here is how Salvi represented the origins of phlebotomy – in much the same way that ancient naturalists like Pliny and Lucretius had narrated the discovery of grafting (fig. 6.7). “Naturalists say that the inventor of phlebotomy was the hippo, an animal that lives on the Nile river, as big as a Frisian horse, of both earthly and aquatic nature; when it feels heavy for the excessive quantity of blood in its body, it goes into a reed bed or a similar place and under the push of a natural instinct he cuts its veins and lets blood out until it feels better; then the hippo finds out some mud and patches up its wounds.” There was no doubt: the author of phlebotomy was nature “which operates through the expulsive virtue.” In the second place, it was the barber-surgeon, operating with the proper tools as an assistant to nature. “To those who deny that such operation is made by nature, this can be proved through the senses with an experience (sensatamente con l’esperienza): if you open the vein of a dead body, it is impossible to draw the blood, because in a dead body there is no expulsive virtue.”

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601 “The vein is a conduct, or a vessel, round-shaped, coming from the liver: its substance is rather nervous, not very sensitive, and included into the spermatic parts: it contains blood and spirit, but more blood than spirit. Its task is to carry the blood to nourish the parts of the body, nutrition which in turns comes from the liver. Veins have just one tunic, which is composed by three kinds of threads: the straight ones, which run along the length of the vein; the oblique ones, which run obliquely; and the circular ones, which go about in circles. Straight threads attracted the blood and other humors; oblique threads retained it, so that it did not go down or up, more than what is needed to nourish the body; circular threads expelled unwanted humors and substances. See Ibid., p. 3.

602 Ibid., p. 4: “Dicono i naturali, che l’inventore della phlebotomia è stato l’Hippopotamo animale, che habita presso il fiume Nilo, di grandezza simile a qualsivoglia Cavallo di Frisia, & è di terrestre, & acquatica natura, il quale, quando si sente aggravato dalla copia del sangue, va in un canneto o cosa simile, e per istinto di natura si ferisce la vena, e ne lassa uscir tanto sangue, fin che si senta sgravato: poi trova la belletta, o fango, & ivi si imbelletta, si stagna, e serra le ferita della vena.”

603 Ibid.
Malfi’s *Il barbiere* shows how the care of barber-surgeons for managing pain, anxiety and fear became a true art, and the focus of close attention at the beginning of the seventeenth century. Malfi engaged in a detailed anatomical description of nerves and muscles, which the barber-surgeon had to learn to recognize from the very start, unless he wanted to cripple his patients. It seems like patients were aware that barber-surgeons could commit such dreadful errors: “sometimes we see a patient who fears and trembles, even if he is someone who in other circumstances would be so brave to face a thousand swords and spears; but when he needs to face such an accident [that might happen during phlebotomy] he is terrified. Therefore, sometimes these patients expose themselves to the risk of being perpetually impaired.”

In this passage an otherwise brave patient is terrified by the idea of being impaired during bloodletting, and there is no moral judgment whatsoever towards him, but comprehension instead.

Letting blood was a difficult and dangerous operation. The main senses involved were sight and touch. Through them, the barber had to figure out what was the individual complexion of his patients and in a way to visualize the body as it would appear “under the skin,” said Malfi. The barber-surgeon even compared bloodletting with sharp razors and lancets to sculpture in that both arts did not allow for errors: if the artisan made one mistake he could not correct it, in marble as well as in man. Therefore, barber-surgeons needed to master a perfect knowledge of the dangers they had to face. “Properly speaking, and only under the respect of the materiality of the body, opening up the veins is contrary to nature,

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604 Malfi, *Nuova prattica*, p. 76: “Che però, vedesi talvolta temere, e tremare il suggetto, ancorche per altro volentieri ne starebbe egli fra mille spade, e mille lance, con intrepido cuore; sol che di non incorrere in uno di si fatti accidenti, par che naturalmente dubiti, e s’atterrisca. Onde gli occorra, che per star migliore, si ponga a periglio di starne per sempre manco, e storpiato.”

605 Ibid., p. 79.

606 Ibid., pp. 79-80.
because it divides and separates that which nature has joined. And this is signaled by the fact that all men abhor and try to escape it: both for the above mentioned reason, and because it causes pain, since it is a solution of continuity, which always causes pain.” If someone would claim not to have felt pain during bloodletting, he could not be trusted, since that was impossible, and could only be a false impression caused by a light hand, the numbness of sensation, or “the power of distraction given by the patient’s imagination which blocks the painful sensation.” 607

Syncope was discussed at length as well. According to Malfi, there were four reasons for the syncope (fainting) or “appearance of death (sembianza della Morte):” the loss of too many spirits, pain, abundance of choleric humors, or fear. With respect to fear, Malfi stated that: “fear is a very frequent cause in pusillanimous patients, who believe bloodletting is a terrible thing … In such cases, one has to behave in the following way: he must change the patient’s fear by knowing his pusillanimity, because it only comes from the patient’s imagination. Therefore, one has to address the patient’s imagination with all that can serve to divert it, such as persuading him that bloodletting is an easy procedure, that the phlebotomist is skilled and experienced; and besides, one must let the patient believe that some kind of occult property of an herb or a stone can strengthen his heart and block all fears … but the main faculty is the imaginative, which can alter everything and turn a man upside down.” 608

Malfi insisted on the power of the mind and to induce the right thought and distract the

607 Ibid., p. 81.
608 Ibid., pp. 136-37: “Il timore veramente è cagione frequentissima ne’ pusillanimi, che apprendono per terribil cosa la sagnia … Il modo poi da notarsi in simili occorrenze sarà; quanto al timore, conoscendo la persona di colui per pusillanimità mutarsi; perché dalla sola immaginatione viene il male; ella sola similmente attendasi con altra contraria a divertire, come di persuadere, che’l salasso sia cosa assai facile, e che colui, che l’essercita avveduto, esparto, e destro ne sia; & oltre a ciò dando a credere al paziente, che per virtù oculta d’herba, o di pietra, quali forza ottengono di corroborare il cuore, facil cosa sia impedire ogni timore, … ma la virtù è nella immaginativa, che alterna, e volge l’huomo tutto.”
patients’ attention away from pain through a thoughtful and skilled manipulation of their imagination.

“The remedy for pain will be this: if you see that the person is very delicate, and soft (molto delicata, e molle), you can anticipate some troubles, and thus you must adapt your ingenuity in order to be light-handed (s’adatti l’ingegno ad essere di mano sollevata), and cut as little as possible. And if by any chance to the insistent pain follows fainting, you must all at once comfort the patient with good smells, and ease the pain with water, oil, and warm wine, at the same time making frictions, and cleaning up the offended part.”609 As far as the “resolution of the spirits” is concerned, “one must let the man lay down and put some spirituous wine in his mouth, or soak some bread in wine, and even more so if the patient has a fever; one must soak the bread in water of roses and then in the wine … I praise the good wine above all, as it is approved by the Salernitan school and Arnaldo [of Vilanova] the commentator … I do comfort patients with these things and then I make the incision on the vein, an incision which must be small and narrow. I am not even talking about spraying water on the face, smelling vinegar and odorous essences, making ligatures at the extremities, pulling hair and ears, since everyone knows about them”610

Barber-surgeons had to become experts of the human mind, all for the sake of managing fear and pain.

609 Ibid., pp. 137-38.

610 Ibid., p. 138: “facciasi stare l’huomo coricato, e mettasi in bocca un pochetto di vino spiritoso, o in questo bagnate alcune fette di pane brustolato, e quando pure l’infermo tenesse febre; intingasi prima il pane nell’acqua rosa, e poi nel vino … Io più di tutti do lode al buon vino, lo che approva la Scuola Salernitana, & il commentator Arnaldo … Con queste cose confortato il paziente facciasi l’apertura della vena, ma picciola e stretta. Io non dico qui (per rivocare li diffusi spiriti) gli spruzzamenti dell’acqua in faccia, o sia pura, o nanfa, gli odoramenti dell’aceto, e delle specie odorose, non le ligature delle parti estreme, non i tiramenti de’ capelli, e dell’orecchie; perché son cose a tutti note, e usate.”
THE VIEW OF THE PROFESSOR OF SECRETS

Leonardo Fioravanti can be taken as the example of the empiric surgeon and the “professor of secrets.” In general, he was highly skeptical about learned surgery, and he often rhetorically exalted natural remedies learned from the wisdom of nature herself as opposed to the complex, painful, and technologically advanced procedures of graduate surgeons. In his 1570 Cirugia, Fioravanti bitterly criticized the trephination of the skull, used as a treatment for fractures, by describing it as too “artificial.” He wrote that he could not understand which reasons physicians could adduce to justify their treatment of skull fractures, which consisted in cutting and dilating the bones of the head. “But I mostly marvel – he added – at how the wounded patients let themselves be tortured without any plausible reason.” Patients should rebel against the pain learned surgeons uselessly inflicted on them. Fioravanti was arguing for a treatment of the wounds of the skull which was based on ointments and application of external remedies – of his invention and sold by him, of course. Elsewhere, he pushed his arguments so far as to criticize one of the secret tenets of sixteenth-century learned medicine: the key value of anatomy for surgeons.

Instead of learning so much anatomy, we would do better by learning agriculture, to treat surgical conditions more easily and in a simpler manner, without tormenting the patient ... I am astonished by the fact that all the Princes of the world let their subjects earn such an art, which is so noxious to human bodies. But I am much more astonished at the men of the world, who, when they are wounded or suffer some kind of injury, let themselves be treated by those who always want to use anatomy, as if nature would have no power to heal ... because for patients it is much better to have the right remedies than to let their wound be observed in detail: for this reason, the former [the caring surgeon] comforts and the latter [the anatomically-skilled learned surgeon] tortures; the former heals, the latter kills. 612

611 Fioravanti, Cirugia, fol. 12r-12v: “ma molto più mi maraviglio, di quei, che son feriti, che si lasciano così tormentare senza alcuna ragione che sia probabile.”

Nature is a self-healing process which the surgeon’s art must second, while learned surgery inflicts unnecessary pain by focusing on solid organs.

MEN’S PAIN, WOMEN’S PAIN

Although not all sixteenth-century surgery books mentioned the idea, it was generally understood that different bodies felt pain differently. Dalla Croce remarked that surgeons had to be quick and minimize pain in treating and bandaging wounds “and much more so when their patient is noble and delicate.” In another passage, while the Venetian surgeon was discussing the conditions that needed to be observed in order to evaluate the possibility of an operation on the skull, he listed as the sixth of these circumstances “age, sex, and way of life or the patient.” And he went on: “children’s bones are less resistant than those of the older and more robust men; women’s bones, or those of the timid, are less resistant than those of the valorous men; less resistant are the bones of a delicate body which is used to live among comforts of all sorts than those of the sailor, the peasant, the soldier, or another man used to live under the sun.” Clearly there was the idea that noble bodies, bodies of women, children, and of people who did not work were more sensitive and delicate than the bodies of those who worked with their hands and of those who were hardened by the training and practice of the military arts.

The gender division between men and women operating in Tagliacozzi’s book referred much more to the conceptual oppositions analyzed in chapters 3 and 4 (natural vs. artificial, medicine vs. cosmetics) than to gendered norms of expression of pain or to different

613 Dalla Croce, Cirugia universale, fol. 11r.
614 Ibid., fol. 8v.
ways of moralizing male and female pain. In a patriarchal society in which issues of inheritance were crucial, male medical writers writing on women were much less interested in the ways they behaved when in pain than in questions revolving around the physiology of birth and the functions of the organs of generation. Overall, in Renaissance surgical literature – and despite the fact that Seneca had thought that the experience of childbirth predisposed women to a greater tolerance of pain – there is little to be found on how men and women perceived pain. It was widely understood that the inferior quality of women’s complexion, leaning towards the cold and moist, could make them more sensitive to painful sensations. However, there were exceptions.

Let us take as an example the 1567 book on honor by the Sicilian humanist lawyer, trained at Bologna, Girolamo Camerata da Randazzo. Camerata summarized all the reasons why men were considered superior to women in medical, theological, and moral terms.

615 The only case of a female patient who underwent Tagliacozzi’s treatment in the literature of the time, discussed in chapter 1, can be found in Hildanus.


But Camerata had a much more nuanced view on these matters. He said that one could discuss the matter in two ways: according to what there is, or according to what there could be. There was no doubt that men were better than women “if we refer to the present (parlando dello stato presente).” Not that there were not excellent women, but they were rare.\textsuperscript{621} However, with respect to “possibility (quello che potria essere),” we could not be certain. Camerata thus invited readers to take a look at male and female complexions, since “the body is an instrument of the soul; therefore when the body has a good complexion and is well organized, the soul operates more or less perfectly.”\textsuperscript{622} Camerata considered the complexions of man and woman to be part of the human species, the “most perfect” one. Qualities had degrees, and saying that women were cold and moist was not an absolute but a relative assessment, compared to men’s complexion. This meant that in a way women were closer to the mean temperament – the Golden Mean – than men: “and therefore we could conclude that women have a better complexion than men.”\textsuperscript{623}

With respect to enduring physical pain and effort though, Camerata had to agree that man’s body “because of its dryness is more apt to tolerate hardness and stronger, and because of its greater heat is braver and more audacious … ready to take action, and better for the most active endeavours.”\textsuperscript{624} In this respect, man was superior to woman, since he was more

\textsuperscript{619} Camerata’s life is not well known. He was active at the court of the Spanish courts of Naples and Madrid, and dedicated the section on men’s and women’s honor to Ana Mendoza de Silva (1540-1592), princess of Eboli.

\textsuperscript{620} For the whole discussion, see Girolamo Camerata da Randazzo, Trattato dell’honor vero et del vero dishonore (Bologna: per Alessandro Benacci, 1567), fol. 10v-14r.

\textsuperscript{621} Ibid., fol. 14r-15r.

\textsuperscript{622} Ibid., fol. 15r-v: “il corpo è instrumento dell’anima; onde quando il corpo è ben complessionato, & organizzato tanto opera l’anima più, o meno perfettamente.”

\textsuperscript{623} Ibid., fol. 16v: “e perciò potremmo concludere, la Donna essere temperata rispetto all’Huomo.”
apt to military affairs, to commerce, and to those letters which were finalized to actions. On the other hand, women were “more stable, more honest, more healthy, and with a longer lifespan.” Women were not as inclined as men to active practices but still somehow inclined to them, and able to learn all the intellectual disciplines: “on the contrary, they are superior to men in learning the letters and busy themselves in contemplative things; because if all our cognitions come from the senses, since they are closer to the perfectly temperate complexion, they have a better tempered sense; therefore, their intellect too is more perfect.” To sum it up: women were better in letters and contemplative sciences; men were better at war, commerce, and practical sciences.

Despite such exceptions – partial exceptions, because even Camerata had to admit that men were more apt then women to endure physical distress – it is clear that in the surgical literature women were considered less capable of enduring pain and were not even expected to do so. On this point, a binary behavioral division emerged.

The tradition of barber-surgeons’ manuals was once again the most explicit on the topic of gendered endurance to pain. Pietro Paolo Magni claimed that it could happen that bloodletting procedures failed because the veins on the feet were too difficult to find, or because “the assistant who holds the foot lets it go when he hears the cries and scream of the

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624 Ibid., fol. 17r: “per la siccità più atto alle fatiche, e più forte, & per la calidità più audace e animoso … presto nelle attioni, & atto molto alle cose attive.”

625 Ibid., fol. 17r-v: “più stabili, più honeste, più sane, atta ad haver più lunga vita … anzi, esse sono superiori a gli Huomini nel poter imparare lettere, & attendere alle contemplative; perciòché se ogni nostra cognizione viene dal senso, & per essere elle più vicine alla temperatura hanno ben anco senso più temperato; seguita che l’intelletto loro sia anco più perfetto.” Camerata also mentioned a “Gentil Donna” in Bologna who studied not only poetry but also the philosophy of Aristotle in all its branches.

626 Surgical conditions such as bladder stones were considered to affect mostly men, and the procedure of extraction was much more complex and painful in men than in women, but this was for physiological and anatomical reasons, not moral.
patient, who being most of the times a woman, is naturally timid and weak (*timida e frullosa*). Here Magni was much harsher than with his male patients: “I have to say that [in such cases of weak female patients] I do not wonder at the poor work of the barber, but at the ignorance and foolishness (*balordaggine*) of the patient: and I would say that they deserve to have been crippled, and the barber must be punished too”.

In the middle of seventeenth century, famous Neapolitan barber-surgeon Cinthio D’Amato wrote that if the patient was a woman, “you would do better to you take care of her lower parts, given that the uterus is the main cause of a syncope which she might suffer: for this reason it will be a very good remedy to fumigate her nose with stinky, dirty things.” This was a remnant of ancient practices based on the conception of the mobile uterus. “It will be wise neither to talk about blood or bloodletting in their presence, nor to let them see the blood, because they are so pusillanimous that these discourses would induce terror in the patient, and from terror comes the syncope.” So, women were pusillanimous. It was implicit that men who behaved like women were pusillanimous too, but that was never stated, and D’Amato spoke clearly of moral defect and cowardice only when he talked about female patients, an attitude which is very similar to Magni’s. The Milanese learned surgeon Gabriele Ferrara (1543-1627) suggested in his 1596 collection of secrets and medicaments not to let women and children be around male patients when performing surgery. In fact, their expressions, cries, and gestures of fear and horror could discourage the patient and compromise the outcome of the surgical procedure.

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627 Magni, *Discorsi*, fol. 64r.

628 Ibid.

Esther Cohen has shown that some Renaissance physicians believed that female pain *par excellence*, labor pain, had its own code of expression. While the *Trotula* collection was silent on the matter, all medieval and Renaissance midwifery textbooks had recipes for hastening birth and easing postpartum pain. However, they did not address childbirth pain as such. In any case, male surgeons writing on women’s health and birth process were not indifferent at all to labor pain. As François Rousset (1535-1590), the physician of the Duchy of Savoy, wrote in his *Traité nouveau de l’hysterotomotokie* (1581): “I have been led to do this [to write a book on the matter of childbirth] by the pitiful sight of the agonies, helplessness, prayers, and pitiful looks of those poor creatures who are so tortured, and cry murder, as they appeal only to us, begging with clasped hands for such help as we may be able to give them. For it is in this more than in any other calamity that the greatest women suffer everything.”

It seems that the reason was neither masculine callousness to feminine pain, nor some reminder of Eve’s burden, but rather that uterine contraction and pain were considered one and the same thing, and therefore easing childbirth pain would compromise the whole process – at least those were the ideas of the fifteenth century eminent physician Michele Savonarola (1385-1468).

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630 Gabriele Ferrara, *Nova selva di cirugia* (Venice: per Bartolomeo carampello, 1596), fol. 12r-13r.


632 While the subject of labor pains was avoided by medical texts, other sources examined by Cohen suggest precise reasons to prescribe a specific pain behavior. In 1490 Saragoza, the childbirth of the noblewoman Isabel de la Cavalleria was recorded in minute detail by a notary and several witnesses for inheritance reasons. In this case, pain was often mentioned and had a crucial function: that of testifying that the childbirth was not a fraud and was actually taking place. These lay persons considered pain as the inevitable and involuntary mark of childbirth. Indeed, the idea that crying and screaming in labor was a required part of the delivery can be evinced by a sixteenth-century case of a German woman reported for “not having acted during her labor as she should.” The norm, Cohen argues, was crying out.
The 1563 vernacular manual on women’s illnesses by Giovanni Marinello (d. 1585) implies that women must cry out their pain in childbirth: “So we require that women, feeling the most acute pain, do cry: because this behavior brings great relief to such pain.” However, it is hard to find a real, uniform norm on the subject of childbirth pain. This norm, if it was a norm, was not universally accepted. Some texts suggested that women restrain themselves. French physician Jean Liebaut (1535-1596) wrote in his popular gynecological and obstetrical vernacular book, first published in 1582, that a good midwife “will tell her [the laboring woman] to hold her breath, and to restrain herself as far as possible, and instead of shouting to block her nose and close her mouth.” Likewise, Scipione Mercurio in 1596 explained that different women suffer through childbirth pain in different ways, and mentioned the capacity to hold breath for a long period of time among the conditions for a less painful delivery. In this period, doctors and surgeons also took up stories of “primitive” women in the New World or the Near East who, unaccustomed to the luxury of the European lifestyle and fortified by their more natural way of living, could give birth almost with no pain.

Women who did not follow the script were suspected of misbehavior or of faking the delivery and, in any case, they would not receive all the sympathy they wanted. See Cohen, *The Modulated Scream*, pp. 102-03 and 131-33.


634 Jean Liebaut, *Trois livres appartenant aux infirmitez et maladies des femmes* [1582], in *Pregnancy and Childbirth in Early Modern France*, p. 119.


636 Liebaut, *Trois livres*, in *Pregnancy and Childbirth in Early Modern France*, p. 124, note 194. Childbirth pain could make an impression in the lay male observer as well. I have found a trace of that left in the diary (libro dei ricordi) of the patrician Gozzadini family of Bologna. One Camillo Gozzadini narrated how he came to name one of his male children
Helen King, taking up a suggestion by Nicole Loraux, has noticed that, in the Greek language, the work *ponos* meant a kind of pain “that cannot be treated because it was seen as a necessary part of the process.” She underlined that there is an analogy linking together labor in childbirth and pain at war to defend the State – an analogy that reverberated through the early modern period. Screaming for pain was more than acceptable as a female behavior, and therefore the opposite of a male behavior, especially if the men in question were upper-class heirs of the chivalric tradition. The field of reactions to pain, and not pain itself, was the field of gender construction.

THE ROLE OF PAIN MANAGEMENT

In his analysis of early modern medical practice in England, Andrew Wear has described three functions of surgical pain. Pain was a matter of negotiation between surgeons and patients; a diagnostic sign; and a practical concern to be integrated in the surgeons’ operations and handy work. Despite the institutional differences between London, Bologna, Giovanni Battista. In October 1584 his wife Lodovica gave birth to a boy “whom I have named Gio. Battista, both to honor my father who had this name, and because when she [my wife] was tormented by such serious pain I have been won over by compassion and piety in seeing her in such trouble and even risking her life (al quale ho posto nome Gio. Battista, si per rinovare mio Padre, che havea questo nome, come perché trovandosi lei, aggravata da estremi dolori vinto io da compassione, et pietà, in vederla stare in tanta pena, non senza pericolo della vita).” See BAB, Gozzadini, Documenti 2, 1, fol. 126r.


639 Andrew Wear, *Knowledge and Practice in English Medicine, 1550-1680* (Cambridge: Cambridge University Press, 2000), pp. 241-48. Despite his alternative theory of diseases and the physiology of human bodies, Paracelsus never developed a deeper conception of pain than the one discussed in the Galenic tradition. The Swiss reformer of medicine, who used to define himself a surgeon more than a physician, avoided all knife surgery, put forward chemical remedies for all surgical conditions, was respectful of patients’ pain, and tried to
Paris, etc. I have identified these very same features in a variety of texts of Italian and French practitioners of the body, no matter their social and professional rank. Michael McVaugh has emphasized how in the fourteenth century Guy de Chauliac devoted a constant attention to minimizing pain. He also persuasively argued that in extremely dangerous and difficult operations, like hernia treatment, patients did not necessarily look for a permanent cure, but rather for a "minimization of their fear and pain" and "increasing control over the kind of operation – and of agony – that they would have to endure."\(^{640}\)

Indeed, the rate of success of past surgical operations must be evaluated as historically and socially determined, rather than against modern standards. Sixteenth-century surgery writers – in both Latin and vernacular, both university-trained and self-taught – had great respect for patients’ pain and were deeply concerned by the inherent painfulness of surgical procedures. Some of them associated pain control with epistemic and technological innovation, some others considered it a tool with which to attack competing professional categories; others believed that minimizing pain was as a sign of professional status. Inflicting too much pain was not simply the mark of the empiric as it was in late medieval Latin surgery literature. Being skilled in pain management was a shared value among the different kinds of practitioners of the body. Indeed, the empiric surgeon could accuse the learned surgeon of being cruel and inhuman, of inflicting torture-like treatment to patients for the sake of knowledge and prestige. In turn, the learned Latin-writing surgeon could accuse

the empiric of treating wounds, fractures and ulcers blindly, thus greatly damaging and hurting patients.\textsuperscript{641}

It is true that pain never became the object of explicit focus, being confined to in-passing remarks and marginal sub-paragraphs, at best implicitly present and indirectly readable between the lines of descriptions of surgical operations.\textsuperscript{642} But all surgery books I have examined agreed in considering painfulness, and emotional reactions to perceived and expected pain, both as something to take care of, and as a result of weakened bodies and unbalanced temperaments, much more than of faulty moral character or questionable masculine identity. Moreover, in the Galenic tradition pain was never a purely corporeal matter, as separate from what we would call “psychological” reactions and sensations.\textsuperscript{643}

Besides being a phenomenon of the body and of the soul, or the imagination, elements like patients’ social status, political opportunity, and the practitioner’s professional reputation

\textsuperscript{641} There is only one exception in which patients were blamed in moral terms. It was the case of the application of the so-called “actual cautery,” namely red-hot iron tools to induce cicatrization and stop the blood flow, and “potential cautery,” or the application of caustic topic remedies for the same purposes. In the sixteenth century, this distinction between forms of cauterization, and the relative blaming of patients who appeared to regularly choose the “wrong” one, had already become traditional. Indeed, in such cases, surgeons reported that patients did greatly favor the application of caustic remedies over red-hot iron, because they were afraid of the latter. Doctors thus blamed them for choosing the remedy which was, despite appearances, the most painful. But in this cases patients were blamed because they claimed they knew better than their healers. In other words, patients were guilty not of being cowards, but of not trusting the epistemic authority of surgeons – not because they were not men enough to tolerate pain. Many surgeons repeated this point for centuries. See for example Guy de Chauliac, \textit{Inventarium}, vol. 1, p. 414; Parè, \textit{Oeuvres}, vol. 2, p. 588.

\textsuperscript{642} The partial exception being the brief booklet of theoretical commentary on the authorities’ ideas and definitions of pain by Simone Porzio, \textit{De Dolore}, quoted above. I say partial exception because this is not a surgery booklet, but rather a learned commentary learned on Galen, Aristotle, and Avicenna; it could be called a book on the philosophy of pain.

\textsuperscript{643} This has been illustrated through a contrast to changes happening in the second half of the seventeenth century by Roberto Poma, “\textit{Dolorifica voluptas}: Pain and Pleasure in Early Modern Medicine,” presentation at the 2015 RSA meeting in Berlin, Humboldt University, March 27, 2015.
must be taken into account in order to paint an accurate picture of pain management in sixteenth-century surgery.

In Tagliacozzi’s monograph, pain as a matter of negotiation between patient and surgeon took a quite unique turn. This is not because *De curtorum* involved extra-medical factors, but because it played with such social and political factors in a different way. From the point of view of pain management, Tagliacozzi’s approach to surgery appears to be an exception that requires explanation.

**MORAL ECONOMY**

Surgery writers of the sixteenth century used to justify pain as an element in a delicate balance which had as a possible outcome death, or the impossibility to carry on a normal life. The general moral economy of pain between surgeons and patients implied a justification of severe pain only insofar as it was the only way to prevent death, or of removing the causes that made living a normal life impossible. Ambroise Paré explained very clearly the terms of the metaphorical – and often real – contract between surgeons and patients in the introduction to his complete works (1575).

To tell the truth – he wrote – surgical procedures cannot be performed without causing pain: indeed, how would it be possible to cut an arm, or a leg, or to make incisions on the neck of the bladder and put there several instruments without inflicting pain? In the same way, treating a luxation, when you have to push and pull a part that is already in pain; opening apostemes, cutting a tendon or a nerve which is already half-broken, suturing the flesh to join the edges of a wound, applying burning irons … and other procedures that cannot be accomplished without causing great and often extreme pain. However, without the surgeon’s help, people would die miserably. Is performing such operations enough to call surgeons cruel and inhuman, and to despise them?644

Durante Scacchi (1540-1620), the first author who in 1596 put on paper the century-long and well-respected empirical art of the norcini, also commented upon the pain-death

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balance while discussing the Hippocratic ban on cutting for bladder stones.\textsuperscript{645} The \textit{norcini} were highly specialized empiric surgeons who performed the most painful procedures such as bone-setting, treatment for hernias and stones, tooth extraction, and the cure of cataracts. They were well-respected practitioners and frequently hired as public servants and hospital surgeons from the fourteenth well into the eighteenth century.\textsuperscript{646} Scacchi suggested that patients had to be encouraged to bear pain with bravery and strength. A priest had then to administer the sacrament of confession, and finally their relatives had to be informed of the extreme danger of such an operation, “which is never certain, and often brings about death.” But if the stones were left in the bladder, he went on, one day they would close all the passages and the patient would die anyway. So “even if Hippocrates said that he would have never cut for the stone, it would be impious to leave patient with no help. Anything must be tried for the patient’s sake.”\textsuperscript{647} In other words, when the patient faced death or constant unbearable pain, any procedure that offered even a small chance of success could legitimately be tried, despite the pain and danger involved. The patient’s voice begging for a remedy entered Scacchi’s picture and justified the painfulness of the treatment: “The necessity of such a procedure is shown by the fact that people who suffer from stones often envy the dead, and say that they wish to die soon rather than live with such atrocious pain; for this reason the operator who successfully removes the stone can get much glory. Therefore, moved by their sense of charity and by the patients’ great suffering, these operators always invoke the help of

\textsuperscript{645} The passage is from the Hippocratic Oath and says: “I will not use the knife on sufferers from stone, but I will leave it such as are craftsmen therein;” quoted by de Moulin, \textit{A History of Surgery}, p. 6.


\textsuperscript{647} Durante Scacchi, \textit{Sussidio di medicina} (Venice: presso Francesco Rampazzetto, 1609), fol. 36v.
God, and carefully assess the age and strength of patients, the time of the year, the brightness of the day, the right place.”

The balance between bearing pain and living a relatively normal life is a more or less explicit and constant theme in the history of pre-modern surgery. Surgical patients shared with martyrs, anatomical models, and soldiers the fact that they could reveal some kind of truth by paying the price of being subject to violence needed to have their pain, fear, and endurance placed within meaningful contexts. Pain must have a meaning in order to be tolerable. The balance between death/impairment on the one hand, and pain on the other, had the function of legitimizing painful surgical procedures.

Against this background, the concept of “moral economy” advanced by E.P. Thompson becomes more than a metaphor. Gianna Pomata used this conceptual tool to

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648 Ibid., fol. 35v.

649 For example, a story told by the eleventh-century scholar al-Biruni about the great physician and surgeon Rhazes, well known in medieval and Renaissance Europe, went like this. Rhazes was becoming blind because of a growing cataract, and the best oculist of the times offered to treat him. After he had heard the description of the procedure, the great surgeon replied: “I acknowledge that you are the most learned of oculists. You know, however, that this operation is not without pain, which the soul loathes, and long-drawn-out discomfort which men find wearying. But perhaps [my] life may be cut short and the time of death may be near; and in that case it is repugnant to someone like myself at the end of his days to choose pain and discomfort over repose. So depart, with thanks for what you intended to do.” Quoted by Emilie Savage-Smith, “The Practice of Surgery in Islamic Lands: Myth and Reality,” Social History of Medicine 13, 2 (2000): 307–321, p. 320.

650 The connection of pain representations with martyrs, anatomical models, and soldiers in the sixteenth century has been made by Moscoso, Pain, 18-20; the cultural relationship of pain with religious, medical, and judicial truth has been stressed by Cohen, The Modulated Scream; on the affinities between martyrs and human dissection in medieval and Renaissance Italy see Katharine Park, “The Life of the Corpse: Division and Dissection in Late Medieval Europe,” Journal of the History of Medicine and Allied Sciences 50 (1995): 111–132.

651 Morris, The Culture of Pain, pp. 36-37.
show how the College of Medicine and the Protomedicato in Bologna were integral parts of the system of power of the old regime and of its mechanisms of legitimization based on “a set of reciprocal expectations between aristocracy and the common people, which E.P. Thompson called the ‘moral economy.’” The Protomedicato was in charge of establishing and enforcing a “moral economy of medicine” – or, better, of health – in that its role was to ensure a fair price and steady supply of medicines and treatments for the people. For such institutions, health was a gift to the people, instead of a citizen’s right. Collegiate physicians were with lower-class patients in a relation similar to that of the powerful aristocrat with the client: a vertical relation of dependence based on benevolence, Christian charity, and concession of favor.

Gaspare Tagliacozzi was part of the College of Physicians of Bologna, the most elite medical institution of the city, but he had come a long way. The encounter between surgeons and patients was mediated by violence: noblemen’s violence and the violence of surgical procedures. This question of violence relates to that of the relationships between men of different social rank. Violence must not be treated like the expression of a meta-historical,

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653 Pomata, Contracting a Cure, p. 93.

654 Ibid., p. 117.

655 The flourishing of duel and of treatises on duel in the sixteenth century have been used as a counter-argument to Elias’ thesis of the civilizing process and the decrease of violence in the early modern period. Jean-Claude Chesnais has divided violence into two sub-categories: “interpersonal,” including criminal violence and deviancy, both lethal and non-lethal; and
primitive, basic human impulse, but as part of systems of human relationships governed by rules and obeying to specific and historically determined contexts.

Noblemen were violent before and Tagliacozzi, and surgery was a learned discipline in Italy before and after that time as well. So, what happened in the late sixteenth century? Several sets of conditions came together in this period. On the one hand, it was a sort of paradoxical and short-lived golden age of noble culture. On the other hand, social mobility for learned surgeons like Aranzi, Tagliacozzi, and Cortesi, the chance they had to improve their wealth and status thanks to their studies and patients was a short-lived phenomenon, as seventeenth-century proofs of citizenship for admittance to the College of Medicine of Bologna show. In that century, these proofs obsessively focus on checking that candidates and their relatives did not work as “mechanici.”

It was in this precarious social and political scene that a book under many respects exceptional like De curtorum could come into being. In a period in which the Papal State tried

“collective,” including crimes against the State, State measures against the individual, and war. Stuart Carroll has welcomed the distinction, and claimed it has eliminated the difference between war and violence, one supposedly rational and the other irrational. Many historians have also opposed Elias’ longue-durée view and embraced a more historically specific approach to violence; others have emphasize the perspectival character of violence, which is dependent upon the kind of society it takes place in. Historians like Carroll and Dewald have criticized Elias’ theory on the birth of the modern self-restrained self according to which violence became less and less tolerated in the early modern period, as the state claimed its monopoly. Elias believed that knights channeled their competitive drives into the court, and that self-constraint became the center of the new ethos, while Carroll and Dewald registered an increase of violence in the same period and emphasized the existence of networks of negotiation and compromise between centralizing States and the noble classes which ultimately benefited both. See Jean-Claude Chesnais, Histoire de la violence de 1800 à nos jours (Paris: Laffont, 1980); Jonathan Davies, “Introduction,” in Id., ed. Aspects of Violence in Renaissance Europe (Farnham: Ashgate, 2013), pp. 1-15; Carroll, Blood and Violence, pp. 330-33.

See chapter 1. On the tightening up and verticalization of social hierarchies in health care and poor relief institutions during the seventeenth century see Gianna Pomata, “Medicine for the Poor in 18th and 19th Century Bologna,” in Ole Peter Grell, Andrew Cunningham, and Bernd Roeck, ed. Health Care and Poor Relief in 18th and 19th Century Southern Europe (Aldershot: Ashgate, 2005), pp. 229-49.
to centralize power and established its new beaurocratic authority at the cost of fighting against aristocratic privileges and codes of honor, Tagliacozzi had to face a delicate situation. He had “made it” thanks to State structures; but his best chance to really become wealthy came from violent, unruly, dueling noblemen. This was a common feature of sixteenth-century urban life and government. Surgeons and physicians served as military doctors, advisors for public health in times of plague, public lecturers, hospital officials. At the same time, they knew that they needed to build a good reputation among the noble class if they wanted both wealth and social prestige.

The moral economy of pain took a peculiar shape in facial reconstructive surgery precisely in the sense of preserving a legitimizing balance: that between the ultimate goal of the operation, and the pain that needed to be tolerated. In the facial reconstruction operation, patients were not in immediate danger, and could decide whether to undergo the procedure or not. This moral economy cut across all modern distinctions between the private and the public, between private feelings and public expressions. Subjecting themselves to painful “private” procedures to have their appearance restored could become for sixteenth-century upper class men a display of braveness and “public” honor. In turn, this balance included the sub-balance of three factors: (1) the ethical values of noble, ruling-class, male patients, and the mechanics of social distinction that marked them as a certain type of men. (2) The relationship between cosmetics, associated with women and condemned by Tagliacozzi in many passages of the book, and the restoration of men’s face, namely their identity and social honor. (3) The key importance of not looking like a monster and not bringing about horrified reactions for men involved in constant social gatherings and in taking political decisions. In a way, Tagliacozzi’s work looks like an attempt to bend the usual moral economy of pain of

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sixteenth century surgery, and to create a different “emotional community” or system of feelings among surgeons and patients.\textsuperscript{658}

Tagliacozzi often emphasized the socially mutilating nature of disfigurements related to missing noses: “But no one will deny that there is nothing more disgusting (foediore) than the sight of the nasal cavities gaping open and allowing the onlooker to see the unwelcome spectacle of mucus dripping forth.”\textsuperscript{659} It is significant that Tagliacozzi in another passage justified pain in surgery taking into account the moral economy of the social and political system he lived in, a system in which punishment, war, and even torture were necessary.

The State – he wrote – demands that evil or arrogant citizens be punished with the sword, the whip, the rope, banishment, and other tortures in order to preserve its dignity and safety. Likewise, in wartime, a soldier must endure hunger, thirst, heat, cold, and lack of sleep, and must value the well-being of his country more than his own life. Just as no great or memorable deed can be accomplished without danger or inconvenience, so no disease can be cured without the potential for harm or danger. Those who use a painful treatment to cure a cruel disease should be praised, not condemned, so long as they accomplish this end with the least possible pain for the patient, for it is indeed impossible to cause no pain at all.\textsuperscript{660}

Facial surgery was an element in a moral economy of pain within a moral economy of medicine, within a moral economy of power. As noted by Joanna Bourke, pain performs ideological functions, and the content of pain, what counts as “being-in-pain,” is a political matter of “legitimation, inclusion, exclusion.”\textsuperscript{661} Bravely bearing pain was clearly a behavior

\textsuperscript{658} See Barbara H. Rosenwein, \textit{Generations of Feeling: A History of Emotions, 600-1700} (Cambridge: Cambridge University Press, 2016), pp. 3-10. Rosenwein defines such communities as groups of people sharing “norms concerning the emotions that they value and deplore and the modes of expressing them” (p. 3).

\textsuperscript{659} Tagliacozzi, \textit{De curtorum}, p. 107 (1:85).

\textsuperscript{660} Ibid., pp. 101-02 (1:80-81).
which functioned as one important element in the construction of masculinity in the sixteenth century. However, such element became part of surgical discourse only under specific circumstances in late Renaissance Bologna. The kind of man Tagliacozzi had in mind was neither the “mechanical man,” an artisan working with his hands to make a living, nor that of the soft and too much refined, effeminate and “slavish” courtier. The world of reconstructive surgery patients was a male world of differentiated forms of masculinity, populated by upper-class men competing for honor, for whom saving face literally meant saving their public appearance.

The man from the artisanal class who promised to restore their sense of selfhood needed to boost his authority by appealing to upper-class values of traditional masculinity. At the same time, he was confident that his role as public officer would grant him a sufficiently high moral standing facing noblemen, who were not always willing to be integrated into the political order. The decisive push for a physician to write an entire monograph on the surgical reconstruction of noses can be found at the local level, and it involves – combined with the fact that surgery was esteemed enough for a College physician to practice, and to write about – a complex politics of masculinity, a specific social context in which the upper class’ rituals fell under both admiration and suspicion, and a moral economy of pain which by far exceeded the boundaries of medicine.

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CHAPTER 7.

CONCLUSION: THE PLACE OF TAGLIACOZZI

Historians of plastic surgery tend to agree on the fact that such a monumental and innovative work as Tagliacozzi’s *De curtorum* remained virtually without any following until the late eighteenth century. Many scholars wrote that right after its publication the book had no favorable reception at all and was, in best case, forgotten, and, in the worst, ridiculed or rejected. Besides the argument based on the French disease that I examined in chapter 1, a variety of other scarcely plausible reasons have been put into play to explain this situation. As possible culprits the following phenomena have been mentioned: the paucity of copies of the book; the premature death of Tagliacozzi; and the opposition to aesthetic practices by the Counter-reformation Church. The problem is that Tagliacozzi and the other major Italian proponent of facial surgery and learned cosmetics were all well-established figures with no problem whatsoever with the Catholic Church.\(^\text{662}\) As for the argument that there were too few copies of the book, a quick research on World Cat proves it wrong. I will only recall that in 1597 a pirate edition of *De curtorum* was published in Florence, and another one in Frankfurt in 1598.\(^\text{663}\)

\(^{662}\) Right after his death and burial in the church of San Giovanni Battista, the body of Tagliacozzi was taken away from its tomb under suspicion of heresy and magic; the documents of the Inquisition are lost, but the surgeon’s body was placed again in its place by 1600, and therefore the investigation must have led nowhere. See Teach-Gnudi and Webster, *The Life and Times*, pp. 236-47.

At a closer look, it appears that Tagliacozzi’s book was not at all neglected by his contemporaries and immediate followers, but rather that it became the subject of a complex and fragmented reception. First, I will underline the deep resonances of reconstructive surgery and Tagliacozzi’s method in two important branches of seventeenth-century medical and natural philosophical culture: teratology and the debate around mechanism and empiricism. Reconstructive surgery struck some important chords concerning the epistemology and the ontology of the “age of the new.” Then I will show that in the seventeenth century this surgical method was present in two distinct kinds of medical writings, or “epistemic genres.” The first is that of collections of observationes, especially in the German-speaking lands; the second is the alchemical literature on sympathies and magnetism, especially in England. In this way, I am going to sketch a map of the geographic spread of the technique of reconstructive surgery between the fifteenth and the seventeenth centuries.

LICETI AND MONSTERS

While early modern European physicians and naturalists were notoriously highly fascinated by monsters, such creatures elicited curiosity and wonder only when they were confined to their own specific spaces in books, paintings, museum collections, or freakshows. Everyday monstrously disfigured faces would certainly cause horror.\textsuperscript{664} Horror and repugnance formed a mixed reaction in the beholder who happened to come across disfigured

people. The disfigured person was similar to a monster, but not quite like it, since its status was the product of injury or illness, and not of congenital defects or its belonging to a strange, exotic race (fig. 7.1).665

Fortunio Liceti (1577-1657) – polymath, antiquarian, physician, natural historian and natural philosopher – was one of the key figures of early modern teratology. Liceti had studied arts and medicine in Bologna, where he had met Tagliacozzi as a teacher; he then moved to Padua, where he became professor of theoretical medicine.666 His book on monsters was first published, without illustrations, in 1616; a second, beautifully illustrated edition came out in Venice in 1634. While Liceti is often credited as being one of the first thinkers who naturalized monsters, his legacy is more nuanced, since he never refrained from considering certain kinds of monsters as omens and signs of divine wrath, and never fully abandoned references to the intervention of demonic forces in the course of natural life. However, it is true that Liceti made a systematic effort to classify monsters and that he attempted to follow a rather naturalistic definition. According to Liceti, a monster was: “a being under heaven which provokes in the observer horror and astonishment by the incorrect form of its members, and is produced rarely, begotten, by virtue of a secondary plan of nature, as a result of some hitch in the causes of its origin … [monsters are] faults of nature when she does not proceed in the right way.”667 And he added: “It is in this [monstrous births]


667 Liceti, De monstrorum caussis (Padua: apud P. Frambottus, 1634), pp. 4-5. For example, Aldrovandi’s Monstrorum Historia – published and edited by Bartolomeo Ambrosini in 1642
that I see the convergence of both nature and art, because one or the other not being able to
make what they want, at least they make what they can.”\textsuperscript{668} Here one can notice the presence
of ideas of nature as an artist, and of monsters as products made with imperfect material.
These ideas were present in Tagliacozzi’s book as well, where he wrote that monsters
occurred when “there is too much or too little material; it resists the artificial manipulation or
is adversely affected by unaccustomed and strange humors, which hinder its inherent
perfection.”\textsuperscript{669} Yet another example of the ontological proximity of art and nature.

Liceti’s book made reference to grafting and monstrosities in plants and humans. He
made use of Tagliacozzi’s surgical procedure as a tool to clarify the status of monsters caused
by an excess of matter. While discussing the tenth cause of \textit{monstri excedenti}, which is some
kind of “violent consussion of the body of the mother,” Liceti described the case of a pair of
twins, “already formed,” who suffered from a blow to the pregnant woman’s body. The parts
of the bodies of the twins could be excoriated and coalesce through the union of blood –
acting as glue – in unnatural shapes (fig. 7.2). To illustrate this process of excoriation, blood
loss, and creation of monstrous forms, Liceti referred directly to Tagliacozzi’s procedure.\textsuperscript{670}
Facial reconstructive surgery was not relevant for Liceti as a technical procedure in itself, but
rather as an epistemological analogy which strengthened his explanation of the cause of
monsters, and it included the theme of grafting trees through analogies between blood and
skin, and between juices and bark. “While we were students in Bologna, we have seen several
times our master Tagliacozzi re-making human noses by excoriating the scars on the nose,

\textsuperscript{668} Liceti, \textit{De monstrorum}, p. 43.
\textsuperscript{669} Tagliacozzi, \textit{De curtorum}, p. 119 (2:3).
\textsuperscript{670} Liceti, \textit{De monstrorum}, p. 108.
and then attaching the skin of the arm to the face in the space of a few days. This can be seen even in trees when, once the bark has been removed from different parts and tied together, they are glued together through the action of the nourishing juices which flows through both parts. Liceti used his former teacher’s surgical procedure as an epistemological analogy to explain the ontological status of human monsters as preternatural entities. Monsters emerged through a blind assemblage of natural causes giving way to unprecedented and singular outcomes. The artificial gave way to the preternatural, expanding the realm of the natural and, paradoxically for an Aristotelian, strengthening the dangerous analogy between natural, or divine, and human artistry.

There is more. In his discussion of “monsters with a double nature” Liceti mentioned, again with reference to Tagliacozzi, the disturbing example of man-made monsters. These were either made unintentionally by poorly skilled empirics and barber-surgeons, or intentionally by the art of people seeking to make money with freak shows. The seventh cause of such monstri ancipiti consisted in “an imitation of nature’s faults by art, not without the help of nature (in arte peccata naturae imitante, ac non sine auxilio naturae operante).” This is a shadowing of one of the dark possibilities of the short-circuit of art and nature. Liceti could not fail to notice that “art can produce monsters.” Indeed, all the works of nature were carried on either by nature alone or with some kind of cooperation. There were cases “when art, if it is able to fashion some kind of monster, cannot help the workings of nature to this end: in fact, the origin of a monster properly depends upon nature. Indeed, the active action of the art can only apply itself to the natural things which are

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671 Ibid., pp. 108-09: “Vidimus enim saepe, dum Bononiae studiis operam navaremus, eximium praeceptorem Taliacotium nares hominum praecisas refecturum prius excoriare cicatrices nasi, deinde brachii partem decorticatam naso ad unionem coaptare, ac fuere ad plusculos dies. Quin & arborum variarum partes decorticatae, ac invicem ligatae coeunt in unum corpus glutine succi alimentaris ad eas partes ab utraque arboire defluentes.”

672 Ibid., p. 125.
passive: so monsters made with the cooperation of art are to be considered as natural products. Awe can observe another benefice of the art, or in some respect a misdeed, in plants: here, living monsters can be produced; even if farmers disagree on that, they can produce one single species starting from different trees through grafting and ligations, and in this way they obtain living beings which have a monstrous nature.” Once again, the reference to plant grafting brought to Liceti’s mind the memory of Tagliacozzi: “And then our most solicitous teacher Tagliacozzi suddenly comes to mind, who used to remake ears, lips, and noses who had been cut off by joining the excoriated parts of the arm to these parts; no matter the scar that had been brought about in those parts, he could not leave the connection in a monstrous shape, as it appears in his most eloquent book.”

Liceti used Tagliacozzi’s principle of grafting to illustrate the monstrous potential of the combination of human shapes, also alluding to artificially created monsters made through the human art of grafting. For example, Liceti reported a 1466 case of two boys in France who were struck by lightning and found attached together in one single body through their burning parts. Patients with burnings who were not treated properly could assume monstrous shapes too. And there were people who showed off monstrous humans for money.

673 Ibid., pp. 125-26: “quando ars, si aliqua est monstra effingere valens, hoc ipsum fine opera naturae praestare nequeat: immo vero quum origo monstrorum a natura praecipue pendeat. artis autem operatio sit solum applicare activa passivis naturalibus: iam physici muneris est monstra in viventium genere artis ministerio facta considerare. Porro artis beneficio, seu verius maleficio, viventia monstra effingi posse primum observamus in stirpibus; siquidem agricolae variarum arborum insitione, colligationeve, quo magis unitae stirpes specie invicem dissidente, eo ex iis coniunctis vivens monstrosam magis naturam obtinebit … Deinde vero in mentem subit solertissimum preceptorem Taliacotium per insitionem consuevisse curtas aures, & nares, curtaque labia curare, brachio primum partibus illis excoriatis coniuncto; quod poterat nullo negocio inducita cicatrice iis partibus, coniunctum reliquere in monstrosam effigiem: ut appareat ex eius disertissimo libello.”

674 Ibid., pp. 126-27. By the fifteenth century, in Italy parents of monstrous children regularly showed them for money. By 1531 such displays began to be officially licensed, and over the course of the sixteenth century references to licenses were to be found in France, England, and Germany as well. Early modern viewers of monsters could react with either pleasure or horror, depending on the circumstances. One can suppose that such shows were frequent.
The fact that Tagliacozzi was mentioned in this context tells us something more about his difficulties and uncertainties in conceptualizing his own surgical procedure, since dangerous associations could be established between grafting, monsters, and the dishonest arts of creating artificial deformities for showing them off in freak shows. Liceti always mentioned Tagliacozzi with the greatest respect, and he used his procedure as part of his epistemology of the preternatural. But it is also clear that Tagliacozzi was operating on the dangerously porous borders between art and nature, where human artists had to intervene if they did not want to leave nature alone producing monstrous faces, as well as strong feelings of horror in the beholder.

MECHANISM VS. EMPIRICISM

One of Tagliacozzi’s main concerns in writing a monograph on reconstructive surgery was to demonstrate that he was able to give the whole procedure a rational and normative scientific explanation. Tagliacozzi had to get rid of the association of the procedure with the empirics and the culture of secrets that surrounded it. This dichotomy between rational method and empirical practice resurfaced in the late seventeenth century, undergoing a deep conceptual shift. Grafting and reconstructive surgery were debated in a famous polemic between one of the champions of mechanical philosophy and the new microscopic anatomy, enough. Bolognese chronicler Francesco Ghiselli reported that in May 1594 “a 12-year old monster was brought to Bologna, short (at the level of a not to tall man’s knee), with a beautiful face, with one hand similar to a duck’s leg and the other flattened with only two fingers, the arms were like a tree’s branch, and he walked on his knees bringing his legs similar to a goat’s legs, and he used to carry more than 50 librre of weight in his mouth walking around a room, and those who wanted to see him had to pay 4 coins (Fu condotto in Bologna mostro di circa dodici anni piccolo alla ginocchia d’huomo, non grande, bello di faccia, mani l’una somigliante a piedi d’oca e l’altra per il mezzo appiattita con solamente due dita per ciascuna parte, e le braccia come tronchi d’arbori, giva con le ginocchia tirandosi dietro le gambe fatte a guisa di quelle di capra, che altrimenti non poteva, portava caminando per le stanze più di 50 librre di peso in bocca, e chi lo voleva vedere pagava sei quattrini).” See BUB 770, Ghiselli, Memorie, vol. XIX (1591-95), fol. 668; Daston and Park, Wonders, pp. 190-91.
Marcello Malpighi (1628-1694), and the defender not only of the Hippocratic-Galenic tradition but also of a clinical, observation-based, pragmatic approach to medicine, Giovanni Girolamo Sbaraglia (1641-1710). One of the points of disagreement between the two Bolognese professors was precisely their interpretation of Tagliacozzi’s work.

The Sbaraglia-Malpighi dispute, despite its origins in local academic and personal issues, gained European-wide visibility and at the same time both reflected and contributed to the most up-to-date debates on the new anatomy. Malpighi’s long reply to Sbaraglia’s criticism was a reflective work and it summarized the results of very intense decades of new anatomical research based on the principle of matter and motion, of filtration of the liquids, and on the microscopic observation of all beings, including animals and plants. Ever present throughout the whole work was the theme of nature’s uniformity and of its action in terms of mechanical devices or *artifici*.676

675 The first blow was Girolamo Sbaraglia, De recentiorum medicorum studio dissertatio epistolaris ad amicum (Parma: per Galeazzo Rosati, 1690). This pamphlet was intended to make an intervention within an already existing controversy involving a supposed opposition to a reform of the studio promoted by Malpighi at Bologna. Among other things that were going on between them, we should be aware that in 1659 Malpighi’s brother Bartolomeo had killed Sbaraglia’s brother Tommaso in a dispute over real estate between the two families. So it is clear enough that any reading of this polemic must be informed by the context of a longer dispute between the traditionalists and the neoterics in Bologna, which put at stake not only intellectual prestige, but real power in the city and in the university. For example, Malpighi was admitted to the College of Physicians only in 1691, after he had been appointed papal archiater of Innocent XII (ruled 1691-1700), thirty-eight years after graduation. Moreover, Malpighi was never appointed official anatomist for the public dissection, but he always taught “practical medicine” in Bologna. Historian Marta Cavazza has rightly argued that Malpighi has been too easily depicted as a hero of *libertas philosophandi* against the dark forces of scholastic obscurantism. On this controversy see Marta Cavazza, “The Uselessness of Anatomy: Mini and Sbaraglia versus Malpighi,” in Domenico Bertoloni Meli, ed. *Malpighi Anatomist and Physician* (Florence: Olschki, 1997), pp. 129-45; and Domenico Bertoloni Meli, *Mechanism, Experiment, Disease: Marcello Malpighi and Seventeenth-Century Anatomy* (Baltimore: Johns Hopkins University Press, 2011), pp. 307-30. On the history of the metaphor of the body as machine see the survey by Jessica Riskin, “Medical Knowledge: The Adventures of Mr. Machine with Morals,” in Carole Reeves, ed. *A Cultural History of the Human Body in the Age of Enlightenment* (London: Bloomsbury, 2014), pp. 73-91; and Domenico Bertoloni Meli, “Machines of the Body in the Seventeenth Century,” in *Early Modern Medicine*, pp. 91-116.
In his *Anatome plantarum* (1675), Malpighi had been keen on comparing the circulation of blood and the circulation of sap in plants (fig. 7.3). In the reply to Sbaraglia, Malpighi mentioned Tagliacozzi’s method as one of the examples of the usefulness of studying plant anatomy – strongly denied by Sbaraglia – since in this case the example of grafting lead to find a method for reconstructing human facial parts through surgery. He explained: “If the author requires some kind of advantage in terms of therapeutics from the examination of plant economy, he only has to look at grafting, and he will learn a method to heal wounds with no bandage and the mechanics of remaking the mutilated parts, which our own Tagliacozzi has explained so well making use of the analogy with grafting plants.”

Tagliacozzi’s procedure was not explained in mechanical terms, but it was listed in the same paragraph and it was included under the examples of animal-plants mechanistic analogy. In the following pages Malpighi explained the similarities of blood circulation and the passing of nourishment through the veins according to hydraulic principles, valves, etc. and referred specifically to the formations of swellings and inflated limbs.

Sbaraglia replied that such a procedure came not from observation of the anatomy of plants and scientific reasoning, but from mere experience, and therefore could not be accounted for as a mechanical philosopher would have. Malpighi’s opponent added three points against the idea that *curtorum chirurgia* actually derived from careful observation of plants, and argued there was a great difference between grafting plants and treating animal wounds: the material is different; the method of fixing the parts is different; and the essence

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678 Ibid., pp. 172-73.
of grafting is not comparable. At best, only an a posteriori justification could be given. The point is that Sbaraglia wanted to prove that such a procedure, as others, came not from observation of the anatomy of plants and scientific reasoning, but from blind chance and experience, and therefore could not be accounted for as Malpighi and the mechanical philosophers would have. In a way, Sbaraglia did not put into question the feasibility of facial reconstruction, but it denied it was based on rational mechanistic principles.

Reconstructive surgery could legitimately appear in one of the most advanced scientific debates of the late seventeenth century. Despite being on the “wrong” side of history, in underlying the contingency of the origins of the reconstructive method Sbaraglia proved the better epistemologist. On the other hand, the long-term role played by learned, anatomically-informed surgery in the demise of Galenic physiology and the rise of mechanism must be further investigated. Learned surgeons like Tagliacozzi, while struggling to place their work within a Galenic/Aristotelian physiological framework centered on humors and “vital heat,” contributed to shift the focus on solid organs and the

679 Giovanni Girolamo Sbaraglia, Oculorum et mentis vigiliae ad distinguendum studium anatomicum et adpraxin medicam diridendam (Bologna: typis P. M. Monti, 1704), pp. 196-201.

circulation of fluids through such solid organs. Moreover, learned surgery contributed to the collapse of the natural and artificial distinction which was thematized by mechanical philosophers and physicians. In this respect, it is no surprise that a mechanist like Malpighi would consider Tagliacozzi’s procedure with great interest.

**OBSERVATIONES AND SYMPATHETIC NOSES: EPISTEMIC GENRES**

In Gianna Pomata’s formulation, an “epistemic genre” is a structured and recognizable social and cultural convention for the transmission of cognitive content that can be used to trace historical changes in medical culture.681

Now, among the most fortunate genres of the early modern period we do not find the erudite, voluminous, humanistic monograph on one single surgical technique. Sixteenth and early seventeenth century European surgical works tended to be of four kinds, or sub-genres. They could be comprehensive textbooks; short treatises on one single case or procedure (often occasioned by a polemic among surgeons); brief technical manuals on particularly difficult procedures (like extracting stones and treating skull fractures), new injuries (like firearms wounds), or important techniques (such as bloodletting); and edited collections of observations and/or works.682 Tagliacozzi’s book was eccentric in that it was a hybrid: part erudite commentary, part humanistic natural-history-style treatise, part technical surgical book. Moreover, this hybrid was applied to one single surgical practice and not a general

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As we have seen, Tagliacozzi’s subject emerged as a unified topic, worthy of a book-length effort, from a series of dispersed cases circulating in the Renaissance. I argue that the unity he gave his topic broke down immediately thereafter, and the reconstructive procedure started circulating again in the form of cases, but within new epistemic genres.

By looking at the rising epistemic genres of curationes, observationes, consultationes, and consilia, one finds that reconstructive surgery of facial mutilations was often present in these works, which followed a peculiar distribution centered on northern Europe rather than in the more conservative Italian medical circles. Consequently, Tagliacozzi’s procedure was described in short paragraphs, rarely accompanied by new cases, and detached from the complex culture of the face that informed the Bolognese’s book. Early seventeenth century examples include: Consilia Medicinalia, cum Mixtim Praestantissimorum Italiae Medicorum, published in Frankfurt in 1605, collected and edited by Joseph Lautenbach, with consilia by Antonio Maria Venosti and Giulio Cesare Claudini from Bologna;683 Johannes Schenck von Grafenberg’s Observationum medicarum rariorum, published different parts in Frankfurt between 1594 and 1599 and reprinted many times, a well-received anthology of cases by a very famous and influential physician;684 the Observationum et curationum chirurgicarum by Fabricius Hildanus, published posthumously in Frankfurt in 1646 but collected between the late sixteenth- and the early seventeenth-century;685 Vincenzo Gosio’s Observationes, published in Turin in 1606 and later included by Albrecht Haller in his Bibliotheca

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683 Lautenbach, Consilia medicinalia, “Consilium 136. On remaking noses (De Naribus reficiendis).”

684 Schenck von Grafenberg, Observationum, “Observationes VIII-X.”

685 Von Hilden, Observationum, “Observatio XXXI: A cut off nose which has been restored (Nasus abscissus quomodo restitutus).”
Chirurgica; and Philippus Salmuth’s Observationum medicarum, published in Brunschvig in 1648, reporting a new case of a man who received a blow while fencing.\textsuperscript{686}

The second channel of the reception of reconstructive surgery is less easily identifiable as an epistemic genre, but nonetheless possessed a remarkable coherence. In the literature on alchemical, sympathetic, or magnetic medicine a story circulated of an “allo-graft,” a skin grafting procedure involving the nose from a donor, generally a nobleman “borrowing” the skin or the flesh from one of his slaves or servants. The story always ended with the death of the donor, which corresponded to the fall of the nobleman’s nose. Probably the origin of this late sixteenth-century story is a 1558 letter sent by Elisio Calenzio to his friend Orpianus after he had his nose restored by the Brancas in Tropea, reported in 1580 by Etienne Gourmelain in his Chirurgicae Artis. The letter included the following passage: “Branca, a man of genius and skill, has learnt to graft on noses (nares inserere) by either taking part of the arm or by borrowing one from a slave.”\textsuperscript{687} However, the most complete and entertaining story was written by the Flemish iatrochemist and moderate Paracelsian Jean-Baptiste Van Helmont in 1621.

This one experiment [i.e., the slave donor graft] of all others, cannot but be free from all suspect of imposture, and illusion of the Devil. A certain inhabitant of Bruxels, in a combat had his nose mowed off, addressed himself to Tagliacozzius a famous Chirurgeon, living at Bononia, that he might procure a new one; and when he feared the incision of his own arm, he hired a Porter [servant] to admit it, out of whose arm, having first given the reward agreed upon, at length he dig’d a new nose. About thirteenth months after his return to his own Contrey, on a sudden the ingrafted nose grew cold, putrified, and within a few days, dropt off. To those of his friends, that were curious in the exploration of the cause of this unexpected misfortune, it was discovered, that the Porter expired, neer about the same punctilio of time, wherein the

\textsuperscript{686} Philip Salmuth, Observationum medicarum (Brunschvig: sumptibus Göttfried Müller, 1648), Centuria II, p. 69.

\textsuperscript{687} Quoted by Corradi, “Dell’antica autoplastica,” p. 266. See also Delaporte, Figures of Medicine, p. 46.
nose grew frigid and cadaverous. There are at Bruxels, yet surviving, some of good repute, that were eyewitnesses of these occurrences. Is not this Magnetism of manifest affinity with mumy, whereby the nose, enjoying, by title and right of inoculation, a community of life, on a sudden mortified on the other side of the Alpes? I pray what is there in this Superstition? What of attent and exalted Imagination?

Van Helmont referred here to the concept of mumia, an alchemical idea which “guaranteed the connection, unity, and solidarity of the organic parts thanks to which the procedure is destined to succeed” by granting the mutual action of invisible forces and material particles at a distance. These ideas had developed from the debate on the “weapon salve,” “an ointment that supposedly cured wounds through magical sympathies after being applied not to the wound itself but to the weapon that had caused it.” Thomas Browne (1605-1682) used the concept of “magnetism” to explain this allo-graft of a nose in his Pseudodoxia epidemica, published in London in 1646. In general, unseen forces were also classified under the rubric of “sympathy,” as argued by Kenelm Digby (1603-1665), a botanist and a early member of the Royal Society, in his 1658 Late Discourse, whose 1661 Frankfurt edition was accompanied by a illustration of the sympathetic nose.

It is this story that gave later English writers outside of the medical profession, from Samuel Butler (1613-1680) to Joseph Addison (1672-1719), the occasion to heavily satirize

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689 Delaporte, Figures of Medicine, p. 47.


Tagliacozzi and reconstructive surgery in general. Significantly enough, natural philosophers engaged in experiments on animal grafting performed with dogs and cocks at the Royal Society in the years 1663 and 1664 did not mention Tagliacozzi at all. The story of the sympathetic nose traveled south of the Alps too. Tommaso Campanella (1568-1639) mentioned it as “the Magic of the Tropeans” in his 1620 De sensu rerum et magia, where he interpreted it on the basis of the theory of universal sympathies and antipathies he had found in Della Porta. The Rome-based Jesuit and polymath Athanasius Kircher (1602-1680), while repeating it with an abundance of details and the playful pleasure that he often displayed in his works, considered it a fake, good only for the vulgus, and believed that no communication at a distance was possible in surgery.

In this literature on nose allo-grafts Tagliacozzi’s procedure was not always reported correctly, and especially his insistence on grafting skin instead of flesh was ignored. Reconstructive surgery was practiced in Italy and beyond, from Padua to Naples to Madrid to Tropea (in Calabria), by empirical, workshop-trained surgeons, and not all of them respected the technical norms described by Tagliacozzi. It is also a fact that the language of marvels and wonders has constantly been associated with the procedure. For example, the

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692 On this satirical literature see Ibid., pp. 26-30; Teach-Gnudi and Webster, The Life and Times, pp. 297-302.


695 Athanasius Kircher, Magnes, sive de arte magnetica (Cologne: apud I. Kalcoven, 1643), pp. 333-34.

German traveler Johannes Heinrich Pflaumern (1585-1671) wrote about Bologna in a 1625 travel guide to Italy: “You will see a monument in honor of Tagliacozzi placed there when he was still alive. He excelled in a new method of healing: he replaced lacking lips, ears and noses so skillfully that his work was almost miraculous.”  

But the most important reason for the dissemination of this story in the regions in which iatrochemistry was most popular, is its connection with an alchemical and specifically Paracelsian imagery of cultivating artificial life and the myth of the homunculus. This imagery became popular especially in the first part of the seventeenth century, before being played down as dangerous and potentially associated with demonic forces by alchemists themselves in the second half of the century. It was indeed by the middle of the seventeenth century that satires on Tagliacozzi began to be written. Given that Tagliacozzi’s book was present in all major European libraries, I believe it was within this context that stories began to circulate with reference to the falling of the nose when the donor died. Probably Tagliacozzi’s work came to be considered an example of a tradition focused on rebirth and artificial life – dangerous or ridiculous fantasy of replicating or even improving upon nature’s creativity.

In the seventeenth century, Tagliacozzi’s procedure lost its coherence and became an element in different genres and other writers’ bricolage. The historical conditions under which facial reconstructive surgery emerged and attracted attention had changed.

I have explained the publication of a book like De cutorum in late sixteenth century Bologna by taking into the account several factors: (1) the political and ideological definitions of nobility; (2) the social mobility of surgeons and physicians; (3) the peculiar cultural

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697 Johann Heinrich von Pflaumern, Mercurius Italicus (Augsburg: typis Andreaa Aperger, 1625), p. 84.

698 See Newman, Promethean Ambitions, pp. 221-27.
dynamics of the history of the gendered face; (4) the appeal of marvelous horticultural practices; (5) and the Italian tradition of learned surgery.

I have argued that the publication of this book was something quite exceptional. The first book on reconstructive surgery of the face was inspired by the dissemination of information concerning one specific technique that spread from fifteenth century southern Italy to sixteenth century Imperial Spain, and, from there, to Bologna and Padua. At that point the technique solidified into a book. In turn, from the centers of learning and of the elaboration of nobility’s culture and ideology of northern Italy the description of the technique traveled north, to Switzerland and Germany, secondhand via the diffusion of genres of compilations of particulars and observations. The technique was also discussed/mentioned in Italian learned circles of physicians and natural philosophers’ writings on teratology, empiricism, and mechanism. Through the development of alchemy applied to the human body, it travelled to England, where it became an object of ridicule and, finally, of political disdain. In fact, from an early eighteenth-century perspective curtorum chirurgia was satirized as involving the exploitation of a “poor man” by a nobleman. The Enlightenment philosopher Voltaire (1694-1778) wrote in 1752:

Ainsi Talicotius,
grand Esculape d’Etrurie,
répara tous les nez perdus
par une nouvelle industrie:
il vous prenoit adroitement
un morceau du cul d’un pauvre homme,
l’appliquait au nez proprement;
enfin il arrivait qu’en somme,
tout juste à la mort du prêtre,
tombait le nez de l’emprunteur,
et souvent dans la meme bière,
par justice et par bon accord,
Throughout the early modern period, the technique was effectively applied very few times, but its scholarly power and its male gendering were passed on through time and space. Reconstructive surgery of the face remained mostly a male affair until well into the twentieth century, when it became an elective practice and got entangled with different contexts of selfhood gender and power.

Figure I. Tiburzio (or Bartolomeo?) Passarotti, *Portrait of Tagliacozzi* (date uncertain).
Figure II. Bartolomeo Passerotti, *Portrait of Ignazio Danti* (1576-1586).

Figure III. Lavinia Fontana, *Portrait of Girolamo Mercuriale* (1590).
Figure IV. Gaspare Tagliacozzi, *De curtorum chirurgia per insitionem* (1597): nose reconstruction.
Figure V. Gaspare Tagliacozzi, *De curtorum chirurgia per insitionem* (1597): a noseless patient in gentlemanly clothes.
Figure VI. Gaspare Tagliacozzi, *De curtorum chirurgia per insitionem* (1597): a “machina” or vest designed by Tagliacozzi.
Figure VII. Gaspare Tagliacozzi, *De curtorum chirurgia per insitionem* (1597): molds to reshape the nose after the operation.
Figure VIII. Gentlemen’s Magazine (1794): the “Indian method” for restoring noses, according to which the skin flap was taken from the forehead.
Figure 1.1. Ambroise Paré, *La methode curative des playes, et fractures de la teste humaine* (1561).
Figure 1.2. Giovanni Battista Cortesi, *Miscellaneorum medicalium* (1625): Cortesi included several illustrations copied from Tagliacozzi’s book in his work.

Figure 1.3. Luigi Luigini, *De morbo gallico* (1566): title page.
Figure 2.1. Gaspare Tagliacozzi, *Cronica di Bologna d’Autore Ignoto che comincia dal 404 e seguita sino al 1585. Portata dall’Idioma Latino In Italiano da Gasparo Tagliacozzi l’Anno 1594* (BUB 1413): “A girl born without an arm.”

Figure 2.2. Achille Morozzo, *Opera nova* (1550): the illustration shows the preparation for a duel, with a third party reading a cartel: the whole scene is framed by a typical fence.
Figure 2.3. Emblem of the Brotherhood and Hospital of Santa Maria della Morte: once on the façade of the hospital, now in the Collezione d’Arte e di Storia della Fondazione Cassa di Risparmio in Bologna. Photo by the author.

Figure 2.4. Giovanni Battista Cortesi, *Miscellaneorum medicalium* (1625): portrait of the author, detail from the title page.
Figure 2.5. Giovanni Battista Cortesi, *Pharmacopoeia, seu Antidotarium Messanense* (1629): title page.
Figure 3.1. Cesare Ripa, *Iconologia* (1603): icon of Beauty.
Figure 3.2. Giovanni Battista Della Porta, *De humana physiognomonia libri IIII* (1586): a lion-like man.

Figure 3.3. Archivio di Stato di Piacenza, Gridario, Tomo I: *fede di sanità* (health certificate), 16 March 1577: a Julio Persicho is authorized to access the city of Piacenza given that he is found to be healthy. No physical description is given of him.
Figure 3.4. Giulio Cesare Croce, *Lettera mandata da Narciso alli più belli, vaghi, e profumati Giovani di questa Città* (1590): detail of the booklet illustrating a classic chivalric scene.

Figure 3.5. Volcher Coiter, *Observationum anatomicarum chirurgicarumque miscellanea varia* (1570): table of the parts of the human nose
Figure 3.6. Bartolomeo Passerotti, *Portrait of a young man* (late sixteenth century), University of Newcastle, Hatton Gallery.
Figure 3.7. Bartolomeo Passerotti, *L'allegra compagnia* (late sixteenth century), private collection.
Figure 5.1. Jean de Tournes, *Insignum aliquot virorum icones* (1559): this portrait of Columella, imitating a classical Roman coin, testifies to his popularity in the sixteenth century.
Figure 5.2. Iustus Van Utens, *Villa medicea* (1599): the garden of one of the Medici country houses.

Figure 5.3. Pirro Ligorio, *The Holy Wood of Bomarzo* (1546): an exquisite example of the grotesque and of the hybridization of art and nature.
Figure 5.4. Giovanni Battista Della Porta, *Phytognomonica* (1588): the shape of the plants corresponds to human body parts and for this reason they can heal them when they are diseased. The doctrine of the cosmological correspondence between all the elements of the universe took the name of theory of signatures.
Figure 5.5. Ulisse Aldrovandi, *Dendrologiae naturalis* (1667): “in all the bodies of trees, just like in the bodies of other animals, there are skin, blood, flesh, nerves, veins, bones, bone marrow, etc.”
Figure 5.6. Ulisse Aldrovandi, *Dendrologiae naturalis* (1667): “The knotty bark of a tree which imitates the shape of a human mask.”
Figure 5.7. Arcimboldo, *Autunno* (1573). Paris, Musée du Louvre.
Figure 5.8. Agostino Gallo, *Le vinti giornate dell’agricoltura* (1570): tools for grafting.
Figure 5.9. Marco Bussato, *Il giardino di agricoltura* (1592): grafted plants with tools.
Figure 5.10. Leonardo Fioravanti, *La Cirugia* (1570): portrait of the author.

Figure 5.11. Portrait of Giovanni Battista Della Porta (1688).
Figure 5.12. Ulisse Aldrovandi, *Melon* (late sixteenth century), BUB, Fondo Aldrovandi, Tavole, vol. 3.
Figure 6.1. Giovanni Andrea dalla Croce, *Cirugia Universale e Perfetta* (1583): a battlefield surgeon and his assistant extract an arrow from a Christian knight’s chest. The knight remains impassible.
Figure 6.2. Antonio Gallonio, *Trattato degli instrumenti di martirio e delle varie maniere di martoriare* (1591).
Figure 6.3, Giovanni Andrea dalla Croce, *Cirugia Universale e Perfetta* (1583): a “Turk” shows all his suffering on the same battlefield shown in fig. 6.2. In the lower part of the illustration surgical instruments for extracting arrows and bullets are represented.
Figure 6.4. *Laocoon and his sons*: copy after an Hellenistic original from ca. 200 BCE, found in 1506.
Figure 6.5. Ambroise Paré, *Dix livres de chirurgie* (1564): two assistant holding a patient affected by a bladder stone.
Figure 6.6. Pietro Paolo Magni, *Discorsi intorno al sanguinar i corpi humani* (1584): the image shows a barber surgeon and his assistant who, under the supervision of a physician (the one with the long robe) perform a delicate phlebotomy from a vein located under the tongue of the patient.
Figure 6.7. Tarduccio Salvi da Macerata, *Il ministro del medico* (1613): an hippopotamus inventing phlebotomy.
Figure 7.1. Hartmann Schedel, *Nuremberg Chronicles* (1493): the noseless people.

Figure 7.2. Fortunio Liceti, *De caussis* (1634): monstrous twins.
Figure 7.3. Marcello Malpighi, *Anatome plantarum* (1676): section of the trunk of a tree as seen with a microscope.
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