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Perfectionner l'art de l'écriture secrète par delà les frontière : le voyage des chiffres de Marie de Guise entre la France et l'Écosse

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Developing the Art of Secret Writing across Borders: The Journey of Marie de Guise's Ciphers between France and Scotland

Perfectionner l'art de l'écriture secrète par delà les frontière : le voyage des chiffres de Marie de Guise entre la France et l'Écosse

Armel Dubois-Nayt and Valérie Nachef

- This paper examines the role Marie de Guise played in the development of one aspect of Renaissance diplomatic culture in Scotland: cryptography. It will show how the queen Regent did her very best to prevent French skills in "the art of secret writing in ciphers" from being passed on to the Scots in a dynamic that was precisely the opposite of that of cultural transfer between the French Regent and her Scottish subjects. It will also consider how she failed in doing so and how her ciphers became transparent for the Scots with the help of the English secret service.
- To assess Marie de Guise's use of French skills in ciphers, this essay will discuss six surviving enciphered dispatches between the Dowager, later Regent of Scotland, and the French ambassadors in residence in England between 1553 and 1560. This short period covers two Anglo-Scottish wars (1553 and 1558), the matrimonial alliance with France (1558-1560), and closes on the Scottish Reformation Rebellion that ended Mary's regency.¹
- The timing of this development, which stands out as a period of war, supports Robert Muchembled's thesis that cultural exchange often becomes intense as a consequence of military conflict. Muchembled legitimately questions the use of the word "exchange" in this specific context and cryptography is a good case in point since letters in ciphers, that became part of a trans-confessional and trans-national diplomatic culture, were neither shared nor exchanged but stolen.

- This culture was obviously not born with the Anglo-Scottish wars and according to Arthurson, the first use of cipher in an English diplomatic source dates from the last Warbeck conspiracy of 1499. Yet historians seem to consider that the use of ciphers in England was stimulated by the presence of continental consorts such as Catherine of Aragon who for instance provided her father-in-law, Henry VII, with keys to decipher letters in Spanish from her father.³ She learnt on her own how to read and write in ciphers but she kept a low profile about it in her correspondence to Spain, maybe simply out of female modesty.⁴
- Royal women seem therefore to have played a key part in the cultural transfer from southern Europe to northern Europe of secret writing. According to Edith Snook the use of ciphers empowered such women in the public sphere just as it would do later in the domestic or literary spheres.⁵ To illustrate how cipher situates the writer in a position of power in political contexts by excluding others from knowledge of the message's contents, Snook refers again to Mary Queen of Scots but also to Henrietta Maria who wrote to her husband in cipher on 22 September 1645. Both women were queens and it should be noted that only powerful women such as queens had access to ciphers at the time. It should also be said that, as pointed out by Elizabeth Mazzola, "code-making should be counted as another sign of 'high literacy' like a personal library or fine italic script".⁶ However, we will put Snook's hypothesis to the test through the study of Marie de Guise's use of secret writing and show how it was for her a means to articulate political authority.
- To this end, this paper will first present the cipher-tables and encoding technique Marie de Guise used and tried to hide from the Scots. They have been reconstructed by us or, in one instance, just after encryption by the encoder herself or himself. This essay refines the findings presented in a previous paper entitled "Marie de Guise's Enciphered Letters" and which focused primarily on recovering the encryption method they adopted and the two code tables used in 1553 and 1559.7 Our first paper also provided the historical context of the letters as well as their transcriptions and translations into English before comparing Marie de Guise's ciphers to one used by her daughter Mary Queen of Scots in 1587. In this paper, we recapitulate all the ciphers we have identified and we present a new code table used in 1556 by Mary to write to the king of France as well as a transcript of that letter which, to our knowledge, has never been printed before. We also compare the code tables we have reconstructed to those reconstructed by Elizabeth's decipherer, Somer, at the time. This crypto-analysis is followed by a discussion of Guise's political use of ciphers. Finally this essay replaces Marie de Guise's ciphers in the information game at play between Scotland, France and England in the 1550's and 1560's. We will come back to our 2015 suggestion concerning forgery in the case of the incriminating coded letters of Mary Queen of Scots.

I. Assessing the strength of Mary's codes

Marie de Guise's cryptographic writing presents us with the usual difficulties faced by historians when dealing with ciphered sources. The ciphering tables are never found with the tables and in all cases but one here the ciphering tables do not seem to have been preserved. In some cases, the recipient of the letters rewrote the deciphered text on the original letter but in most cases the decipherment is not kept together with the ciphered texts in the manuscript. We have been able to match the cipher-texts and

deciphered-texts for all of the letters presented here and thus, this paper can therefore present in detail the cryptographic patterns and codes used in the different ciphers found in Mary's correspondence as well as transcribe them through ciphering tables which are published here for the first time.

- Marie de Guise's secret writing to her French correspondents began with the Anglo-Scottish wars and continued during the Scottish Protestant rebellion. Seven enciphered despatches are still extant today, one in the BnF and six in the records of the French ministry of Foreign Affairs.⁸ One, dated August 25, 1553, is from Marie to Antoine de Noailles; another to the same correspondent is dated November 6, 1553; the third was sent to the King, Henry II, on 8 December 1556; the fourth, also sent to the King but through Gilles de Noailles is dated February 1559; it was followed by a fifth one in August 1559 and yet another on January 2, 1559-1560.¹⁰ That same year Guise also wrote in cipher to her brothers, the duke of Guise and Cardinal of Lorraine on March 27.¹¹
- 9 Mary used different nomenclators or code tables with several correspondents and she changed them as soon as she became aware that they had been broken. Four deciphering tables have been identified, dating from 1553, 1556, 1559 and 1560. It is difficult to assess those from 1553 and 1556, which we have only been able to partially break. We can offer a more detailed appraisal of the codes used in 1559 and 1560 that were broken by Somer and preserved in their entirety.

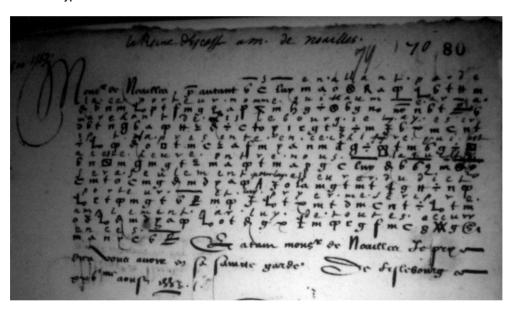
The 1553 code

10 To partially reconstruct the nomenclator, we had two documents: the letter from Lorraine to Antoine de Noailles dated 25 August 1553 and one dated 6 November of the same year. In the archives, the text in ciphers is beneath the letters in clear in both cases although in the case of the letter written on 6 November only part of the letter is in ciphers. The substitution table we have created (below, Table 1) shows the use of Latin and Greek letters, mathematical signs, and symbols. It shows a tendency to privilege homophonic substitution (several variants for one clear letter particularly those with a high use rate) and to adopt word substitution. It uses nulls or symbols, corresponding to no letters, to make the task of the codebreaker harder¹². The 1553 code table also used a new tool in the sixteenth century, which has been identified by Pierre Berloquin in the code table used by Henry II in his correspondence with Philibert Babou de la Bourdaisière, his ambassador in Rome. This tool aimed at hiding double letters, "a weak point in many languages" and represented every common double letter by a single specific symbol¹³. This is the case for "cc", "ff", "ll", "mm" and "rr" "ss" "tt". This might therefore be a French input that the ambassadors of the King of France shared with the Scottish regent. Finally, what has been recovered from the code table also attests that it was strengthened by a short codebook or vocabulary for common words such as "lui", "est", "pour".

Table 1.

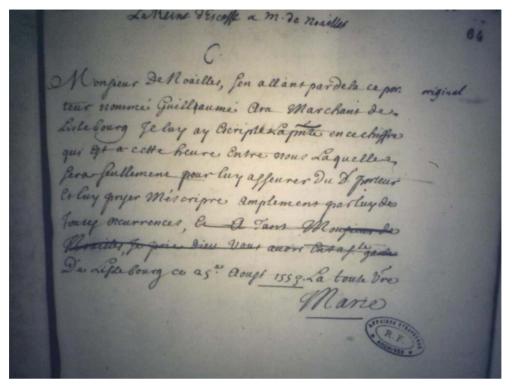
a	b	c	d	e	f	g
ORG	19	7 t	+ 1	m 289		9 % 3
h	i/j	k	1	m	n	0
9	÷71		a to	20	a	B I 8
p	q	r	S	t	u/v/w	X
0 %	6	1 %	2 5	9 f	985	
У	Z	11	rr	SS	ff	tt
20	P	8	Q	Ca	୧୭	68
mm	cc	lui (him)	est (is)	pour(for)	vide (r	
×	*	正	Ħ	A	6 G P	- CM P

Letter encrypted with Table 1



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The clear text corresponding to the above letter



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The 1556 code

In December 1556, Lorraine used a second deciphering table for her correspondence with the King of France, Henry II. To establish this table, we only had one encrypted letter dated 8 December. 14 This letter was analyzed with the help of those that have enabled us to reconstruct table 1 (1553) and table 3 (1559). There were hardly any common symbols in this letter with either those found in table 1 or table 3 and the use of the previous tables to try to decipher it led to no results. This is not surprising since the letter of 1556 is written to King Henry II. 15 This means that this letter was ciphered in a completely new table that was unknown and the short length of the ciphered passage made it hard to break. Yet, a frequency analysis helped us guess that the symbols (#) and (V) might represent the letter "e" but this was not enough to reconstruct the whole code. We then became aware of a ciphered letter written by Henry Cleutin (Mr d'Oysel) to the duke of Guise dated March 30 1555 in Recueil de lettres originales et pièces relatives particulièrement à l'Écosse et aux années 1543-1546 that was ciphered in what looked like the same symbols. 16 The text in clear was written next to the letter but was difficult to read. It was however published in Teulet's Papiers d'États relatifs à l'Écosse au XVIème siècle.17 It allowed us to establish the deciphering table or grille used by Cleutin (see table 2a for a partial cracking of the code) and with it to decipher the letter Marie de Guise sent to the King. There were enough similitudes to get a text that made sense although there are still missing passages. This is how we obtained Table 2 a.

Le gentilhomme anglois présent porteur nommé ... maneville ...Voyant la persécution que se faisoit contre le feu duc de northumberland auquel il estoit se

retira par deca ou depuis la mort du dict duc il a toujours demourer à mon service ... mais pour ce que par les traictés d'entre ces deux royaumes il est dict et de nouveau confirmé que les rebelles seront rendus d'une part et d'autre estant demandés par le prince ainsi que c'est ... de present avecques continuelle instance ... il m'a faict entendre qu'il desiroit se retirer en France et essaier de ... service par de la ... me priant ... le accompagner de la presente qui est de lui assurer user comme un gentilhomme qui cherche de vivre en quelque part. 18

We then completed table 2, which is slightly different from table 2a. To the best of our knowledge Table 2 has never been published before. However this table was reconstructed with the help of only one text and might still be incomplete.

Table 2a

a	b	c	d	e
クセ	8	HXB	> 8	# 1/ 7
f F#	g fr	h lo	V1/V ₽888	k
1	m	≥ M	0	р
NI	700	FRZT	7 B	A w
q	r	s	t	u/v
#	·X∙ €	0- m	8 9 8	od で 青
х	z	сс	ff	II
\cap	×	B	E)-(
mm	nn	pp	rr	ss
0	Н	M	N	7
tt	uv	pour	par	nous
S	T	6	H	Le
vous	le	que	est	faict
B	3	+	Z	7
faire	roi	plus	dicts	je
11	4	Po	150	P
et	blanc	ec_	pous	
C	HM A	D	H	
	+3×B		0	

Table 2

a	~ b	С	d	е	f
ひから	8 6	PP	78	# 1	H
g	h	i/j/y	k	1	m
6	10	t 785		L K	A 65
n	0	p	q	r	s
25CR	f	m fp	#	EX F	0-xm
t	u/v	X	Z	uv	cc
8 9	at 8		A	7	B
11	mm	le (the)	est (is)	faict (fact)	et (and)
F	6	3	Z	7	6
dict (said)	qu'il	pour (for)	par (by)	que (which)	vide (null)
Pg	(that he) ζ	Es	H	+	Me

This code table is designed like the other codes used by Mary. It mixes alphabet letters, symbols and homophone variants and word substitution to mislead the codebreaker. It was further protected by the introduction of numbers: for instance 6 stands for "g", 10 for "h" and 7 for "d".

Letter encrypted with Table 2

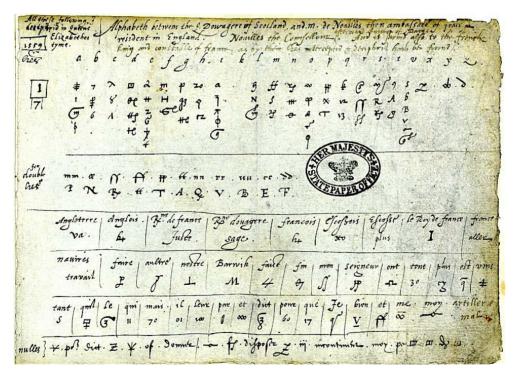


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The 1559 code

Around 1559, Lorraine wrote in a third cipher to Gilles de Noailles, Antoine's brother, when he acted as French ambassador to England. Three letters are in this cipher. They are dated 19 August and 2 January 1559-1560. For the August letter, the plain text and the cipher text follow one another in the archive volume and are therefore easy to match. For the other two, the cipher text and the letter in clear were apart in the volume and it was only possible to match the cipher text and the plain text after some frequency analysis. Once this was done we managed to complete the 1559 code table which turns out to be much more complex than the earlier ones. It shows a development of word substitution. For instance, "Queen of England" is coded with one single symbol as opposed to one for each letter that forms the phrase. Similarly there are many more symbols for the letter "e" for which there are many more symbols. This longer and richer code table, which includes an abundant set of seven null letters or symbols, is also the result of the volume of coded material, for the 1559 correspondence is much longer. As mentioned earlier, the 1559 code had been broken at the time of the events by John Somer. We compared the alphabet we had obtained with Somer's and found a few differences. For some letters or words, we have identified more symbols than Somer ("r"; "queen of England"), for others fewer ("g", "q", "mine") and in some cases we found ("c", "d"). We also noticed that the writing of the symbols differed in places in Somer's alphabet from the original cipher text which could suggest that the text in ciphers Somer worked on was a copy of the (now lost) original.

Somer's 1559 Table

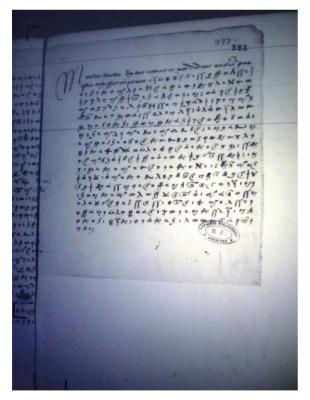


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Table 3

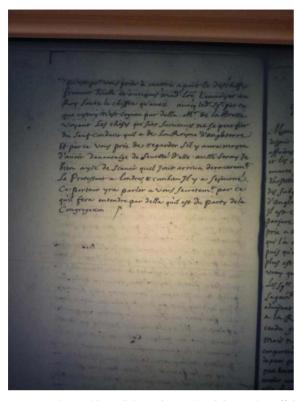
#16 ¢	\$>\tau_{b}	1 8°	92,0 € Z	~# ¥	202
mæ	YS P	2 °9	6 e & x	k	J 1
SH	BP ++- fZ	8 d 9 8	-X: 19 X	л 6 _ж	CN CP
RN=1	9AF	0 8 15		ž	ab y
P	uv/w B	ec P	H	<i>N</i> ₁₁	P
Rt nn	T pp	rr V	Of ss	A F	BEe
je Z	le(s)(the)	nous	vous(you)	notre(our)	votre(your)
j'aye (I have)	qu'il (that he)	est 9	ont(have)	dict(said)	faict(fact)
veut(wants)	faire(do)	pour(for)	par(by)	et(and)	mais(but)
car(because)	tant(as)	que(which)	qui(who)	tous(all)	bien(well)
plus(more)	leur(them)	β	sieur(Mr)	roi(king)	guerre(war
Espagnol (Spanish)	Anglois (English)	Eccossoys (Scottish)	Francois (French)	Royne d'Angleterre (Queen of England)	
Angleterre (England)	France	Ecosse (Scotland)	la religion (religon)	vide (null) F D M Z may	

Letter encrypted with Table 3



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The clear text corresponding to the above letter

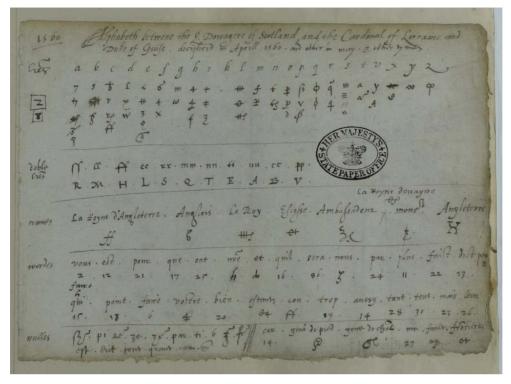


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The 1560 code

15 Somer also broke the cipher used in the letter from Lorraine to her brothers dated 27 March 1560. Unfortunately, the manuscript only contains the letter in plain text. The cipher text seems to have been lost. Somer's retranscription of the "Alphabeth between the Queen and the Cardinal of Lorraine and Duke of Guise" was done within less than a month of the date on which it was written. It shows a reuse of earlier symbols but mixed in such a way that the symbol never corresponds to the same letter as in the earlier code table. The later alphabet also stands out in so far as more words are changed into numbers and confirms the hypothesis of an increased sophistication of Lorraine's ciphers over the years.

Somer's 1560 Table



© Courtesy of the National Archives

16 At the very least it seems possible to conclude that Lorraine brought state-of-the-art French coding technique to Scotland and that her practise of cipher was on a par with that used by the English Queen and her ambassadors.

II. Marie de Guise's political use of cipher

- As a Scottish Regent of French extraction, Mary no doubt benefited from the state-ofthe-art French coding technique used by the French king and his ambassadors such as the tool to hide double letters first featuring in the cipher used by Henry II to write to his ambassador in Rome. We have pointed out that she was also given a cipher to write to the king that had previously been used by Henry Cleutin to write to the duke of Guise.
- The secrecy that surrounded that correspondence leaves us however with few clues about the way the encryption was organised. We know nothing about the way Mary was provided with the cipher keys that clearly came from France and which she used with her correspondents most likely with the help of her secretary. We can simply guess from the information provided above that if her letters were intercepted, her cipher keys were not or at least they have not been preserved.
- The crypto-analysis of the codes used by Marie de Guise seems to suggest an increasing sophistication of her ciphers. If we try to reconnect this increased sophistication with the content of the cipher messages, what can we conclude about Mary's position in the information games at play between Scotland, England and France?
- First it is clear that cipher is used more systematically over time over longer passages, and finally for whole letters. In 1553 and 1556, it is merely used to hide the identity of

Marie de Guise's spies, such as the name of the merchant Aran who is the bearer of her correspondence to Noailles in 1553, or those of her protégés in 1556. This is the case of an English gentleman by the name of Mandeville who sided with Northumberland after the death of Edward VI and who took refuge in Scotland in Mary's service after the Duke's arrest and execution. In the ciphered passage Mary asks the king of France to offer Mandeville shelter, which is a clear breach of the treaties agreed on between Scotland and England and which provided that rebels will be exchanged. Cipher is also used in 1553 to voice her anxiety about the silence of the English monarch, Mary Tudor, who has not yet answered her peace message.

In her introduction to the Foreign Correspondence with Marie de Lorraine, Margaret Wood has argued that it is likely that those letters contain far less information than what was exchanged orally between her correspondents and the accredited bearer, unless they were in cipher.²⁰ Considering the scarcity of information in the first batch of ciphered letters under scrutiny here, it is indeed likely that Mary relied more on her bearers than on her ciphers to convey information to her allies in the early years of her ciphering.

22 At the beginning of the Prostestant rebellion, this was still the case. In the 1559 February ciphered note, Mary asks for a safe conduct for La Brosse, who was stationed in Scotland as captain of the French troops, and who had not been granted by Elizabeth the safe conduct he had required to pass through England into France. And again in the ciphered passage, she tries to protect the identity of the spy who bears her correspondence to and from Noailles pretending to be a member of the Congregation. At that stage, Mary however voices her first concern about the reliability of her cipher as she asks Noailles to re-cipher the letter she is sending to Henry II through him using the cipher he used with Henry II.

From the 1559 August letter to Noailles onwards, her use of cipher writing changes: she has obviously become wary of her messengers. She no longer uses ciphers to protect the identity of her protégés and spies. Instead, she writes diplomatic correspondence in cipher that unveils to France the secret alliance of the Protestant Scots and the English, still in the hope that the French ambassador might be able to convince the English queen to put an end to it. In the August letter to Noailles, Mary reports a series of conversations by English Lords acting on the English Queen's behalf in the borders that are not in keeping with the Queen of England's claims that she wants to live in friendship and harmony with the Scots. She asked Noailles to voice her complaints to the English queen. She also wants her to instruct her representatives at the borders to behave more honestly towards the Scottish crown. Her mentioning of seditious Protestants in the ciphered passage clearly betrays the clearsightedness of the Regent queen as the Protestant rebellion was looming large: "If the seditious Scots wanted the support of the English for the advancement of Religion they would get it". 21

Things further deteriorated when the English reinforcements joined in, which is the topic of the last ciphered letter. The January letter (1559-1560), written after 23 January, the date of the arrival of the English fleet in the Firth of Forth, is entirely coded. It contains highly sensitive material which includes a direct attack on Elizabeth and the former Regent the Duke of Châtelherault, an evaluation of Marie de Guise's position in Scotland and of her morale as well as diplomatic requests. It takes up the plea of the previous letter and informs the French ambassador in England of "the misdeeds of the queen of England which clearly contradict what she has told you many

times and what you wrote to me".²² It was written during the unofficial sea war started by the blockade by the English of the Forth and its estuary, the Firth, to prevent French troops from landing.

25 She warns Noailles that this unofficial sea attack is a "masquerade" and "that war cannot happen at the expense of a Prince without his knowledge", that this is a clear breach of the treaty of Cateau-Cambrésis signed between the two countries on 2 April that year and sufficient a motive to declare war on the English.²³ Mary then turns to an appraisal of her position at this time in Scotland when she feels she only has "a few hostile subjects" and "many good ones who will devote themselves to the defence of their country".24 She does not seem to be scared by the perspective of a war with England and reclaims Scottish pride for that matter through her daughter and son-inlaw: "If the kings of Scotland were able to fight wars in times past, the incumbent has no less means to do so".25 She intends, however, to go forward first using diplomacy and negotiation and suggests to Noailles that he should send Frédéric de Foix, count of Candale to open Elizabeth's eyes on the Congregation's motives unless he would rather put that point to her in person. Candale had surrendered to the Queen on the occasion of the ratification of the treaty of Cateau-Cambresis and would therefore be an ardent advocate of peace.26 She mentions in passing the "double treason" of James Hamilton, Duke of Châtelherault who had turned against the French alliance and joined the Protestant cause and thus warns Noailles of a possible political crisis in so far as the Protestants had a suitable and legitimate candidate to replace her. As Amy Blakeway has noted, Hamilton was indeed being referred to as "Governor" by the English in 1559-1560.27 To resolve the matter, Mary thus expects Elizabeth to send "letters to Scotland that clearly show that she is eager to punish the law-breakers if, as she claims, they did not act at her command".28 She also wants to see her have the rebels' envoys arrested. The letter then continues with a more trivial instruction to inform Dunbar of the arrival of couriers with parcels, who are on their way to Berwick which is too rough a place to be visited without an escort. She finally concludes with a wish to avoid war with England: "I have known the torment of war for too long and for the honour of God I wish to avoid resorting to such means and also to keep God on our side for ever, if this declaration of war goes any further".29

The rich content of this last letter confirms that over time Marie de Guise was trusting a greater quantity of information to cipher, but does it mean that Guise trusted ciphers more than messengers or that she no longer had access to trusted bearers? One thing is clear: as Mary's ciphers became more sophisticated the skills of the English code breakers also developed for they were able to break them – unless it be the other way round. We have no evidence that the ciphers used in 1553 and 1556 were cracked, but we know that both the 1559 cipher she used with Gilles de Noailles and the 1560 cipher she used with her brothers feature in the *Book of Ciphers* by John Somer, the most acclaimed decipherer of the Elizabethan period on whom Throckmorton and Cecil relied entirely³⁰. He also served Elizabeth I directly.³¹

III. Mary's place in the information game between Scotland, France and England

Deciphering Mary's letter was a joint effort, however, between the Scots who seized the letters and the English who had the expertise to decipher them. In the 1550s and 1560s,

deciphering skills were in fact rare. The Lords of the Congregation seem to have been entirely dependent on the English to break the ciphered letters they intercepted and more particularly on John Somer. For instance, the enciphered letter between the Scottish regent and her brothers, dated 19 February 1560, was intercepted in Scotland and sent to William Cecil on March 17, 1560 "to find someone able to disclose [...] their devices". It is difficult to be sure that there was no one in Scotland with the deciphering and language skills required to break encrypted texts in French. It might just have been that the Congregation and the English who helped them in their rebellion against the Regent, such as Thomas Howard, duke of Norfolk and lieutenant-general of the north, were in a hurry and found it quicker to use Somer's work. However, in April 1560, Norfolk, who then commanded the English army sent to support the Congregation, asked "Cecil to send the cipher, which was lately deciphered by Somer; for certain letters in cipher were lately intercepted which came from Leith to the Dowager, which he might decipher". 33

Meanwhile, Marie de Guise was however perfectly aware of the activities of the nascent intelligence service of the English crown. Writing to D'Oysel on 5 May 1560, she mentions the February letter of which "she was shown a translation into English, word for word". It had been sent to Cecil in Throckmorton's own cipher. This made her realize that "the cipher was dangerous" and could not guarantee the secrecy her messages required. This explains why, if we are to believe the English, the French ciphers became more complex though not unbreakable. On 19 July 1560, Throckmorton wrote to the Privy Council to return them a "letter in cipher deciphered" and commented "the characters are new and difficult".

The practice of sending one document in successive ciphers was not an English specificity. Mary herself suggests this practice in the 1559 February letter to the King of France. The letter was first written with the cipher used by Mary and Noailles but Mary asked Noailles to re-cipher it using the cipher he used with Henry II. The communication war at play between Marie de Guise, the French, the Scots and the English in fact involved ciphering, deciphering, reciphering but also spreading false information under the pretence of ciphering. Mary was one player in the game but she was certainly not the only one. For instance, on 18 June 1560 an anonymous writer suggested to D'Oysel that he should mislead the enemies with a coded letter in the king's cipher: "Because the enemy have the King's cipher, if D'Oysel thinks good to give any ciphered advertisement and let the same fall into their hands, they will not miss to decipher it, and finding therein the state of the place such as he pleases to make it, it may be somewhat beneficial to the negotiation of the said Randan and the Bishop, who greatly desire to know truly for how long he yet has victuals".38 In fact, in the spring 1560, the French king had sent two diplomatic envoys, the Bishop of Valence and M. de Randan, "to essay to appease things in Scotland, and to find means to win time". 39

Similar disinformation games were played by the English as a letter from Wotton to Cecil dated 11 April 1560 testifies. In this letter, Wotton advises:

that a letter be devised as written from the Duke of Norfolk to the Duke of Châtelherault, signifying that Glasion, having heard the causes and reasons of the Scots, said that his master had been far otherwise informed, and that he doubted not but that the Duchess of Parma would stay the sending of the aid until she should hear from the King, and that it was most likely that he would stay it everywhere, and that the Queen had written to King Philip and the Duchess with such an offer that he would be more ready to aid to drive the French out of

Scotland; and to make it appear a true letter there may be another joined to it written in false cipher containing no matter at all; and these letters to be so carried that the bearer be taken by the French or French Scots, and Lord Grey and the Duke advertised of it, lest peradventure the packet should come to their hands indeed and deceive them.⁴⁰

It seems possible to conclude that Lorraine brought state-of-the-art French ciphers to Scotland that were on a par with those used by the English Queen and her ambassadors. We have previously commented on the poorer quality of the encryption methods used by Mary Queen of Scots compared to those developed for her mother. This concurs for instance with Pierre Berloquin who has concluded "Mary Stuart was an emblematic victim of bad cryptography". 41 Commenting on the code she allegedly used in 1586, he adds:

185 years after Simeone de Crema, her code contained no homophones. It was a simple substitution alphabet that was protected only by four null symbols and a vocabulary of 35 symbols for frequently used words. Moreover, as only one of its kind, it featured a naïve gimmick: a symbol placed before letters to signal that they should be doubled, the typically pointless creation of someone with no real experience as a codebreaker. Inevitably, her code was cracked and turned against her.⁴²

- Yet, neither Berloquin nor we have considered the possibility that Mary Stuart's weak ciphers could be her own creation as opposed to those designed by more experienced cipherers for Marie de Guise. This hypothesis has been put forward by John Guy and completely changes the perspective on Mary's weak ciphers. If Mary Queen of Scots took in fact in the end the risk of relying on her own ciphering skills, however naïve this might appear, it is still evidence that she went further than her mother in the process of empowering herself by trying her hand at ciphering and incidentally it would indicate her taste for logic and mathematics. But this idea of empowerment should be qualified: Mary Queen of Scots was also forced to rely on her own skill by circumstances as a captive queen isolated at Tutbury.
- To conclude, Marie de Guise's use of ciphers between 1553 and 1560 suggests an increasing reliance on this device over the years, as French support began to weaken and her political isolation became more patent. It seems that it is when all other means of communication failed that ciphers became particularly useful to her. The image of Marie de Guise on her deathbed on 11 June 1560, retired into Edinburgh Castle, still at war with her subjects and abandoned by the Guises in France, echoes eerily with the distress articulated in some of her secret writing. The increased resort to cryptographic writing demonstrates her growing confidence in the encryption. She might have been forced by circumstances to rely more heavily on cipher to exchange with France and this might have boosted the information war that raged during the Scottish Reformation Rebellion. However, it is difficult to assess her role in the information games that were played between Scotland, France and England. Further research on ciphering by the Scots themselves would be needed to see if and how Mary's ciphers influenced coding methods in Scotland at the time in their turn. Unfortunately we have not been able to identify such material yet.

NOTES

- **1.** We should like to thank Dr Amy Blakeway for her comments on an earlier draft and many generous suggestions.
- **2.** Robert Muchembled, *Cultural Exchange in Early Modern Europe*, Cambridge, Cambridge University Press, 2007, Vol. 4, p. 18.
- **3.** Alison Weir, *The Six Wives of Henry* VIII, Grove Press, 1991, p. 59; Ian Arthurson, "Espionage and Intelligence from the Wars of the Roses to the Reformation", *Nottingham Medieval Studies*, 35, 1991, p. 149.
- **4.** Ian Arthurson, art. cit., p. 151. *CSP Spanish*, i. 413 n°516, 426-7 n°541.
- **5.** Edith Snook, "'Onely a cipher': Reading and Writing Secrets in Lady Mary Wroth's The Countess of Montgomery's Urania", in her Women, Reading, and the Cultural Politics of Early Modern England, Aldershot, Ashgate, 2005, p. 153.
- **6.** Elizabeth Mazzola, "The Renaissance English Woman in Code: "Blabbs" and Cryptographers at Elizabeth I's Court", *Critical Survey*, 22. 3, 2010, p. 8.
- 7. Valérie Nachef, Jacques Patarin et Armel Dubois-Nayt, "Mary of Guise's Enciphered Letters", dans Peter Y. A. Ryan, David Naccache et Jean-Jacques Quisquater (eds.), *The New Codebreakers Essays dedicated to David Kahn on the Occasion of His 85th Birthday*, Berlin, Springer, 2016, p. 3-24. Table 1 and Table 3 in this paper.
- **8.** Archives du ministère des affaires étrangères Paris: Correspondence Politique, Angleterre, II, VIII-XXII, Mémoires et Documents, Angleterre, XV; Bibliothèque Nationale, Paris: Fonds Français: 5467, 18153, 20457.
- 9. Recueil de lettres originales, de minutes et de pièces réunies par Gaignières, pour servir à l'histoire de France depuis le règne de Charles VII, jusqu'à celui de Louis XIV. XXXIII Pièces relatives particulièrement à l'Écosse et aux années 1543-1556, https://gallica.bnf.fr/ark:/12148/btv1b90592962/f159.item.r=fran%C3%A7ais%2020457, f. 313. We are grateful to Eric Durot for drawing our attention to this source.
- **10.** AÉ, *Cor. Pol.*, Angleterre, XII, fos. 170/80 (6 August 1553), fos. 6 november 1553, February 1559 fos 181/175, August 1559 fos 367, 362 bis, 366, January 2 1559-1560 fos. 324-328. The letters are quoted in their edition in V. Nachef et al, art. cit..
- 11. BL, Calig. B IX, fos. 99v-100r.
- **12.** Pierre Berloquin, *Hidden Codes and Grand Designs: Secret Languages from Ancient Times to Modern Day*, Sterling, Sterling Publishing Co. Inc, 2010, p. 168.
- 13. Ibid., p. 178.
- **14.** Recueil de lettres originales, de minutes et de pièces réunies par Gaignières, pour servir à l'histoire de France depuis le règne de Charles VII, jusqu'à celui de Louis XIV. XXXIII. Pièces relatives particulièrement à l'Écosse et aux années 1543-1556, https://gallica.bnf.fr/ark:/12148/btv1b90592962/f159.item.r=fran%C3%A7ais%2020457, f. 313.
- **15.** Recueil de lettres originales et pièces relatives particulièrement à l'Écosse et aux années 1543-1546, f. 313.
- **16.** Recueil de lettres originales et pièces relatives particulièrement à l'Écosse et aux années 1543-1546, f. 299, f. 300, f. 330.

- 17. Ibid., f. 299-301 and Papiers d'États relatifs à l'Écosse au XVIème siècle tirés des bibliothèques et archives de France et publiés par le Bannatyne d'Edimbourg par A. Teulet, Tome 1, p. 720.
- 18. f. 313 Our translation: "The bearer of this letter is an English gentleman by the name of Mandeville... who seeing the persecution to which the late duke of Northumberland, whom he had served, was subjected, retired to Scotland where he has remained in my service since the death of the duke. But because of the treaties agreed on between the two realms, where it is said and reasserted that rebels will be exchanged as required by the Prince.... He has repeatedly asked... He made me understand that he wishes to retire in France and try and enter your service.... Asking me... with the present letter which is to garantee that he is a gentleman who wants to settle down somewhere".
- 19. Manuscript BL Cotton, Calig. B IX.
- **20.** Margaret Wood, *Foreign Correspondence with Mary de Lorraine*, Edinburgh, Scottish History Society, 1923-1925, p. xxiii.
- **21.** V. Nachef et al., art. cit., p. 14. Here our translation of "Si les Écossoys voullaient avoir secours d'Angleterre pour le faict de la Relligion ils l'auroient".
- 22. Ibid., p. 17.
- 23. Ibid., p. 18.
- 24. Ibid.
- 25. Ibid.
- 26. CSP Foreign, Elizabeth, I, 1558-1559, 1-10, 475.
- **27.** Amy Blakeway, *Regency in Sixteenth-Century Scotland*, Woodbridge, The Boydell Press, 2015, p. 195.
- 28. V. Nachef et al, art. cit., p. 19.
- 29. Ibid., p. 20
- 30. SP53/23 in the National Archives.
- 31. Little is known about the education, background and life of this key player in the spying game that took place between France, England and Scotland. Somer later became a highly regarded English diplomat sent on missions to France and the Low countries, but his career can only be related through references in the Calendar of State Papers and a copy of Les Annales et croniques de France by Nicole de Gilles (1560) he owned and on the title page of which he put his signature. Based on these documents, we know that he started his working life as secretary to Sir Nicholas Wotton when the latter was resident ambassador in France between 1553-1557. Then he was employed as secretary to Nicholas Throckmorton between 1559 and 1563 at the time he deciphered Mary's letters. In 1561, he was sent as special ambassador to France to "demand the confirmation of the late treaty made in Scotland", that is the Treaty of Edinburgh drawn up on 5 July 1560 between Elizabeth's commissioners and the French representatives of Francis II and Mary Queen of Scots. But he did not manage to meet Mary Queen of Scots and she never ratified the treaty. He later took part in the marriage negotiations between Elizabeth and Henry, Duke of Anjou and future Henry III (1565), and in the spring 1583, he was sent to the Low Countries to meet up with the Duke after his military defeat there in January.

- **32.** *CSP*, *Scotland*, Volume 1, 1547-1563, 150-151, 689. We are indebted to S. Tomokiyo and his website "Ciphers during the Reign of Queen Elizabeth" who has first located the evidence of the information game between France and Scotland: http://cryptiana.web.fc2.com/code/elizabeth.htm.
- **33.** Norfolk and his council to Cecil, 21 April 1560, *The Cecil Papers*, Volume 1, 1306-1571, 200-216, 680.
- **34.** *CSP Foreign, Elizabeth*, Volume 3, 1560-1561, 1-24, 37.
- 35. Ibid., Volume 2, 1559-1560, 6-10, 954.
- 36. Ibid., Volume 3, 1560-1561, 1-24, 37
- 37. Ibid., 1560-1561, 188-201, 346.
- 38. Ibid., 1560-1561, 16-20, 206.
- 39. Ibid., Volume 2, 1559-1560, 16-20, 879.
- 40. Ibid., 1559-1560, 11-15, 986.
- 41. Pierre Berloquin, Hidden Codes and Grand Design, op. cit., p. 182.
- 42. Ibid.
- **43.** John Guy, *The True Life of Mary Stuart*, Boston & New York, Houghton Mifflin, 2005, p. 465.

ABSTRACTS

This article looks at Marie de Guise's part in the development of ciphered writing in Scotland. Based on six surviving enciphered dispatches between the Regent of Scotland and the French ambassadors between 1553 and 1560, it analyses Guise's increasing reliance on secret writing in periods of war or domestic conflict as well as the encoding technique she or her secretaries used. This cryptoanalysis leads to a discussion of Guise's political use of ciphers and her attempt to prevent French skills in the field to be shared with the Scots. Finally it discusses the information game, involving three players – France, Scotland and England – in which the Regent took part during the Reformation rebellion and which contributed to her fall. Guise's ciphered letters as well as the matching code tables are also transcribed here to illustrate the contribution of continental consorts to this aspect of early modern diplomatic culture.

Cet article s'intéresse au rôle joué par Marie de Guise dans le développement de l'usage des chiffres dans la correspondance politique en Écosse. Sur la base de six lettres chiffrées entre la régente d'Écosse et les ambassadeurs français en Angleterre entre 1553 et 1559 qui ont été conservées, il analyse le recours accru au chiffrage dans les périodes de guerre civile ou entre états ainsi que la technique de chiffrement par nomenclature utilisée par Guise ou ses secrétaires. Cet exercice de cryptanalyse se poursuit par une discussion sur l'usage politique des chiffres par Marie de Guise et de ses efforts pour empêcher que les compétences françaises en la matière ne soient partagées avec les Écossais. Enfin, cet article commente la guerre de l'information entre trois protagonistes – la France, l'Écosse et l'Angleterre – dans laquelle la régente prit part pendant la rébellion de 1560 et qui conduit à sa perte. Les lettres chiffrées, accompagnées des nomenclateurs correspondant aux chiffrements, sont également retranscrites

ici pour apporter un exemple de la contribution des reines-consorts venues du continent à cette facette de la culture diplomatique de la première modernité.

INDFX

Keywords: Anglo-Scottish wars, ciphers, cryptoanalysis, Marie de Guise, Antoine de Noailles, Gilles de Noailles, nomenclators, Reformation rebellion, John Somer **Mots-clés**: Guerres anglo-écossaises, chiffres, cryptanalyse, Marie de Guise, Antoine de Noailles, Gilles de Noailles, nomenclateurs, guerre civile écossaise, John Somer

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