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## The Labé Question: a New Stylometric Analysis

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by

Ryan Schmid

## A THESIS

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The Labé Question: a New Stylometric Analysis

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In 2006, a theory was put forward concerning sixteenth-century poet Louise Labé and her work- both her prose and her poetry. Mireille Huchon, in her 2006 study Louise Labé, une créature de papier, claims that Labé's work, and indeed a large part of her identity itself, was a fabrication invented by several poets of the 1500s. Huchon describes Labé as a "mystery" and an "enigma," noting the relatively scant biographical details that we know of Labé's life (Huchon, pp. 7-11). Perhaps needless to say, this claim stirred up a bit of controversy- many reacted negatively to Huchon's thesis, not only attacking the evidence that she put forward in support of her theory but also summarizing it as little more than a conspiracy theory. Michel Jourde writes,

C'est l'effet bien connu des argumentations qui s'emploient ainsi à défaire une «illusion» historique ou déjouer un «complot» jusque là inaperçu : leur adresser des objections devient impossible ou vain, puisque tout témoignage contradictoire n'est plus considéré pour sa valeur de témoignage, mais comme une simple participation au complot et à l'illusion. (Jourde, 299).

Some scholars, on the other hand, were more receptive to the idea, even calling it "irrefutable" (Fumaroli), or arguing that "Huchon quite convincingly demonstrates that Labé's works amount to a literary hoax perpetrated by a group of male poets based in Lyon" (Bourbon).

Why, after more than 17 years, has Huchon's thesis persisted? Why has this problem created so much controversy, with critics both praising and lambasting Huchon? Why has it been difficult to put a definitive end to the question of the identity of Louise Labé or the authorship of her works? This paper seeks to add to the discussion around Labé by analyzing the poetry of Labé and other sixteenth century authors discussed in Huchon's texts using computational methods, specifically using stylometry, the measuring of the style of individual authors' styles with programming.

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### CHAPTER 1: THE LABÉ QUESTION, AN INTRODUCTION

Part of the problem of previous analyses of Louise Labé's work is the fact that they are subjective- our belief whether or not La Belle Cordière, as she is often called, actually wrote the works attributed to her is reliant to a large degree on a trust in the authority of the person making the claim one way or another, unless we ourselves are experts in the same niche field. Normally this may not be a problem, but in the case of Louise Labé, the question concerns a group of authors who already possess unusually similar styles in writing, due to the simple fact that they belonged to the same creative circle.

Louise Labé was a member of the *école lyonnaise*, a group of poets living in Lyon during the sixteenth century, and one of the rare female poets of the Renaissance in France. Their poetry often included romantic themes, and was heavily inspired by classical poetry, as well as the poetry of other languages at the time, especially Italian-with authors noting the specific influence of Petrarch. Other members of the *école lyonnaise* are authors such as Maurice Scève, Guillaume Des Autels, Pernette Du Guillet, and Antoine Héroët. Labé's importance to the sixteenth century is due not only to the comparative rarity of feminine authors that we know of from this time period, but also to her style, especially in her poetry, as well as the relative mystery that surrounds her life.

The details concerning her later life and especially her popularity at the center of this circle of authors, and her exact relationships with them, are a matter of much discussion and debate. Even her own contemporaries had various opinions; though generally Louise Labé was a well respected author (with several poems devoted to her praise), there were some who were less kind, referring to her as a *plebeia meretrix* or

common whore. It should be noted that the same is true of all the authors inside the *école lyonnaise*. Biographical details are scarce for many of these writers, which raises the question of to what extent an absence of information can be used to assert a false identity for one person without implying the same for others inside the *école lyonnaise*. If one were to search for more details on many of these authors, one would be greeted by a scant amount of information.

What we do know begins with the city of Lyon, the center of the *école lyonnaise*. Described by contemporary authors as a location of incredible beauty, and the second eye of France, an understanding of Lyon is indispensable to understanding these authors themselves, and especially Labé. Huchon describes the publication of Labé's poetry as "indissociable de la ville de Lyon et du contexte poétique contemporain, l'année 1555 se manifestant comme une période exceptionnellement faste" (Huchon 15) Lyon is relatively close to Italy, which helped the spread of the Renaissance, especially considering that the city itself had a large population of Italian origin. It makes sense therefore that the poets in this circle would have been so influenced by Renaissance humanism; specifically, Italian poetry and poets such as Petrarch. Lyon had already been established as a cultural center before Labé and her contemporaries- and in fact some influences on the *école lyonnaise* itself, like Maurice Scève for example, come from earlier poetic genres such as emblematic and didactic poetry.

The Classical influences in the poetry from Lyon in the sixteenth century have sources as well: another separate group of poets formed in the years 1536 to 1538 called the *sodalitium lugdunense* began a sort of mini-renaissance of certain lesser known or forgotten poets. These included Italian authors such as Petrarch, but also classical authors

that had become neglected- authors such as Horace, Catullus, Propertius, and Ovid, the latter being especially interesting as an influence on later poets in Lyon, being an author known for his romantic poetry. (McFarlane).

This interest in the classics would soon be superseded by a new movement of poetry in French, led by the poets who lived in the city itself. Many think of La Pléiade as being the driving force behind French becoming a language equal to Latin or Greek, but the role of the preceding *école lyonnaise* in this should not be ignored, as many of them were publishing poetry in French several years before the arrival of authors such as Joachim du Bellay (1522-1560) or Jean-Antoine de Baïf (1532-1589). Maurice Scève is undoubtedly one of the most well-known of these poets, as well as one of the most prolific; nearly a decade before the coining of the term *Pléiade* by Ronsard, Scève published his *Délie*, and became a preeminent poet in Lyon, but he was far from alone.

Though we may know less about them today, these poets were well known in their time, and many, such as Maurice Scève, were prolific writers. This begs the following question; why might these authors have found the need to write under Labé's name at all, especially if they were already well-established authors? There are many possible answers to this question. For one, we can return to the content and style of Labé's poetry- her sonnets described love in a dramatic, ardent manner that may have been outside of what was socially acceptable at the time. Writing as Labé gave the male authors a sort of pass to use what language they pleased, without any consequences being able to affect them or their own names. Some have suggested that the poems have homosexual elements, and that these male poets wanted to write about such themes while being able to protect their reputations. One of the more pessimistic scenarios is the

simple idea that this cabal of sixteenth century poets wanted to create an inside joke, a ruse by taking a popular woman's (courtesan's?) name and writing under it- making her poetry popular while they knew that the truth of the matter was that they had made it all up.

The question of Labé's authorship over her twenty-four sonnets, three elegies, and two pieces of prose is actually not a recent one. Only Huchon's reasoning and evidence has put a different spin on it. In as far back as 1584, Pierre de Saint Julien attested that Le débat de folie et d'amour, one of Labé's works of prose, was written by Maurice Scève. In contemporary history, V.L. Saulnier questioned the authenticity of *Le débat* as well as other Labé texts, and most recently before Huchon, Keith Cameron questions the authorship of the texts in his 1990 monograph, Louise Labé: Renaissance Poet and Feminist. It could perhaps be hand waived that some of Labé's contemporaries might have wanted to discredit her due to her potentially being a courtesan and thus they may have felt the need to invent some lie about her not having written the poetry and prose she's attributed to. But to have the same questions about her work come forward from multiple independent sources hundreds of years apart perhaps demands a closer inspection to what is typically taken for granted. This is especially the case when considering the fact that many of these arguments aren't coming from people who are unfamiliar with French literature, but professors and scholars, some who have even studied Louise Labé specifically.

Many of Mireille Huchon's arguments for Louise Labé being a ruse is linked to cryptic wordplay and stylistical/thematic similarities between Labé's work and her contemporaries. On the one hand, much of her claims can seem to be stretches, dubious

even without a high level of scrutiny. Scholars such as Michel Jourde, researcher at the École normale supérieur de Lyon, claim to have disproven individual pieces of evidence of her theory. There are multiple aspects to the Louise Labé question that make it particularly difficult to find a definite answer to one way or the other. First, there is relatively less literature and scholarship on Louise Labé and the authors that are supposedly involved in this conspiracy. One may be able to find the texts that they have written, but beyond that, biographical details can be scarce, and some information may be unreliable or biased. To some degree therefore, every claim becomes more plausible because of the lack of sufficient information to disprove theories that would in other circumstances be immediately dismissed. However, this is naturally not sufficient enough alone for anyone to dismiss Huchon's claims- work must be done to address the evidence itself being put forward, and this of course has been done. Indeed, many have been far from subtle about their feelings towards the idea of a "fake Labé", many going as far as ridiculing the hypothesis entirely and attacking the manner in which Huchon presents her argument, saying that the logic itself is flawed.

The Labé question is difficult because one is ultimately making subjective qualitative judgements and comparisons between several different authors and dozens of texts. As humans, we have the capacity, after years of training and reading similar texts, to recognize different authors' styles. It wouldn't be difficult to distinguish between a paragraph written by Louise Labé from one written by Marcel Proust, for example. Not only would the structure of the sentences be different, unique to each author, but the orthography and vocabulary used would both be distinct enough to be a trivial question to someone who has read either of the two authors. The problem that we have in making

distinctions arises when the issue becomes more granular, such as in the case of Labé- the authors who have been purported to have written under Louise Labé's were her contemporaries, and many of them also belonged to the *école lyonnaise*, sharing many stylistic features- not only by the simple virtue of the authors having lived in the same time period, but also from having shared the same influences in their poetry, living in the same region, and likely also an influence from poetry within the *école lyonnaise*- it's possible that reading each other's poetry left a mark on each other individual's writing afterwards. Add on top of this the fact that they not only shared the same French culture but also lived within the same region in France, and wrote about similar themes in a structurally distinct style (typically the sonnet).

The final effect is these authors are much more similar to each other than what is usually the case. Even the trained eye may have trouble distinguishing any two authors within the group, even after years of reading Renaissance poetry. As far as analysis goes, the similarities between poets of the *école lyonnaise* makes any claims relating to authorship that much more difficult to sort out- it's simple to point out two poets such as Louise Labé and Maurice Scève and say that their poetry is much more similar, such a conclusion is obvious for the above reasons. The more interesting question, and also the reason behind why Labé's authorship is nebulous, and why Huchon's ideas have survived so long despite the relatively strong response against them, is whether or not their poetry is similar enough to indicate that Labé might not have written her sonnets and elegies, that it was in fact another author (or multiple other authors) that wrote under her name. This question is difficult to even approach- and requires a large amount of intuition which is ultimately subjective, and even if someone is sure of their own analysis, convincing

others is an entirely different task. How can you convince someone else about this sort of subject when you're likely drawing on years of experience working with these texts, experience they don't have? Ultimately, you can show them excerpts of text A and text B and show why you consider them similar enough to belong to the same author, but this can be essentially meaningless to them if they're not intimately familiar with the exact sort of texts that you're examining. This paper seeks to eliminate any sort of subjectivity in analyzing Labé's work by using computers to first parse the French of the 16th century into data, and then do an analysis using the resulting morphological and syntactical data. The result will be a product of objective numbers, with the added benefit that we can focus on data rather than rely on any sort of speculation. This can be accomplished by extracting morphological and syntactical features (such as gender, part of speech, person, number) in R using the "udpipe" package. This reads in text using a parser and then lists each token along with the features that it has. These features are then recombined into tuples and triples, and then the particular instances of each of these features, feature pairs, and feature triples are counted. This process is repeated for each text, and then the texts are compared to each other using clustering analysis. But before we turn to an objective study of Labé in the context of her larger literary circle, I will first situate the Labé question in the context of the arguments that have been made both in favor and against her identity, and will do a more subjective, "traditional" reading of some of her work and some of its most salient traits.

#### CHAPTER 2: LA CRÉATURE DE HUCHON

This chapter will present the major arguments made by Mireille Huchon in her two studies devoted to the Labé question: Louise Labé : Une Créature de Papier and Le Labérynthe, as well as some of the major critiques of her work. It will then look more closely at the problem of verifiability by looking at the claims of Huchon that are the most quantifiable- ideally specific individual words or phrases whose presence or absence can be easily detected in each text, or otherwise structural similarities that are difficult to disagree on. I'll start by providing some context about Maurice Scève – the writer most-commonly assumed (and notably, by Huchon) to have impersonated Labé. Several other authors will be examined as well, to give a broader picture of the sixteenth century and beyond, and to serve as "controls" for our computational analysis, namely: Charles Coypeau d'Assoucy, Charles Fontaine, Clément Marot, Joachim du Bellay, Jean Antoine de Baïf, Jean de La Fontaine, Madeleine des Roches, Marguerite de Navarre, Olivier de Magny, Pontus de Tyard, and Pierre de Ronsard. Some of the authors specifically chosen as "controls" include Ronsard, as a representative of the Pléiade, and Jean de La Fontaine, simply to have an author outside of the sixteenth century. I was curious to see if de La Fontaine might be especially dissimilar from the other authors, being from the 17th century. Authors were chosen on a basis of having a sufficient amount of modernized text to analyze, which is not always the case for poets of the sixteenth century. This chapter will provide close analysis of structural elements that Huchon examined in a broader context, looking at other authors in addition to just Labé and a few other members of the école lyonnaise, which can be considered to be a weakness of Huchon's argumentation.

Mireille Huchon is a preeminent scholar of the French Renaissance and an expert on Rabelais. In Mireille Huchon's first book on the subject, *Louise Labé: Une Créature de Papier*, Huchon puts forward her argument that the works of Louise Labé are a "supercherie littéraire" or literary hoax. Alongside naming Maurice Scève as a key player in this hoax, Huchon mentions Olivier de Magny, also included in this analysis, as a sixteenth century poet that authored poems under Labé's name, as well as Claude de Taillemont, specifically asserting that the latter wrote the now-famous proto-feminist preface to Labé's *Oeuvres*- the collection of the works of Louise Labé, including twenty-four sonnets, three elegies, and an *epître dédicatoire* where she calls women to new intellectual pursuits previously reserved for men.

Responses to Labé's claims were polarized and extreme, as we have already seen. In *Le Labérynthe*, Huchon doubles down on her arguments, bringing in additional pieces of evidence, other authors with pieces of Labé's *Oeuvres* that they allegedly wrote, and directly comparing poetry of authors such as Scève and Olivier de Magny with that of Labé.

Many of Huchon's claims are difficult to directly refute because they don't often deal with textual elements that are directly quantifiable- that is to say, they more often allude to supposed wordplay in the poetry of Labé and Scève. The most glaring of issues with Huchon's arguments is typically a lack of scope: she will often compare another poet of the sixteenth century with Labé, note how similar they are in some narrow aspect of their writing, and then continue with a different author and a different facet of their style. For example, on page 177 of *Le Labérynthe*, Huchon switches from comparisons

of the use of the word *mais* in Labé and Scève's poetry, to the use of the word αλλά in ancient Greek Sapphic verse, to a connection between Labé and Olivier de Magny using four lines of each's poetry, which ultimately seems to be only a semantic connection, in a text which is supposedly trying to illustrate to the reader a stylistic link between the authors. The result can be hard to follow, and leaves me echoing Nancy Frelick's question in her response to Huchon, "...is this labyrinthe not of Huchon's own making?" (Frelick, 12).

The reader can be at times forced to accept claims that something else is going on behind the scenes a priori, which has unsurprisingly caused consternation in reactions to her work on Labé. Nancy Frelick has written two articles that respond to each of Huchon's respective books. In her most recent, forthcoming piece, *Lost in the* Labérynthe: *Mythologizing Louise Labé and the école lyonnaise*, she writes the following:

"As we have seen, in her "Entrée," she attempts to lure readers into her *Labérynthe* by suggesting that she will reveal all sorts of secret complicities or collusions ("connivences") among the poets surrounding Labé. Even though only shadowy traces of such conspiracies remain, Huchon bids her readership to follow these spectres or phantasms ("ces fantômes") and to lift the veil on one of the most surprising adventures- or ghost stories- in literary history... Despite her assurances that- unlike the writings of Labé's poets- nothing in the following pages has been invented, much of Huchon's prose reads like a gossipy scandal sheet founded on little more than baseless rumours, hints, and whispers; it teems with oblique, peripheral, or tangential arguments, insinuations, and inuendo, rather than serious scholarship based on solid archival evidence or close textual readings. (Frelick, 12)

Conversely, others have praised Huchon's writing, describing it as "irrefutable", claiming that Huchon has gone against the grain of scholarly consensus to unearth a literary conspiracy:

"Sur cet arrière-fond d'élégie grecque et romaine, Mireille Huchon démontre que Louise Labé, la « Sappho françoise », est un « emploi féminin », inventé de toutes pièces par un groupe de poètes réuni autour de Maurice Scève, le Mallarmé lyonnais du XVI° siècle, capable tout comme le Racine de *Phèdre* ou le Mallarmé d'*Hérodiade* de travestir sa voix pour la prêter à une grande cantatrice fictive. La démonstration de Mireille Huchon est irréfutable et réjouissante, même si elle doit faire rentrer sous terre les exégètes et les biographes qui, depuis le XIX° siècle, ont pris au pied de la lettre un double jeu poétique « de haulte gresse » dont le sel attique leur a échappé." (Fumaroli)

I will attempt to reexamine here some of the specific stylistic comparisons in Huchon's writings. But before doing so, it is worth impressing that literary scholarship is, at least to some degree, a necessarily subjective endeavor. An amount of trust in the good faith of the author and their knowledge in the subject is required at all times. Enough has already been written in regards to Huchon's interpretations of Labé's figurative language, the social circumstances that surround Labé, and the wordplay inside and between the poetry of each author.

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Before considering any of these hypotheses, let us first consider the influence of the Petrarchan style on Labé's writing as we know it in her first sonnet. The connection is made clear in Labé's first sonnet, the only one of twenty-four total to be written in Italian instead of French:

Non havria Ulysse o qualunqu'atro mai Più accorto fu, da quel divino aspetto Pien di gratie, d'honor et di rispetto Sperato qual i' sento affanni e guai.

Pur, Amour, co I belgi occhi tu fatt'hai Tal piaga dentro al mio innocente petto, Di cibo et di calor già tuo ricetto, Che rimedio non v'è si tu n'el dai.

O sorte dura, che mi fa esser quale Punta d'un Scorpio, et domandar riparo Contr'el velen' dall'istesso animale.

Chieggo li sol' ancida questa noia, Non estingua el desir a me si caro, Che mancar non potrà ch'i' non mi muoia. (Labé, 172)

The similarities will be clear when Labé's sonnet is read together with one of Petrarch's:

Voi ch' ascoltate in rime sparse il suono di quei sospiri ond' io nudriva 'l core in sul mio primo giovenile errore, quand' era in parte altr' uom da quel ch' i' sono:

del vario stile in ch' io piango et ragiono fra le vane speranze e 'l van dolore, ove sia chi per prova intenda amore spero trovar pietà, non che perdono.

Ma ben veggio or sì come al popol tutto favola fui gran tempo, onde sovente di me medesmo meco mi vergogno;

et del mio vaneggiar vergogna è 'l frutto, e 'l'pentersi, e 'l conoscer chiaramente che quanto piace al mondo è breve sogno. (Petrarca, 37)

Even to a reader unfamiliar with either author, some of the structural similarities are immediately obvious. The petrarchan sonnet consists of an octave of eight lines plus a sestet of six. The rhyming scheme of the octave is typically ABBA ABBA while the

sestet could realize a variety of patterns- CDC DCD, CDE CDE, CDE DCE, etc. Both Petrarch and Labé have nearly the exact same pattern of rhyming, with the only difference being that Petrarch's sonnet ends with CDC EDE while Labé's sonnet ends in CDE CDE.

Louise Labé is well known for her sonnets, poems with expressions of love that were unique in their time, especially in the exceptionally emotional manner that these sentiments were described. Take one of Labé's most famous examples of this, her 18<sup>th</sup> sonnet:

Baise m'encor, rebaise-moi et baise, Donne-m'en un de tes plus savoureux, Donne-m'en un de tes plus amoureux, Je t'en rendrai quatre plus chauds que braise.

Las, te plains-tu? çà que ce mal j'apaise, En t'en donnant dix autres doucereux. Ainsi mêlant nos baisers tant heureux Jouissons-nous l'un de l'autre à notre aise.

Lors double vie à chacun en suivra. Chacun en soi et son ami vivra. Permets m'Amour penser quelque folie :

Toujours suis mal, vivant discrètement, Et ne me puis donner contentement, Si hors de moi ne fais quelque saillie.

Even simply taking the first half of the octet at face value, the words are quite salacious, describing not an emotional feeling of love, but one that is physical, after translating it myself, it looks like this-

Kiss me again, again kiss me, kiss, Give me one of your most delicious, Give me one of your most loving, I'll give you four more warm kisses in return;

Add onto this the ambiguity of the verb *baiser* (TLFi) during the Renaissance, when it could refer either to a kiss, or to sex. Professions of love and amorous feelings weren't unheard of at the time, and in fact Labé's colleagues wrote of the same themes, but Labé's descriptions such as these could oftentimes be physical, lustful even, without giving up the emotional aspect of romance. Part of what makes Labé interesting to modern scholars is her ability to weave in two themes with levels of ambiguity, encouraging different interpretations from the same reading.

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One of the authors to compare Labé with that comes the most immediately to mind is undoubtedly Maurice Scève. Described as "le premier et le plus grand" (McFarlane) of the writers in Lyon, he is certainly one of the most preeminent poets of the *école lyonnaise* alongside Labé. He is also of special interest as one of the only poets who wrote in homage to Louise Labé (Huchon, 15). Most crucially of all for our purposes, he is one of the premier "suspects" implicated in the Labé question. Indeed, he is the first poet mentioned by Huchon as having written in Labé's place. She points to Pierre de Sainct-Julien, a contemporary of Labé, who claimed that Maurice Scève was responsible for her *Débat de Folie et d'Amour* (Huchon, 141). Who is Maurice Scève, then, and how is he important within the context of poetry in Lyon and the Labé question?

The details surrounding the life of Maurice Scève (~1500-~1560) are not necessarily more clear than most other authors of the time. Born to an honorable family in Lyon, the eventual cultural center that he would help create, he remained nevertheless relatively unknown until the publication of his major work, the Délie. He was well educated, and in 1533 was evidently in Avignon where he was involved in the "discovery" of the tomb of Laure. He was embedded in the poetic circles in Lyon, especially the aforementioned sodalitium lugdunense - the poets who were especially focused on Latin and ancient Greek, and reviving interest in the Classics, who had been forgotten in their eyes. His first work was a translation of *Flamete* (1535), a text by the Spanish author Juan de Flores, a detail that shows already his interest in renewing literary languages. Indeed, this seems to have been a sort of theme in Lyon: after the sodalitium lugdunense explored the literature of the classics, the école lyonnaise and the Pléiade arrived to legitimize the use of vernacular French as a language worthy of literature. He wrote poetry for the tomb of the Dauphin of France, who died in 1536, titled Arion. He was an organizer of the royal entry into Lyon in 1548, and some paraphrases of psalms and lesser poems authored by him are known. He has two major works, the *Délie* (1544, 2nd ed., 1562) and the *Microcosme* (1562), published posthumously (McFarlane).

The *Délie* is likely to be the text that most scholars associate most readily with Maurice Scève. Many biographies of the poet can typically be split into before and after the *Délie* was published, and details surrounding and concerning the collection of dizains and his writing of it often dwarf the circumstances of his life before. Considered to be the first love cycle of the French Renaissance, despite having followed certain neo-Latin poets such as Salmon Macrin, Nicolas Bourbon and Jean Visagier; as well as Jean de Boysonné

who also wrote a collection of love poems. While these poets preceded Maurice Scève, he is considered to have solidified the genre on their foundation, and inspired by Petrarch, created a work that rivaled the poets of Italy. (McFarlane)

The cycle, besides containing several themes in opposition such as absence and presence, moon and sun, shadow and light, etc., shares many themes with the Petrarchan model, such as fear, solitude, jealousy. Classical themes haven't been completely forgotten either, but also integrated within the poetry, this time in the language of Frenchclassical mythology is a common theme, even the title itself, *Délie*, is reminiscent of the Roman goddess Diana. Where Scève shines is his integration of these texts into his own work, not imitating or citing in excess, but exploring these themes in his own way. The Latin poets that he evidently knew thoroughly are only seldom directly quoted in his work. Perhaps the most notable distinguishing detail of Scève's poetry is the aspect of it that is most immediately obvious- Scève doesn't use the sonnet, unlike Petrarch, and unlike Labé and the other members of the école lyonnaise. Instead in his Délie he wrote nearly 450 dizains, so-called because they contain ten lines instead of the fourteen of the sonnet that come from the combination of the first eight in the octet and the six that follow from the sestet. There are many possible reasons for this: it is possible that Scève was trying to distinguish himself from Petrarch or the other poets who had been influenced by the Italian poet. Because they all used the sonnet, the dizain was an easy way to distinguish himself. Perhaps his reasoning was slightly less intentional, and he simply found that the structure of the dizain lent itself better to his style of poetry. Or perhaps it was the fact that the sonnet had at that point been a less popular form of poetry at the time in France, and thus it was never really an option for him to choose from in the first place. (McFarlane)

Ultimately, Scève is of the utmost importance to this analysis not only because of his place as one of the greatest and most well-known poets of his time, but also because of Huchon's recent analyses, placing him as not only complicit, but a ringleader of the group of poets that impersonated Louise Labé. His choice of the dizain also immediately creates an interesting bit of contrast between himself and Labé- it is interesting to think that someone who had written hundreds upon hundreds of dizains might be able to create an entirely new voice while using the sonnet, which has a completely different structure. It's not entirely impossible, but it's hard to imagine someone publishing so much poetry with a single structure, refraining from using the sonnet until writing under the name of Labé in order to partake in an incredibly complex ruse.

#### Syllables and Wordplay

Huchon asserts that the syllables "con" and "com" found in Labé's work supposedly create a hidden vulgar link between her poetry and that of Maurice Scève's: "Le sonnet du luth de Louise Labé offre une surcharge intentionnelle des mots comportant la syllabe *con*. Le début évoque celui du dizain de Scève où les emplois de *concent* et de *comment* relèvent de sous-entendus qui, de même, suggèrent derrière le blason du luth, un blason du cul." (Huchon, *Le Labérynthe*, 181).

Can this pattern actually be seen in the poems of Labé and Scève? Before examining the writings of either author, it should be noted that Huchon has already made the question difficult, as she has included the word *comment* as a link between the two poets. The assertion that there can be a link between two authors in part because of such a common function word is difficult to take in as evidence. The word *comment* in French, an interrogative adverb meaning *how* in English, remains an incredibly common word both today, just as it was in the sixteenth century. Asserting that there is a link between French authors because they both use a word like *comment* is saying almost as little as saying that there is a relationship because they both use words such as *le* or *être*. Essentially, it doesn't amount to much more than the fact that both poets speak French.

But it is possible be more methodical, and examine both authors numerically, to see if there is anything unexpected with these syllables as Huchon asserts. Huchon lists several possible examples that she believes make up a part of this wordplay- "mon coeur/ con meur", "caleson/ sale con", "vous crotez les fons", "concent", "comment", etc. (Huchon, *Le Labérynthe*, 181) The simplest thing that can be done is to look for all instances of "con/com" in the texts of both authors and compare them to their peers.

Examining Labé shows that she uses such syllables across all of her sonnets in approximately 1.46 percent of her words, while Scève uses them in about 1.87 percent. This may seem like a very slight margin of difference between the two, until one begins examining other sixteenth-century authors- selections from Catherine des Roches and Pierre de Ronsard each show a frequency of 1.41 percent. Does this imply that these three authors all have writing styles very similar to each other? Does this mean that

there's another conspiracy that rests beyond simply the *école lyonnaise*? Certainly not. As implied before, examining such a narrow aspect of the language in a select few authors, especially something such as a pair of syllables which are extremely common, will not provide enough evidence towards anything other than coincidence.

Huchon also uses sonnet XXI of Labé to insinuate a vulgar undertone in a pattern that seems otherwise only alliterative:

Quelle grandeur rend l'homme venerable?
Quelle grosseur ? quel poil ? quelle couleur ?
Qui est des yeus le plus emmieleur ?
Qui fait plus tot une playe incurable ?
Quel chant est plus à l'homme convenable ?
Qui plus penetre en chantant sa douleur ?
Qui un dous lut fait encore meilleur ?
Quel naturel est le plus amiable ?
Je ne voudrois le dire assurément
Ayant Amour forcé mon jugement :
Mais je say bien et de tant je m'assure,
Que tout le beau que lon pourroit choisir,
Et que tout l'art qui ayde la Nature
Ne me sauroient accroître mon desir.

The letter "q" is to be read as the word *cul* here, meaning *ass*. Additionally, there are other supposedly vulgar interpretations that Huchon makes, such as the usage of vocabulary such as *penetre* (*penetrate*), or *naturel* referring to the "membre naturel" (natural member) of a man, etc., such interpretations being, according to Huchon, completely evident to a reader from the sixteenth century: "Il n'y avait aucun doute sur l'interprétation de ce sonnet pour le lecteur du XVIe siècle" (Huchon, *Le Labérynthe*,

182). I find this point to be not very compelling either. Huchon ignores the fact that Labé exhibits other examples of alliteration or assonance in other sonnets, such as sonnets II and XIX, both quoted below:

II

Ô beaux yeux bruns, ô regards détournés,

Ô chauds soupirs, ô larmes épandues,

Ô noires nuits vainement attendues,

Ô jours luisants vainement retournés :

Ô tristes plaints, ô désirs obstinés,

Ô temps perdu, ô peines dépendues,

Ô mille morts en mille rets tendues,

Ô pires maux contre moi destinés.

Ô ris, ô front, cheveux, bras, mains et doigts :

Ô luth plaintif, viole, archet et voix :

Tant de flambeaux pour ardre une femelle!

De toi me plains, que tant de feux portant,

En tant d'endroits d'iceux mon cœur tâtant.

N'en est sur toi volé quelque étincelle.

#### XIX

Diane étant en l'épaisseur d'un bois,
Après avoir mainte bête assénée,
Prenait le frais, de Nymphes couronnée :
J'allais rêvant comme fais maintefois,
Sans y penser : quand j'ouïs une voix,
Qui m'appela, disant, Nymphe étonnée,
Que ne t'es-tu vers Diane tournée ?
Et me voyant sans arc et sans carquois,
Qu'as-tu trouvé, ô compagne, en ta voie,
Qui de ton arc et flèches ait fait proie ?
Je m'animai, réponds-je, à un passant,
Et lui jetai en vain toutes mes flèches
Et l'arc après : mais lui les ramassant
Et les tirant me fit cent et cent brèches.

In sonnet II, there is the obvious repetition of  $\hat{O}$ , while in the nineteenth, we see the repetition of Qui/Que and Et. It is hard to imagine that Labé, or another author posing as her, would try to code something with such a common literary device. One needs make several interpretive leaps to reach the same conclusion that Huchon has reached here. First, one needs to imagine that this specific instance of alliteration or assonance is coding for something rather than just being there for stylistic purposes as in the other examples previously noted. Secondly, one needs to imagine that the author still wanted to use such a subtle code that would be nearly undetectable to anyone else. This is admittedly plausible if these authors wished for the "supercherie" of Labé to remain undetected, and were only communicating to each other. Thirdly, one needs to agree with Huchon's reasoning that words like Qui/Que/Quelle can represent the word cul in French, because of the similar sound of their initial letter. All things considered, it's difficult to accept evidence that relies on so many assumptions, which is sometimes a recurring theme of Huchon's claims.

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Huchon implicates Maurice Scève as one of the possible authors to Labé's *Débat de Folie et d'Amour*, alongside Guillaume Des Autels. (Huchon, Une créature de papier, p.141)

As we've seen, Huchon doesn't limit Scève's supposed hoax to just Labé's prose, she also makes structural comparisons between the dizains in *Délie* and the last four lines of several of Labé's sonnets. Specifically, Huchon asserts that there is a pattern by which

Labé splits up the sestet into two using the word *mais* in eight of her twenty-four sonnets.

Take, for example, the sestet of Labé's twenty-second sonnet:

Voilà du ciel la puissante harmonie Qui les esprits divins ensemble lie; Mais s'ils avaient ce qu'ils aiment lointain, Leur harmonie et ordre irrévocable Se tournerait en erreur variable, Et comme moi travailleraient en vain.

The result is a rhyming structure of AABCCB or AABCBC which effectively splits the last six lines into what Huchon labels as a *distique* (poem of two lines) followed by a sentence split into four lines (Huchon, *Le Labérynthe*, p.176). The same structure exists in Scèves poetry as well- Huchon cites several dizains and puts them side by side with the relevant Labé sonnets. One such dizain is dizain CCVII:

Mais quand je voy si nubileus aprets, Vents si cruels et tant horrible orage : Je croy qu'estoient les infernaus arrets Qui de si loin m'ourdissoient ce naufrage

Huchon goes on to say that Scève may have published experimental poetry under Labé's name in the *Euvres*. According to Huchon, the first reason for doing so was to create a sort of echo of the *sodalitium lugdunense*- legitimizing the French language as a poetic form by uniting many of the themes and structures of classical poetry with French vocabulary. Essentially, following this line of argument, Scève was using something familiar to the public -- the French language, poetic verses similar to those found in Scève's dizains -- to create something new, a romantic cycle in French with a more

unfamiliar poetic structure: the sonnet. It should be noted that some of this conforms with scholars' understanding of Scève already. It's agreed that he integrated classics into his poetry, and that he is considered an innovator in having created the first romantic cycle in French, in a time not too far separated from a period in Lyon that was obsessed with Latin and Greek. The second goal, according to Huchon, was to emulate Sappho, and create a French version of her under the name *Louise Labé*. This would create a further link with antiquity, and would explain the themes of love found in Labé's sonnets. Huchon supports this by making a further lexical comparison between the two French poets and Sappho: "Sappho a laissé son nom... à une strophe de quatre vers composée de trois saphiques et d'un adonique. Dans l'Ode à l'aimée et l'Ode d'Aphrodite, des strophes commencent avec la conjunction adversative ἀλλά" (Huchon, *Labérynthe*, 177). This is the Greek conjunction that means *mais* in French or *but* in English.

In her forthcoming article, *Lost in the Labérynthe*, Nancy Frelick asserts that no real substantive claims are made in Huchon's analysis:

"...instead of providing a detailed stylistic analysis, Huchon raises initial doubts regarding authorship as rhetorical questions; then, interrogative or conditional clauses are hastily turned into declarative statements, in order to make definitive claims about attribution." (Frelick, 27) In effect, Frelick accuses Huchon of trying to have her cake and eat it too: she acknowledges correctly that something such as authorship can be difficult to ascertain in certain circumstances, then proceeds to make these exact claims, in a manner that many have claimed to be deliberately vague.

Even if Maurice Scève weren't such an important author of the Renaissance and *chef de file* of the *école lyonnaise*, he is such a central figure to Huchon's arguments that

he must be examined both in this subjective analysis chapter, and again in chapter 2, when we will turn to computational analysis.

As previously mentioned, the most immediate difference between the Labé and Scève's poetry is their choice of form- Labé uses the sonnet, comprised of fourteen total lines, while Scève uses the dizain. While the rhyming scheme of Scève's dizaines is always fixed with a pattern of ABABB CCDCD, the rhyme of Labé's sonnets can vary. Take the following two Labé sonnets for example:

#### VIII

Je vis, je meurs ; je me brûle et me noie.
J'ai chaud extrême en endurant froidure,
La vie m'est et trop molle et trop dure.
J'ai grands ennuis entremêlés de joie ;
Tout à un coup je ris et je larmoie,
Et en plaisir maints griefs tourments j'endure,
Mon bien s'en va, et à jamais il dure,
Tout en un coup je sèche et je verdoie.
Ainsi Amour inconstamment me mène,
Et quand je pense avoir plus de douleur,
Sans y penser je me trouve hors de peine.
Puis quand je crois ma joie être certaine,
Et être au haut de mon désiré heur,
Il me remet en mon premier malheur.

#### IX

Tout aussi tôt que je commence à prendre Dans le mol lit le repos désiré, Mon triste esprit hors de moi retiré S'en va vers toi incontinent se rendre. Lors m'est avis que dedans mon sein tendre Je tiens le bien où j'ai tant aspiré, Et pour lequel j'ai si haut soupiré, Que de sanglots ai souvent cuidé fendre. Ô doux sommeil, ô nuit à moi heureuse!
Plaisant repos, plein de tranquillité,
Continuez toutes les nuits mon songe;
Et si jamais ma pauvre âme amoureuse
Ne doit avoir de bien en vérité,
Faites au moins qu'elle en ait en mensonge.

The first has a pattern of ABBAABBA CBCCBB (separated into the octet and the sestet) and the second ABBAABBA CBDCBD. There are a couple of immediate points to observe here, besides the most immediate fact that these two patterns are different. The first is that the octet and sestet are separated by the rhyming scheme in two ways. The octet in Labé's poems always follows the same pattern of ABBAABBA. Secondly, the third rhyming syllable typically only comes into play in the first line of the sestet, usually by necessity because the structure of the octet needs to be preserved. The tenth sonnet is one notable exception to the rule, with a structure of ABBAABBA AAACCA. The octet stays as we'd expect, but the result is that it's slightly less distinct as a separate unit from the sestet as there is no new rhyme at the ninth line.

What is the effect of all of this? Let us remind ourselves of Scève's rhyming scheme to highlight the results. Scève's poetry seems to be split into two parts as well, always following a pattern of ABABB CCDCD. The fact that both authors habitually split their poetry into two parts is of course not conclusive proof of anything. Let's examine something a little more specific to get an idea of what might constitute real evidence that could be used for or against a theory like Huchon's.

Many of Huchon's comparisons between Labé and Scève are lexical, attempting to demonstrate similarities in vocabulary. For example, Huchon claims that the sexual undertones of Labé and Scève are very similar, but oftentimes hidden. As demonstrated previously with the word play of words starting with the letter Q such as Qui/Que/Quel and the word cul, such ideas can oftentimes be less than convincing. It seems that Huchon often attempts to draw parallels between texts based on topic rather than style, that is to say, examining the themes of two authors and deciding that they must be one and the same because they talk about romance in the same way. Obviously, just because two or more authors from the Renaissance talk about love doesn't mean that there's any sort of connection between them that's more than just coincidence- to be more convincing, a systemic stylistic link would have to be demonstrated.

We'll finish this chapter with a final aspect of Huchon's analysis, where she asserts that there is more than a casual link between how these poems are split up. This will also illustrate a specific weakness of Huchon's argument and how it could be improved. Instead of examining the last "half" of the poems of Labé and Scève, she looks at the last four lines of several different examples of each, specifically the those that begin with the word *mais* (Huchon, Le labérynthe, p. 176). Huchon claims that there is a more than coincidental similarity between such poems. Let's take two poems that Huchon compares, Scève 87 and Labé 17, with the most relevant portions of each highlighted:

Scève LXXXVII.

Ce doux grief mal tant longuement souffert En ma pensée & au lieu le plus tendre, De mon bon gré au travail m'a offert, Sans contre Amour aulcunement contendre:

Et me vouldrois a plus souffrir estendre,

Si lon povoit plus grand peine prouver.

Mais encor mieulx me feroit esprouver,

Si par mourir sa foy m'estoit gaignée,

Tant seulement pour me faire trouver

Doulce la peine au mal accompaignée. (emphasis added)

#### Labé XVII.

Je fuis la ville et temples et tous lieux
Esquels prenant plaisir à t'ouïr plaindre,
Tu pus, et non sans force, me contraindre
De te donner ce qu'estimais le mieux.
Masques, tournois, jeux me sont ennuyeux,
Et rien sans toi de beau ne me puis peindre,
Tant que tâchant à ce désir éteindre,
Et un nouvel objet faire à mes yeux,
Et des pensers amoureux me distraire,
Des bois épais suis le plus solitaire;
Mais j'aperçois, ayant erré maints tours,
Que si je veux de toi être délivre,
Il me convient hors de moi-même vivre,
Ou fais encor que loin sois en séjour. (emphasis added)

The effect of the word *mais* creates a contrast, not with rhymes this time, but with semantics. The first half of the poem establishes some sort of premise while the latter half expresses a contradiction or contrast, made more evident with the word *mais*, a conjunction that expresses exactly that. Does this shared feature of both authors occur frequently enough to be considered significant? The word *mais* appears in this manner eight times, or in a third of Labé's sonnets. Combing through Scève's 458 dizains, there are 182 instances of the word *mais* with 40 of those being the first word of the last four lines. Not as often as Labé proportionally, but still a significant amount. It could always

be argued that there are enough instances in his poetry to indicate more than a coincidence, or that Scève, writing in place of Labé, was trying to exaggerate a feature of his writing in order to leave a clue, a breadcrumb trail, either as an elbow nudge to his contemporaries who were already in the know, or perhaps for later readers to pick up on.

Even after being relatively surprised by the instances of this structure in Scève's writing, I remain unconvinced by this specific assertion by Huchon. It may be easy to fall into the thought process that this pattern occurs too much in both authors' works to be mere chance, but I feel that this would be ignoring two crucial counterpoints: number one, that the word *mais* is a *conjunction*, one of the most common parts of speech in any language, French being no exception. The only words that will be occurring more often will be pronouns, articles, copula, etc. Saying that both authors use the word mais a lot is not going much further than saying that they both use the words le or elle or est. But of course, this is a bit disingenuous towards Huchon's argument, which is more about where this specific word is placed. And so we arrive at the second point. We don't know what quantity of this occurrence should be suspicious to us. That is to say, it's very possible that other authors of the sixteenth century made very similar contrasts in their own poetry as well, and that this shared pattern that we thought existed only between Labé and Scève actually is a characteristic of a large portion of poets from this time period. To play devil's advocate, even such an observation doesn't necessarily discredit the idea that the occurrence of mais in Labé and Scève's poetry indicates that the same author penned both. What would actually have to be examined is whether or not this word occurs to a degree that is statistically different from authors of the same time period. If Labé and Scève both use the word in a manner that is different from other contemporary authors,

but similar to each other, suddenly this argument holds much more weight. Huchon doesn't really go as far as to compare Labé and Scève to other non-implicated poets of the same time period, and perhaps this is one of the reasons why her analysis here has been met with so many critiques. Take what Frelick has to say about Huchon's theory here, in her article which primarily reacts to *Le Labérynthe*:

"Yet, as often happens in *Le Labérynthe*, instead of providing a detailed stylistic analysis, Huchon raises initial doubts regarding authorship as rhetorical questions; then, interrogative or conditional clauses are hastily turned into declarative statements, in order to make definitive claims about attribution" (Frelick, 27).

It has already been discussed that stylistic analyses often have a naturally large burden of proof due to the fact that they are subjective and sometimes require a trust in the author, when they make claims about differences in style that are time-prohibitive to verify or disprove. In order to have a subjective analysis that can serve as evidence for such a dramatic claim as Huchon's, the argument must have a sufficient "breadth" and "depth." What does this mean? Essentially, one needs to analyze as many of the relevant stylistic features as possible, meaning not only word choice and placement such as the previous example with *mais*, but the syntax in general, the tone, etc. Essentially the "breadth" concerns what is being examined. It would be disingenuous to claim that Huchon has not been thorough in the hundreds of pages that she has written about this theoretical conspiracy. What is lacking is depth- it is not convincing enough nor sufficient to talk about the similarities between two authors and then conclude that one of them was simply a pseudonym of another. What is necessary is to do this analysis and then continue by examining other authors as a sort of control. For example, it may very well be the case that Labé and Scève's usage of the word *mais* is very similar, but we could also

observe that several other poets of the *école lyonnaise* do the same thing, and so it's actually not a pattern between these authors but between the poets of this circle, or perhaps even a trope of authors of the sixteenth century in general, if we continue to expand our analysis. This is something that Huchon's assertion seems to lack, a look at other authors of the time period in order to be as objective as possible, but without it, it leaves a hole in the argumentation that leaves the reader saying to themselves in the best case that this whole idea could just be coincidence, or in the worst case, that Huchon is deliberately leaving certain authors out of the picture because they paint a different picture than she is trying to illustrate.

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As a counterpoint to the critiques of Huchon on the table, let us consider for a moment other authors of the sixteenth century, to see if the similarities between Labé and Scève indicate that they may be the same author, or if they can be explained simply as a part of the style of the sixteenth century. If we look at the sonnets of Madeleine Des Roches, another author of the sixteenth century with sonnets of a similar structure to Labé's, it can be easily seen that she employs the word *mais* as well. And of course she does, because it's a common French conjunction. How does her usage compare to that of Labé and Scève? Des Roches, like Scève and Labé, leads many of her lines with the word *mais*. This seems to be an entirely natural aspect of the sonnet. It's much rarer to see conjunctions in the middle of the line, most likely because there are only so many syllables that fit nicely within the meter. What is much more common is to have two phrases which each take one line that contrast with each other, that are split by the word

mais at the beginning of the second phrase. A premise or statement is made, and then the next phrase contrasts or contradicts it. This sort of usage of mais, where it starts the line and can be seen in several different poems, is found all over the poetry of the three authors- as one would probably expect (although Des Roches might use the conjunction less frequently than Labé and Scève). More importantly, does Des Roches' use of mais differ in any noticeable fashion? In fact, yes: Des Roches' poetry has no instances of the word mais leading the fourth to last line, which does happen unusually often in Labé and Scève's poetry, as Huchon claims. Is there a similar lack of this characteristic with other authors? There are a few scattered instances of the same structure in the sonnets of DuBellay, but not nearly at the same frequency as what is found in Scève or Labé's works.

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Huchon's weakness in her argumentation- whether accidental or on purpose, avoiding directly providing evidence to create a rhetorical "Labérynthe" for her readerslies in ignoring the full scope of sixteenth century poetry or even the rest of the *école lyonnaise* when making her comparisons. This chapter has already demonstrated how many of Huchon's points could have been strengthened, not only by expanding on her analysis by quantifying her arguments, but also by exploring other authors of the same time period. All of this notwithstanding, to write an analysis of the same level of detail as is found in Huchon's *Labé*: *une créature de papier* and *Le Labérynthe*, and keeping in the same level of detail not only with *Labé* and *Scève*, but with several of their contemporaries, would require a level of thoroughness and effort would be manually

impossible, so the question is inevitable, can we reach any sort of conclusion on the Labé question, when doing so convincingly would require analyzing the minutia of every single relevant author all at once?

#### **CHAPTER 3:**

# COMPUTATIONAL ANALYSIS- LEAVING THE LABÉRYNTHE USING STYLOMETRY

The answer I will propose here to the question posed just above is to use computers and code designed specifically to answer these sorts of problems. Texts can be digitized into a .txt file, tokenized, tagged, and parsed for dependency using UDPipe, turned into one-hot data using R, and then analyzed using a variety of methods, such as cluster analysis. This sort of analysis- focusing on structure and syntax, instead of something like semantics or theme, is known as stylometry:

"Stylometry relies on the assumption that each person not only has a genome, but also a "stylome", i.e. linguistic idiosyncrasies such as specific words, called markers by Mosteller and Wallace in their seminal study on the Federalist papers. The two American scholars have indeed demonstrated that it is possible to distinguish texts written by Hamilton, who uses while, from those written by Madison, who prefers whilst (among many other features). The use of such a technique is however not limited to authorship attribution or document classification, and literary scholars have used it to investigate intertextuality or periodisation." (Gabay, 359)

I have already noted that the goal of this paper is to reach an objective analysis of Labé and other sixteenth century authors, and to this end will be using computational methods to do so, but these words aren't synonymous with each other and should not be conflated. Even though we use models to be objective as possible, we still create these

models ourselves, and while the math may be correct, the details that go into these models can create results that can be misleading, unintentionally or otherwise. The files chosen, the ways in which the data is treated, and the methods used for analyzing this data will all have an effect on the final result. To avoid any sort of mystery as to how any particular conclusion was reached, I will try to be as explicit as possible with the methods used and include all code and files (including intermediate steps) in a Github link.

# Corpus

The corpus selected for analysis consists of thirteen authors who wrote primarily in French between 1538 to 1668. Each file, comprised at least one or more of their works, typically poetry, totalling at least 1,000 words each. Many of the earliest texts are tightly grouped in the middle sixteenth century, since this is when Labé and Sceve were active. The latest group of texts included are Jean de La Fontaine's *Fables* published in 1668. Other authors of the *école lyonnaise* were the next natural targets, as long as a sufficient amount of their work could be found with modern French spelling. Pontus de Tyard (1521-1605), for example, was an author that had substantial such text found online.

Next to be included were members of *La Pléiade*, a group of poets that came soon after the *sodalitium lugdunense*- the group of neo-latinists, and coincided temporally with the poetry of the *école lyonnaise*. The members of the *sodalitium lugdunense* wrote in Latin and revived interest in classical authors and forms, but also Italian poets, most notably Petrarch of the 14th century and the sonnet (though a version of the sonnet bears his name, it was not developed by him). The *école lyonnaise* and La Pléiade wrote in French, and while the Classical influence remained in the poetry, both groups were now

concerned with legitimizing French as a language of the same station as Latin and Ancient Greek, a language worthy of literature. Both of the latter movements are known for their development of French as a poetic language, with the *école lyonnaise* being notable for its feminine literature, not only including Labé but Pernette du Guillet as well. (McFarlane, 1-2)

Members of the Pléiade include Pierre de Ronsard (1524-1585), Joachim du Bellay (1522-1560), and Jean-Antoine de Baïf (1532-1589). Analyzing texts of these authors had two benefits. Many of the members of La Pléiade are very well known and are thus more likely to have modernized versions of their texts available. Second, for our analysis, these authors could be used as a control group for the rest of the members of the école lyonnaise. As mentioned previously, it isn't necessarily interesting for two authors to have similarities with each other in their style and word choice, unless it can be shown that these similarities exist only between them or otherwise exist to a degree not shared with any other authors. If the authors of the *Pléiade* are just about as close in style to Labé as Scève is, then we can conclude that their similarities aren't idiosyncratic to just them, but are more so a feature of poetry of the sixteenth century. I was also curious to see if any concrete differences in style could be drawn between the two "schools" of the école lyonnaise and La Pléiade. One of the interesting things that can be done with the data after it has been one-hot encoded is examining individual variables and seeing if any outliers exist for certain morphosyntactic features. Finally, authors such Madeleine des Roches (1520-1587) and Marguerite de Navarre (1492-1549) were selected for much the same reasons as the members of the *Pléiade*- firstly, from the analytic point of view, they serve as good control groups, being from approximately the same time period, and thus

eliminating most stylistic differences that might come with different centuries of French, secondly from a humanities point of view, I was also very interested to see how other prominent female authors from the *Querelle des Femmes* might compare stylistically to Louise Labé.

Care was taken to ensure that spellings were modernized, and some texts required additional attention as certain more archaic spellings were left, perhaps simply due to the taste of whoever had first edited the text. For the purposes of this project, very simple strategies were used to improve the files' spelling, although more sophisticated methods would improve the results even further, especially because it is ultimately prohibitively time-consuming to perform manually.

### Methods

There were several steps involved in reexamining the Louise Labé question with a computational approach. First and foremost, UDPipe is an R package which uses the UDPipe C++ library, containing several language models that allow for a text file to be "read" by a computer. More about UDPipe can be found in the paper *Tokenizing*, *POS Tagging*, *Lemmatizing* and *Parsing* UD 2.0 with UDPipe, by Milan Straka and Jana Straková. First, we select a (French) model to be used by the pipeline. However, one challenge is that this model has been trained on modern French, whereas the French of Labé and her contemporaries is of the sixteenth century. Much of the syntax of sixteenth century French remains the same as modern French, but the spelling and orthography is in many places completely different. Certain letters are replaced with others, in the

sixteenth century instead of *moi* or *toi* there is *moy* or *toy*, *jeunes* and *jour* becomes *ieunes* and *iour*, and the long s (f) is present instead of short "s". Other issues include "segmentation differences" or the addition or deletion of spaces between words, as in long temps becoming longtemps; spelling reflecting linguistic changes as in eftoit becoming était; and insertions of letters such as in *beaulté*, or *sçait* instead of *sait* (a deliberate spelling changed influenced from a false assumption that *savoir* comes from the Latin *scire*). (Bawden et al., 3355)

I attempted a trial run with the original French that had been digitized, but there were too many errors with the parsing to continue. I considered multiple methods to overcome the roadblock of working with sixteenth century French. One approach would be, at least in theory, to train a parser to work on sixteenth-century French literature, as one does not yet exist. This is technically possible, but time prohibitive. To do so, one would need to provide an entire sixteenth-century corpus for the model to train on, and one would also need to provide the answers for the model to check against. This would involve tagging the lemmas, parts of speech, and morphosyntactic features of each individual word, word by word, sentence by sentence, for several thousand words worth of sixteenth-century French. Even if I were an expert in sixteenth century French, this would take an incredible amount of time, and is a task that is already worthy of its own paper.

So naturally, the problem needs to be turned around: if there isn't a parser that works for the given French, we need to make the given French work for the parser that we already have. There are multiple ways to approach this individual problem as well.

- As previously described, a sixteenth century French model could not be found and it was not feasible to make one myself.
- 2. Automatically transcribing the French- where sixteenth century French is inputted into a model that automatically corrects antiquated spellings- was examined, as discussed in the paper Automatic Normalisation of Early Modern French (Bawden et al.). Normalizing spelling for a parser can be considered to be a "step 0" for textual analysis, and is a large enough problem that entire models are being developed to transcribe texts automatically. In their model, all of the previously mentioned differences in spelling were examined and normalized using the following rules: if the token is found in the contemporary French lexicon, it is kept as is, if the token is a known spelling difference in 17th century French it is swapped with the modern spelling, otherwise it is transformed by a series of character replacement rules, and the first resulting candidate token is used. If no plausible word can be found after application of these rules, the original is kept. Sometimes this process requires additional context as well, for example, the older spelling of *nostre* in the 17th century is realized today as two separate words in contemporary French, nôtre and notre, and so for best results modernization needs to happen at the sentence level, not the level of the token. Despite the promising results of the model, it was trained on 17th century French and the differences in one hundred years of French were too much for it to be viable- using it on the

- original French from Maurice Scève showed that the parser was not recognizing enough of the French to be reliable.
- 3. The last option would be to get versions of the texts that are in modern French. Translations of the poems into modern French were considered briefly, but discarded as a feasible solution for two main reasons: firstly, a translation of the poem isn't guaranteed to keep the same meter or word usage as the original, only attempting to keep the same meaning. This would obviously change the syntax of each poem, subtly albeit enough that a reasonable doubt could be raised about the accuracy of the results if one were to use them in the parser. Additionally, these changes would not be consistent across all authors- each translation is likely to be done by a separate translator, and thus each one will be effecting their own unique changes upon each individual text, further spoiling any stylistic analysis on the set of texts. Therefore, I decided that transliterated texts would be used, that is to say, texts where the spelling and orthography of individual words was updated, but otherwise the texts were left alone, even in places where antiquated words were used or structures which have since fallen out of favor. This keeps the same meter as before, which is important in a stylometric analysis, but also makes a minimal amount of change on the texts, with little agency for the transliterator to make any changes that would add unnecessary noise into the texts. This solution has the additional benefit of being the simplest to implement, as there are many modernized versions of texts readily available in the public domain and

online, especially collected on sites such as Wikisource, or Project Gutenberg.

After parsing .txt files, we receive a list of tokens (a list of what is essentially the individual words in the text) with their morphosyntactic features listed beside them-their part of speech, their function in the sentence, whether they're singular or plural (if applicable), etc. We list these features alone, as well as recombine them into "tuples" and "triples", groups of two and three features, which strengthens the signal that we can receive from our data, and provides additional interesting insights besides those we might gain from just the single features. To illustrate this, a single feature might be "is a verb", a tuple may look like "mood is indicative and number is singular" and a triple may look like "gender is masculine, parent's gender is masculine and number is singular". For all of these categories, the answer can only be yes or no, a "1" or a "0". I took up to three samples of five hundred tokens each (sometimes only two samples were possible when there was a limited amount of modernized text). Notably, these tokens don't follow any order- this is done to avoid, for example, five hundred words from an introductory paragraph, which can have a slightly different syntactic signal than content paragraphs.

We then sum each of the variables in the samples, and divide these sums by the number of tokens (500) in each sample (to normalize for sample size), which will then give us the "fingerprint" of a text or author. Each sample will be completely unique-taken from the binary valued file without replacement, such that no single token will appear more than once across all three samples. This ensures that in later analysis, samples won't be falsely considered to be similar to each other because they share the

same tokens. This can contain a large amount of summed features, in the case of this paper, 975 singles, tuples and triples.

After summation, clustering can be done, where individual samples from each author are compared to each other. While we can select individual features and compare the frequency present in each author, a list of 975 is too much for humans to process as a whole, so we use clustering algorithms to calculate the closest texts. There are multiple different clustering algorithms, as well as multiple different distance measures (the distance between two points, in our case individual samples of a text) and different linkages (the distance between clusters, groups of points, multiple text samples already determined to be close to each other). Because of the possibility to only use one combination of algorithm, distance measure and linkage to cherry pick exactly the result that one is looking for, multiple different clustering methods were used then summarized in a "consensus tree".

This entire procedure begs the question, why take samples of the authors at all for clustering? Why not just compare the authors directly against each other? Essentially, these samples will form a "test set" that will allow us to know if our data and the parser work well enough together to produce information reliable enough to draw conclusions from. How can we tell if this is the case with these samples? We perform a clustering analysis on these samples, and examine the results. Here, we are not so much concerned about different authors being clustered together, only with the samples of each individual author. Ideally, we will see them more or less grouped together by the chosen algorithm, as they belong to the same author and therefore they should be most stylistically similar to each other. If different samples were split up from each other, especially far enough

from each other that they may as well have been sorted randomly, then we know that a problem exists somewhere because we know already which subsets of the samples belong together. After confirming that the results are good with the samples, we can more broadly compare authors together (using the same algorithms) and be confident that our results can be relied on.

I have already mentioned that part of the aim of this paper was to be as objective as possible, to remove shades of doubt that are possible with literary scholarship.

Obviously this seems like an extraordinary claim, but it is my hope that the previous explanations have shown how some problems such as cherry-picking are avoided in the clustering analysis. One other common question/critique with this paper may be something like "If you're choosing the methods, variables, and algorithms, doesn't that necessitate a large amount of choice, making the analysis inherently subjective?" As previously mentioned, a set of algorithms were used together in a consensus tree as to not overly rely on any one single method, to avoid choosing any one single algorithm that may have supported a preconceived notion that I may have had about the Labé problem. In addition, the variables were not hand-picked either- the singletons, tuples and triples used in the analysis were the most common variables found in the texts- variables were only dropped on a basis of frequency (less than 2.5% occurrence in the texts), not on any sort of basis of whether or not they would support any sort of outcome.

## Data

All files and code can be found at this github link:

NerdOctopus/LabeData (github.com)

# **Results and Analysis**

Cluster analysis was performed using various combinations of distance measures and linkage parameters. Consensus trees were built using the sums of four to sixteen different combinations of distance measures and linkages. As previously mentioned, more than a few permutations are necessary to avoid cherry picking, however, it was found that as more and more permutations were added, the consensus tree of the clusters would become "smoothed out" from all the different methods being averaged together. In cases such as these, the results seemed to be more or less the same, but the picture would become less clear, so certain permutations of distance measures and linkages were preferred over others, such that the results were as clear as possible.



Image 1: consensus tree made of eight clustering methods on the test set of samples from each author. This is the result that allows us to continue with the experiment- ideally, the samples from each author will be grouped together, as discussed in the "Methods" section. Here we see that, with a small amount of noise, which is acceptable. Each sample is more or less clustered with other samples from the same author. If our data wasn't strong enough (for example, if the parser had trouble or if the algorithm we selected couldn't properly distinguish the styles of different authors), then the pattern we would see would be much more random- examples from the same author scattered around the plot, no sense of authors being grouped together. Since that's not the case here, and because this sort of structure happening randomly would be impossibly unlikely, we can move forward with the knowledge that the information we have is useful, and we continue with comparing the authors more generally, without splitting them into samples:



Image 2: consensus tree of clustering done on all thirteen authors, without splitting individual authors into samples. Once we know that our data is good and we've found an algorithm that works as detailed in Image 1, we can continue by comparing the authors generally, without sampling from them. This gives a consensus tree and result that is

much easier to read- authors can be compared to authors instead of samples (which are random words piled together with no semantic meaning).

Scève was not directly clustered with Labé in any of my clusterings. Instead, Marguerite de Navarre was grouped with Labé, both when taking the authors as a whole, and when clustering samples of texts. There are various ways by which one can analyze why this might be the case. Clustering is done on the summations of each variable in each file, in our case, a list of thirteen authors with 975 variables each (each variable representing the frequency of a certain syntactic feature). We can compare them either to each other or to the average across all thirteen authors with a few extra steps- we calculate the average by summing up a feature across thirteen authors and dividing it by thirteen, then calculate the standard deviation for that feature. Finally, we can calculate how many standard deviations away from the average an author is separated- this is the z-score. This will tell us how similar (or dissimilar) an author is to the rest for a certain feature. If we take singular nouns, for example, we can see that Jean Antoine de Baïf has a z-score of 3.12, meaning that the poetry that I selected for him to be analyzed uses singular nouns much more than the rest of the authors. I was suspicious of such a high z-score (3.12 indicates an observation within the 99th percentile), but looking back at the text I had selected, I think that it makes sense. Take this excerpt as an example:

O ma belle rebelle,
Las, que tu m'es cruelle!
Ou quand d'un doux souris,
Larron de mes espris,
Ou quand d'une parolle
Mignardetement molle,
Ou quand d'un regard d'yeux
Fierement gracieux,

Ou quand d'un petit geste Tout divin, tout celeste, En amoureuse ardeur Tu plonges tout mon coeur. O ma belle rebelle, Las, que tu m'es cruelle! Quand la cuisante ardeur, Qui me brusle le coeur, Fait que je te demande A sa bruslure grande Un rafraichissement D'un baiser seulement. O ma belle rebelle Las, que tu m'es cruelle! Quand d'un petit baiser Tu ne veux m'apaiser, Mais par tes fines ruses Tousjours tu m'en refuses, Au lieu d'allegement Acroissant mon tourment.

This is a solid example of the sort of analysis that can be easily made with computers that may not be immediately obvious to a human- but after verifying is immediately illuminating.

As a next step, let us continue with Labé, and perhaps compare her poetry with Scève's by subtracting their z-scores from each other, to find the features where they are most distinct. In many places, the z-scores of Labé and Scève are several standard deviations apart. Some of the most salient differences include the difference in word order- words that are dependent on others precede their "parent" words much more often in Scève's poetry than in Labé's. The easiest way to observe this is to look at adjective placement, especially considering that adjectives are typically postpositive in French:

Scève CCXLV Au moins toi, claire et heureuse fontaine, Et vous, ô eaux fraîches et argentines, Quand celle en vous - de tout vice lointaine - Se vient laver ses deux mains ivoirines, Ses deux soleils, ses lèvres corallines, De Dieu créées pour ce monde honorer, Devriez garder pour plus vous décorer L'image d'elle en vos liqueurs profondes. Car plus souvent je viendrais adorer Le saint miroir de vos sacrées ondes.

Naturally, the reverse is also true, Labé's poetry most often has parent tokens preceding their dependents. Additionally, they differ by 2.8 standard deviations on using prepositions, with Scève using them much more often than Labé. It should be noted that while this is a relatively common feature (around 30th most common syntactic feature, prepositions aren't exactly rare in French), the differences between authors are becoming more and more slight, with the difference in occurrence between Labé and Scève being less than two percent. Still, because of the disparity in the difference between the two authors and the average occurrence, it sticks out even at a cursory glance at the data.

#### Discussion

One of the important considerations that comes out of this thesis, and of reading the two chapters together, is the value of these observations to a scholar of Labé or the sixteenth century in general. Obviously there are pieces of an analysis such as this that can be very useful and informative to someone who reads lots of Louise Labé or Maurice Scève. For example, small details about their style and the kinds of words they like to use that would have otherwise been too subtle to notice without spending inordinate amounts of time on an individual author. However, this utility of course has a limit-eventually the details of each author or text become so fine that it's not necessarily useful for a human's understanding of the style of an author. Imagine if an author used, for

example, feminine plural nouns as 1% of their usual tokens, which is double that of the other authors examined which only use them .5% of the time. This can be statistically significant, and gives us an idea of an author's signature computationally. But from a human reader's point of view, to someone who's interested in the literature itself, this will likely not be very useful. Even after being informed of some such aspect of an author's writing, such a rare occurrence wouldn't likely affect one's feeling or understanding of the author. Eventually, the detail becomes so fine that it will probably only be important to a computational analysis, not one done by a human. This is not to say that these analyses aren't important to those interested in the literature- only that it will take a human approach to sort out the data that is relevant to the style of the author, i.e., human-readable features, from the data that is only relevant to the classification of the text. This relation is essentially that the computer (or the computer scientist) will typically only ever care about what the solution is, while one interested in the humanities will want to dig in, unfold the data, and see why these authors are supposedly so similar.

This discussion of which features might be important for humans leads us to the question of whether or not the authorship of these poems even matters. If it even could be definitely shown that Scève or another author of the sixteenth century wrote Labé's poetry (which seems to be not the case as far as this data is concerned), would it even matter for how we read Labé's poetry? I think that it would. Even if objectively, it wouldn't change the meaning or our interpretation of the sonnets (and there's plenty of reason to think that it would- as changing the author's gender from female to male is already a large shift), it would, as Frelick says, harm the perception of women writers and the fact that they were and are able to write literature just as worthy as that of men:

"...rather than recognizing Labé's status as a fully functioning writing subject capable of creating her Euvres and fashioning the myths around her own poetic persona in her "complete works," 100 Huchon's goal is clearly to downgrade the sixteenth-century poet to the role of an abject object circulated among men; not even just a mere muse or pseudonym, in Le Labérynthe Labé is transformed into both a much-maligned sexual plaything and a cover for lewd homoeroticism." (Frelick, 119)

In addition, if Huchon were correct and Labé was just a hoax, the supercherie that she claimed Labé to be in her writing, it could cast a shadow on a good amount of existing literary scholarship. After all, if Labé, a poet who has been studied for hundreds of years by scholars, could have been a fake all this time, and all the people who had studied her were fooled, any literary scholarship becomes much weaker and less reliable. A good amount of this paper has been spent talking about being more objective about this particular problem of authorship, but this isn't to say that all literary scholarship is so dubious, only that here a computational analysis was useful because of how hotly contested and difficult the problem was. Learning about a false Labé, however, could have harmed the perception of human analyses of texts.

There are several avenues by which this thesis could be improved, or the work in it could be continued. Firstly, the relative lack of texts available was a concern. Not only were individual authors difficult to find, but even if an acceptable modernized text from an author could be found, length of text could be an issue as well. Fortunately, texts of even one thousand tokens are sufficient for an analysis using clustering or classification models. All the same, if the reader notices that certain texts have been left out of this analysis that would fit well with an analysis of Labé's writing, the likely answer is that they were mostly likely not available or not found.

Additionally, it should be noted that analyses such as clustering, while not necessarily new technologies themselves, are somewhat novel for use in digital

humanities. Maciej Eder notes even that the algorithms used are not necessarily specialized for linguistic data, but instead taken from other disciplines:

"The real problem is, however, that stylometry has not developed its own linkage algorithm, and the methods derived from other fields have not been systematically tested on linguistic data. So far, then, we are at the mercy of existing procedures, for better and for worse." (Eder, 5)

This paper contains a clustering analysis of modernized sixteenth century texts after running them through a modern French parser, which was sufficient enough to provide more information about the Labé question, but I would like to continue my work with Labé by training a model to classify these texts. Such a method gives a much more accurate picture of the texts, as the model will teach itself how to recognize the author of a given text, eventually, even texts that it hasn't seen before. This approach brings its own unique challenges, such as managing hyperparameters, needing a sufficient amount of data to train *and* test the model on, being wary of overtraining, etc., but getting such a model to work is a good goal for an analysis such as this.

Additionally, I would be interested to see if a standalone application could be built that streamlines the steps taken in this paper. I imagine that there would be some professional interest in seeing the stylistic similarities between texts that they study. As a result, scholars would be able to input a list of files, then modifying certain parameters to one's liking then being able to see all of the results such as most similar/dissimilar authors, what aspects of their writing makes them most unique, etc.

#### Conclusion

Using stylometrics allows one to get a more complete picture of these selected authors from the sixteenth century, one that indicates that the poetry written by Louise Labé is indeed distinct from that of Maurice Scève. This point should be stated as clearly as possible- the data in this paper suggests very strongly that Scève and Labé are sufficiently stylistically distinct from each other, such that they couldn't be the same author. It is essentially impossible, for example, that the examples from Image 1 inside of the "Results and Analysis" section could be randomly arranged in such a way that each author's samples cluster together almost perfectly. The result with the samplings shows that the data is good, and continuing with the analysis, comparing the authors together without using samples shows that Labé and Scève have a large enough distance from each other to make the idea that Scève authored Labé's poetry incredibly hard to accept. This isn't to say that the discussion surrounding the école lyonnaise is over, in fact, it provides many more questions now- such as why are certain authors clustering together? What aspects of Labé and Marguerite de Navarre, for example, cluster them closer together than any other authors? What sort of stylistic link is found between them, and could such a link ever be shown to be more than coincidental? How do other female authors of the Renaissance compare- could this be a phenomenon shared by more than just these two authors?

Similarly, how is it that DuBellay and Ronsard are grouped together, two of the premier poets of the Renaissance? What sort of stylistic features are shared amongst French's greatest authors? These questions and others, many of which would have been

incredibly difficult to answer beforehand, are now available to be explored with computational analyses.

Not only can an analysis like this present a "yes" or "no" answer to a question of authorship, it also can serve as a very effective tool for gaining a precise, finely grained portrait of the style of an author's writing, and how they might differ from other authors. This is especially valuable, as the details revealed in parsing and clustering data are easily missed by a human. The frequency of such details is rather low, and syntactic information which is not always examined in comparison to something a text's themes or content.

This sort of analysis costs nothing and isn't difficult to implement. One doesn't need to be a computer scientist to analyze texts that they are interested in. I hope that this relatively brief analysis of Renaissance authors has illustrated the ease with which novel observations about authors can be extracted from texts that have existed for hundreds of years.

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