Digital Approaches to the Archive: Multispectral Imaging and the Recovery of Borges's Writing Process in "El muerto" and "La casa de Asterión"

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With the ever-growing popularity of an entire e-world of downloading, sharing, and easy access to texts, interest in a material, print culture appears, at first glance, to be on the decline. In the age of the e-reader, the digital word often wins out over the printed word. That said, certain new technological advances of the twenty-first century, such as multispectral imaging, are at the service of print documents and more often than not open a number of possible avenues for future investigation. In the most general of terms, multispectral imaging has the ability to capture many of the invisible, illegible aspects of original documents through the use of a system of single wavelength scans. At various institutions around the world, this technology has already been used, with great successes, for unearthing lost or damaged textual material and, as a result, points to one of the positive dialogues between digital and print cultures that emerges in the twenty-first century. In this paper I will provide a case study of the application of multispectral imaging to a pair of manuscripts from the University of Virginia Borges collection: "El muerto" and "La casa de Asterión."

These two works, later published in *El Aleph* (1949), contain a number of cross-outs, smudges, and stray marks that make parts of the central text impossible to decipher to the naked eye. With the help of multispectral imaging technology, a series of previously hidden words in the docu-

ments are thrown into sharp relief for the reader and provide a great deal of insight into Borges's writing process. More specifically, what we find in the changes that appear beneath these cross-outs is an extreme attention to word order and the *choice* of words, which emphasize the particular importance of precision in conveying meaning for Borges.

In recent years, Daniel Balderston's research on Borges's manuscripts has provided the field with insight into the writer's unique compositional process. More specifically, Balderston's analysis of Borges's manuscripts—which is the subject of his forthcoming book, *How Borges Wrote*—reveals this Argentine author's obsession with rewriting, which can be identified most clearly through the constant cross-outs, interlined edits, and marginal comments throughout his manuscripts all neatly written in his "insect-like handwriting" (Balderston "Insect-like"). In his own words, "podemos observar en los manuscritos de Borges procesos constantes de tachadura y de multiplicación: se anotan posibilidades, se reemplaza una palabra con otra que no es para nada parte del mismo campo semántico, se borran conexiones, se anotan nexos secretos" (Balderston "Tachadura" 83). The use of multispectral imaging technology further enhances this research in uncovering textual variants, which ultimately aids in the production of scholarly editions— whether diplomatic or critical[1]—as well as broader bibliographical and material studies. While multispectral imaging has traditionally been employed for recovering and preserving material that was unintentionally damaged by external forces—as is the case with the Archimedes Palimpsest—, this technology can also be vital for other types of damage.[2] In other words, the two case studies I provide here do not shed light on material lost due to external forces—such as water damage, fire damage, or simply aging—but rather an individual author's

1 The various methods of scholarly editing can be divided into two camps: documentary editing and critical editing. The first type of editing is also referred to as "diplomatic" or "non-critical" in light of the fact that it aims to reproduce (historical) documents *without* introducing any new emendations or alternations of the text. The second type of editing, also called the "eclectic method," invokes debates surrounding the ideas of copy-text, accidentals versus substantives, and authorial intention (see Tanselle). What is more, the role of editors (i.e. multiple hands), societal impacts, and more performative issues are discussed at length with critical editing (see Shillingsburg).

2 For more information on the Archimedes Palimpsest project, and their successes with multispectral imaging technology, see: (http://archimedespalimpsest.org/about/imaging/).

self-inflicted damage to his own texts.[3] Put simply, this technology can allow scholars to approach the question of authorial intention more critically with a substantial amount of material data.

CASE 1: "EL MUERTO" (UNIVERSITY OF VIRGINIA, MSS 10155-0)

First published in the literary journal *Sur* in November 1946 and later included in *El Aleph* (1949), "El muerto" tells the tale of a porteño man, Benjamín Otálora, who is a fugitive from justice in Uruguay after killing someone in Buenos Aires. In a seemingly fortunate turn of events, Otálora saves the life of Azevedo Bandeira shortly after arriving in Montevideo, and, subsequently, is invited to join this man's troop in the north of the country. As Otálora adjusts to the life of a gaucho, he becomes more and more power hungry and ultimately hatches a plan to overtake Bandeira. He reveals his strategy to Bandeira's bodyguard, Ulpiano Suárez, and coyly begins to seize Bandeira's two most valuable possessions: his horse and his woman. A few nights later, Bandeira confronts Otálora to tell him he is aware of his plan and, after forcing him to kiss his woman in front of everyone, takes aim to shoot him. The central narrative of a man on the run from the law aligns with a number of themes present in detective fiction, which is a well-known area of interest, and topic of study, for Borges.[4] While his theoretical positions with regard to this genre tend to favor the enigmatic approaches of locked-room mysteries, what we find throughout "El muerto" is a shift toward the seedier, crime-filled North American tradition of hard-boiled detective fiction.[5]

3 Current work at the Library of Congress and the University of Virginia reflects this latter use of multispectral imaging to recover "self-inflicted damage" to historic documents. Consider, for instance, the shocking revelations found in Thomas Jefferson's edits to the original Declaration of Independence (https://www.loc.gov/item/prn-10-161/analysis-reveals-changes-in-declaration-of-independence/2010-07-02/). While this specific initiative at the LOC used *hyperspectral* imaging, both technologies allow us to see the unseen. The main difference between the two technologies is that hyperspectral imaging provides much more detail through *hundreds of narrow bands*, while multispectral imaging relies on *fewer*, *wider bands*.

4 While much ink has been spilled on Borges and the genre of detective fiction see the following critical works for an introduction to the topic: Bennett, Lafforgue, Irwin, Martín.

5 See Benedict for an in-depth analysis of the hardboiled traits in "El muerto."

The "El muerto" manuscript consists of thirteen unique leaves of slightly yellowed graph paper with sharp edges.[6] The graph lines are a grey-blue color and there are two blue double lines that surround the graph sections and demarcate the inch-wide margin on the left-hand side and the top of the leaf. The narrative text is written in black ink while the title of the work appears in pencil in the top margin on the first leaf. The most curious feature of this manuscript is the fact that each leaf is of a varying length. In other words, most of the leaves are cut fragments of graph paper, not entire sheets. Since each leaf contains the same one-inch top margin, it is clear that the segments of paper do not come from the same leaf, but rather are all unique leaves. To give readers a better sense of the sizes of these fragments, consider the following dimensions of each leaf[7]:

Folio Number	Dimensions (length x width)
1	15.4 – 15.6 cm x 16.7 cm
2	7.5 – 7.6 cm x 16.7 cm
3	6.5 – 6.8 cm x 16.7 cm
4	11.5 – 11.7 cm x 16.7 cm
5	6.3 – 6.7 cm x 16.7 cm
6	7.3 – 7.5 cm x 16.6 cm
7	8.5 – 8.7 cm x 16.7 cm
8	21.4 cm x 16.7 cm
9	5.9 – 6.3 cm x 16.7 cm
10	6.4 – 6.5 cm x 16.7 cm
11	9.7 – 9.8 cm x 16.7 cm
12	6.3 cm x 16.5 cm
13	21.4 cm x 16.7 cm

6 Borges has only written on the recto of each leaf, which is also the case for the "La casa de Asterión" manuscript.

7 Certain lengths include a range of numbers; this range captures the jagged edge where the page was cut unevenly and, as a result, has slightly different lengths.

From these dimensions we get a sense of the variations in length, yet consistency in width, between the leaves of this manuscript. The majority of leaves are just around a third of the size of a full leaf, while only *two* leaves maintain the complete, original dimensions of the paper (ff. eight and thirteen). All of the leaves of the manuscript are housed in between the green marbled covers of a "Lanceros Argentinos (1910)" notebook on which Borges has written the title, "El muerto," in small print directly to the right of this brand name.

Throughout the "El muerto" manuscript, we find a total of nineteen cross-outs. While a few of these editorial marks leave the underlying canceled texts visible to the reader, the majority are extremely thick, black blocks that completely obscure the words hidden beneath. With the help of multispectral imaging a large portion of these canceled texts materialize before our eyes.[8] In general terms, we see two categories of textual material below these cross-outs: substantive variants and accidental variants. Drawing on practices of textual criticism and scholarly editing, the former category refers to variants that change the meaning or sense of the text, and the latter includes variants that change the "formal presentation" of the text (spelling, punctuation, word-division, etc.) (Greg 21). Thus, many of the substantive variants imbue the "El muerto" manuscript with darker, almost sinister, shades of meaning, causing it to align more with the hard-boiled detective tradition as opposed to the *novela enigma* that one normally associates with Borges. The accidental variants in this manuscript, on the other hand, point to the fact that this document was most likely a clean (finalized) copy to be sent to the typesetter or editor for print production.

Consider, for instance, the following substantive variant in the "El muerto" manuscript, which appears on the eighth leaf:

8 Multispectral imaging is most successful when different inks have been used for the underlying text and for the crossing out. In the case of Borges's manuscripts, the rate of return for reading beneath the surface of these obfuscations is around fifty percent, which is most likely due to the fact that the same fountain-pen ink has been used for composing these texts, as well as editing them. For the "El muerto" manuscript, multispectral imaging helped reveal the canceled text for ten of the nineteen cross-outs (52.6%). The "La casa de Asterión" manuscript had a slightly higher rate of return of nineteen out of twenty-eight (67.9%).

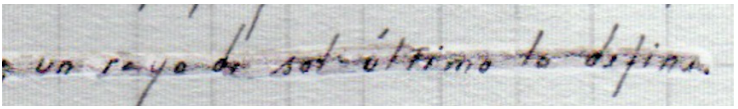

Figure 1: "El muerto" (MSS 10155-0)

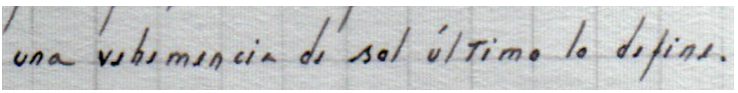

Figure 2: "El muerto" (MSS 10155-0)

The above two lines describe a dramatic encounter between Otálora and Bandeira, when the latter is gravely ill and the former brings a gourd of mate to his bedroom. More specifically, the narrator describes how the scant light reveals the figure of Bandeira to Otálora. The first figure shows the canceled text—revealed through multispectral imaging—, while the second presents the final version of the text in question. Even though only one word is changed from the first line to the second ("rayo" to "vehemencia"), the sense of the phrase is clearly altered. Instead of a mere descriptive stance of sunrays defining the shape of Bandeira in the room, Borges has opted to define this natural light source as "vehement," which sets the stage and hints at how Bandeira will ultimately seek vengeance. The majority of the multispectral-imaging revealed variants in the "El muerto" manuscript are substantive and, similar to the above example, point to slight shifts in language to achieve a darker, more sinister feel. Thus, we find the following slight change a few lines after the above example:

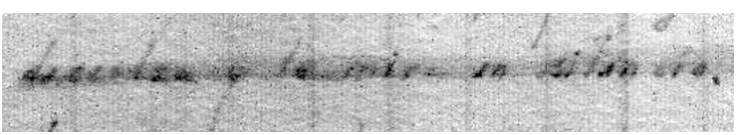

Figure 3: "El muerto" (MSS 10155-0)

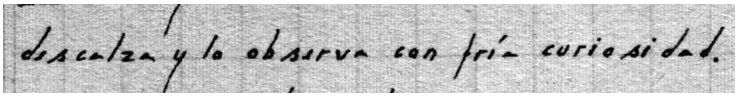

Figure 4: "El muerto" (MSS 10155-0)

Here we once again discover a slight change of words: "mira" becomes "observa" and "en silencio" becomes "con fría curiosidad." That said, these substantive variants highlight Bandeira's cold, calculated nature and, instead of simply trying to make out an unclear figure, he is characterized as carefully *studying* and scrutinizing Otálora. Similar shifts in character development toward the more sinister appear later in the manuscript. More specifically, on the eleventh leaf we find that Otálora does not "*descuida la ejecución de órdenes* de Bandeira," but rather "*no obedece* a Bandeira" (emphasis mine). This subtle change from a passive stance (neglect) to an active one (disobedience) captures Otálora's brazen spirit.

The following is the only one example of what I would deem an accidental variant in the "El muerto" manuscript:[9]

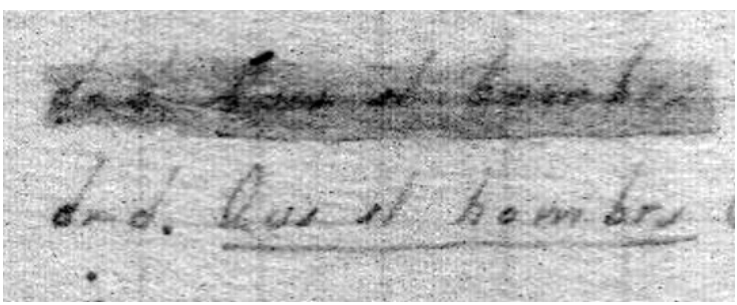

Figure 5: "El muerto" (MSS 10155-0)

Here we find the exact same phrase ("-dad. Que el hombre") written out, canceled, and rewritten in exactly the same way just below the original text. At first glance, there appears to be no rationale for this cross-out, yet if we look to the remainder of the manuscript, the decision to cancel

9 Readers will recall that multispectral imaging only revealed half of the total cross-outs in this specific manuscript, which suggests that there might be more instances of accidental variants in the manuscript as a whole.

the previous phrase and rewrite it one line lower might be a desire to place more space between lines in the text or even clarify these letterforms more deliberately for potential editors, typesetters, or printers.[10] While this example is the only (visible) instance of an accidental variant in this specific manuscript, its presence points to the fact that Borges was keen to edit not simply for content (substantive variants), but also for form (accidental variants). In other words, his (recognizable) precision of language—apparent in both his character and plot development—naturally bleeds into a concern for the physical presentation of each carefully printed letterform. Both levels of precision—semantic (content) and typographical (form)—allow for clarity and an avoidance of confusion in the "El muerto" manuscript, especially if we are to understand it as intended for the editorial eyes of others.

Case 2: "La casa de Asterión" (University of Virginia, MSS 10155-k)

"La casa de Asterión," which also forms a part of *El Aleph*, first appeared in print in *Los Anales de Buenos Aires* in May 1947. Taking the form of a dramatic monologue, this short story immediately inserts readers into a world of mystery, violence, and intrigue, as the true identity of the speaker, Asterión, is not revealed until the very last phrase of the work. As is typical in a number of Borges's short stories, we are presented with an alternative retelling—from a new perspective—of a centuries old tale. In this case, the narrator is none other than the Cretan Minotaur expressing his grief, sadness, and discontent for being imprisoned in a labyrinth, which is the only home he knows. In a sense, the entire work is comprised of a series of riddles about the Minotaur's life and imprisonment that the clever reader can try to work through and solve before the ultimate unveiling—and death—of the narrative voice. Thus, Asterión presents readers with curious information about his home—which has no doors, yet many corridors—, how he spends his days alone, and finally how people come every nine years as sacrifices and he leaves their bodies in empty rooms. The

10 C. Jared Loewenstein makes this same claim in his impressive catalogue of the University of Virginia Borges Collection: "original manuscript, probably supplied to the printer" (143).

final key to solving the riddle appears in a short epilogue—demarcated by an asterisk—in which Theseus mentions to Ariadne how the Minotaur scarcely defended himself. On the whole, "La casa de Asterión" contains many common themes and technical strategies that crop up frequently in Borges's writings: the re-telling of a canonical story through the eyes of a silent participant; the inclusion of and reliance on mythology; the presence of monsters; the iconic labyrinth; and the idea of redemption.[11]

The physical features of the eight-leaf "La casa de Asterión" manuscript are reminiscent of those we saw in the "El muerto" manuscript. In other words, each leaf of this manuscript is slightly yellowed graph paper with grey-blue grids and two blue double lines to demarcate the inch-wide margin on the left-hand side and the top of the leaf. The only exception to this standard is the penultimate leaf (f. [6+1]), whose top margin has been sliced off and the coloring is significantly lighter than the rest of the document.[12] The central text is written in blue ink, while the majority of the cross-outs are in black ink. Once again, the only exception to this pattern of ink colors is the penultimate leaf (f. [6+1]), which presents edits, cross-outs, and changes in both blue and black ink. Similar to the previous manuscript, the length of each of these leaves is also varied:

Folio Number	Dimensions (length x width)
[1]	8.7 cm x 16.7 cm
2	11.1 cm x 16.7 cm
3	7.9 – 8.4 cm x 16.7 cm
4	5.7 – 5.8 cm x 16.7 cm
5	9 – 9.2 cm x 16.7 cm
6	7.8 cm x 16.7 cm
[6+1]	14 – 14.2 cm x 16.7 cm
7	21.4 cm x 16.7 cm

11 As with the vast majority of Borges's fictions, the list of critical sources that engage this short story is seemingly infinite. That said, see the following works for their consideration and examination of the central themes and tenets at play in "La casa de Asterión": Anderson Imbert, Shaw, Lefere, and Bocaz Leiva.

12 Within their archival folder, the last leaf of the manuscript bears no numeration. I argue below that this unnumbered leaf in question is actually an earlier version of leaf seven (f. 7) in light of their shared textual material and physical presentation.

The same tendency to cut virtually every sheet into small fragments that we saw with the "El muerto" manuscript continues here, which points to another level of textual cancelation—or suppression—on the part of Borges. The fact that the bottom edges of several leaves—2, 4, and 5 to be exact—show the tops of canceled texts further supports the claim that cutting off parts of each leaf signals another level of textual obfuscation:

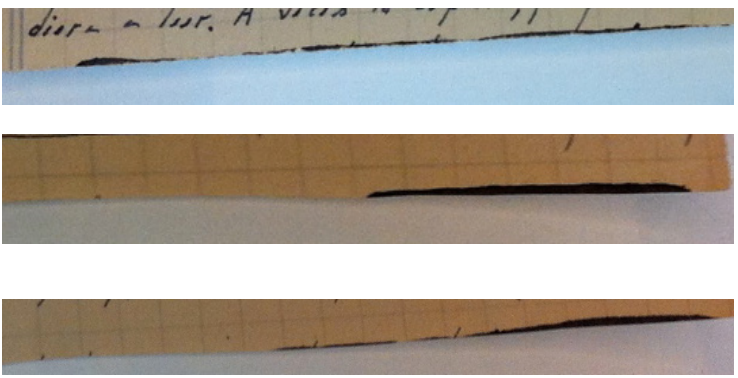

Figure 6: Bottom (cut) edges from "La casa de Asterión" (MSS 10155-k)

Unlike the previous manuscript, the leaves of "La casa de Asterión" are *not* housed in the cover of any notebook.

Of the twenty-eight cross-outs found throughout the "La casa de Asterión" manuscript, nineteen are legible with either multispectral imaging technology or a close study of the leaves with the naked eye (67.9%). In her critical analysis of this particular manuscript, María Laura Bocaz Leiva groups all of the instances of canceled text throughout the document into three unique styles of cross-outs: "inscripción de una gruesa línea negra que vela por completo el texto descalificado (tachadura de supresión); tachado horizontal simple (tachadura de sustitución) y por último, tachado sucesivo mediante líneas verticales paralelas (tachadura de supresión)" (192). Curiously, the more legible cross-outs—those of a simple one-line strike through or a series of vertical cross-hatchings—only appear in the final two leaves of the manuscript, while the more challenging canceled texts—those that use "una gruesa línea negra que vela

por completo el texto"—occupy the first six leaves of the work. In light of the fact that these former two styles of cross-outs are legible *without* multispectral imaging, I will focus my attention here on the latter type of the completely illegible canceled text.

The "La casa de Asterión" manuscript has a smaller number of (visible) substantive variants in comparison with the "El muerto" manuscript. That said, they are just as revealing and help us better understand the various ways in which Borges might have edited, refined, and created some of his most canonical writings. More specifically, the cross-outs and canceled portions of text in the "La casa de Asterión" manuscript uniformly point to a marked effort to mask the identity of the speaker, Asterión, until the very last moment possible. Thus, the first cross-out in the entire document, which appears a mere three lines into the first leaf, reflects Borges's conscious decision to keep any revealing details close to his chest:

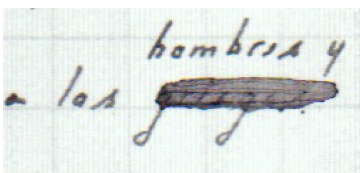

Figure 7: "La casa de Asterión" (MSS 10155-k)

Serving as one of the clearer examples of the power of multispectral imaging, we find that the original text beneath this cross-out—"griegos"—is immediately thrown into sharp contrast with this technology. To give readers a better sense of the impact of this change, consider the entirety of the sentence: "Es verdad que no salgo de mi casa, pero también es verdad que sus puertas (cuyo número es infinito) están abiertas día y noche a los ~~griegos~~ hombres y también a los animales" ("La casa de Asterión" [MSS 10155-k]). While both terms refer to Asterión's visitors, the former provides specific geographical detail that would potentially give away the mystery and intrigue of the short story within the first few sentences. The idea of reserving the identity of the narrator until the very end of the short story—as well as revealing the identity of this figure with as *few* details as possible—, imbues the work with a heightened level of suspense. While our current conception of Greek nationality does not map onto the

heroic age of the mythological Minotaur, as a *modern* categorical descriptor, it would certainly convey meaning to Borges's contemporaries in the mid-twentieth century. In a similar vein, this semantic change captures Borges's ability to reinvent mythologies and well-known oral traditions in unique and novel ways since we see him deliberately shifting his perspective to take on the persona of the Minotaur who, as a monster, does not identity with the category of "hombres." Viewed from either angle, this substantive variant reveals a decisive shift toward narrative ambiguity, which is a defining feature in many of Borges's creative fictions.

In contrast with what we saw in the "El muerto" manuscript, the majority of (visible) variants found in the "La casa de Asterión" manuscript are *accidentals*. Moreover, in contrast to the lack of changes that we saw with the previous case study, the hidden accidental variants in the "La casa de Asterión" manuscript tend to obscure either spelling errors or instances of running out of physical space to finish a line of text. Consider, for instance, the following example taken from the center of the second leaf of the document:

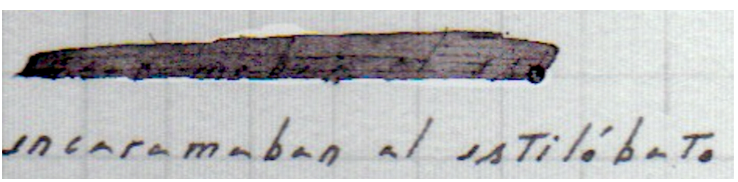

Figure 8: "La casa de Asterión" (MSS 10155-k)

While the image quality is slightly wanting, the first line of canceled text reads "encaramaban el eso," which is re-written as "encaramaban al estilóbato" immediately below it. Since the last word of this phrase is a technical term referring to the structural base of a temple, it is plausible that this canceled text may reflect a spelling error. When we look closely at the final "o" in the cross-out, we can discern a faint typographical ascender—perhaps intended for the first "t" in "estilóbato"—, which further suggests that this canceled text is an accidental variant. Toward the bottom of this same leaf we find another clear example of a similar accidental variant:

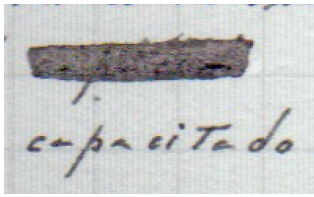

Figure 9: "La casa de Asterión" (MSS 10155-k)

Here the word "capacio" is canceled and "capacitado" is written directly below it as its replacement. In a sense, we might conceptualize these two accidental variants as a case of the mind working faster than the hand. Moreover, Borges's ultimate decision to strike these errors almost completely from his manuscript—a manuscript that I believe would have gone directly to his editor, typesetter, or printer[13]—speaks to his desire for his writings to convey a sense of polished perfection immediately before entering the hands of others.

Even though the cross-outs on the two final leaves of the "La casa de Asterión" manuscript are legible without the assistance of multispectral imaging, it is important to consider their canceled material in light of the newly revealed substantive—and accidental—variants. In general terms, these two final leaves can be seen as variations on a theme. That is to say, the textual material inscribed on these leaves provides readers with an early draft of the ending of "La casa de Asterión" (f. [6+1]) and a finalized version of this ending (f. 7). While the structure of the textual material remains the same—a final reflective passage from the narrative voice at the top of the leaf, an asterisk that serves as a divider in the center of the leaf, and a final short epilogue by Theseus after the Minotaur has been slayed

13 Several factors support the claim that this manuscript most likely went directly from Borges's hands to those of an editor, a typesetter, or a printer. The relatively *clean* state of the manuscript itself, which lacks a large number of cross-outs and has virtually no marginal annotations or alternative texts, suggests that it was prepared for editorial eyes. In contrast, we find a tendency toward myriad cross-outs, emendations, and alternative texts in the majority of Borges's extant (earlier draft) manuscripts (see Balderston). That said, there are still a few cross-outs throughout the manuscript, which can be explained by the biographical accounts surrounding Borges's composition of this short story. Such accounts allude to the fact that he wrote this piece in a matter of days, which is very uncharacteristic and would suggest a lack of time—on the part of Borges—to rewrite an entirely clean copy of the work (Rodríguez Monegal 45).

on the bottom half of the leaf—the earlier version (f. [6+1]) includes a great deal more (canceled) material. More specifically, what I am calling the final "epilogue" of the short story—the insertion of the voice of Theseus to reveal the mysterious identity of the narrator as well as explain his ultimate demise—appears as a working draft, rather than a final, polished ending. Here we see Borges ruminating on how to frame his big reveal: should he mention the actual labyrinth? What type of weapon should be associated with the slaying of the monster? Should there be multiple lines of dialogue or just one statement? All of these crucial details call to mind the first substantive variant in the manuscript itself—the changing of "griegos" to "hombres"—and Borges's tendency toward both linguistic precision and heightening levels of suspense. Curiously, the only legible cross-outs—those with a single horizontal strike through or those with light cross-hatching—occur on these final two leaves, which points to a certain level of lingering indecision toward the ending for this short story. While we might never know the exact rationale for leaving these earlier texts mostly visible to the naked eye, we might posit that Borges was coyly showing two potential endings to his re-writing of a canonical myth and that these two variations on a theme could produce more (or it might simply be that Borges was pressed for time with a swiftly approaching deadline and only had one pen on hand for writing and editing).[14]

A REVIEW AND CONCLUSION

In these case studies I have shown how multispectral imaging can help read beneath cross-outs and canceled texts in two Borges manuscripts. This technologically driven methodology reveals a series of substantive and accidental variants, which demonstrate the specific ways that Borges worked to imbue his texts with more sinister elements, develop narrative ambiguity, and heighten suspense. Moreover, since I argue that both

14 This latter claim lines up closest with the probable reality when we consider Emir Rodríguez Monegal's statements surrounding the hurried composition of "La casa de Asterión": "The story was originally published in the magazine *Los Anales de Buenos Aires*, which Borges edited between 1946 and 1948. According to Di Giovanni, Borges wrote it in two days in 1947. He was closing an issue of the magazine and discovered he had two pages to fill. 'He commissioned a half-page drawing of the Minotaur on the spot and then sat down and wrote his tale to measure'" (45).

the "El muerto" and the "La casa de Asterión" manuscripts[15] functioned as printer's copies, we can identify a move to eliminate any typographical errors (accidental variants) as well as any alternative word choices (substantive variants) prior to sharing this work with printers.[16] In the pages of "Pierre Menard, autor del Quijote" Borges ruminates on the future of his own creations: "He reflexionado que es lícito ver en el Quijote 'final' una especie de palimpsesto, *en el que deben traslucirse los rastros –tenues pero no indescifrables– de la 'previa' escritura de nuestro amigo. Desgraciadamente, sólo un segundo Pierre Menard, invirtiendo el trabajo del anterior, podría exhumar y resucitar esas Troyas*..." (58-59, emphasis mine). Borges's words here serve as a sort of call to arms for future scholars to investigate the residual traces of previous versions of writings, which requires both print and digital methodologies. More specifically, as I showed in my two case studies, current imaging technology can allow individuals to "exhumar y resucitar" previous writings. This newfound evidence—produced on a larger scale with many more manuscripts—will hopefully result in novel avenues of scholarly investigation as well as the production of expertly prepared editions, both critical and diplomatic. As Daniel Balderston indicates, the desire to obscure any edits through the cross-out is a common practice in virtually any manuscript of Borges. For that reason, these technological advances provide scholars with new understandings about the meticulous process of writing for this canonical Argentine author and help them to recuperate—and reconstrue—what he was at such pains to conceal.

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15 Here I refer only to the University of Virginia manuscripts. In light of the fact that many extant Borges manuscripts are held in personal, private collections, there is always the possibility that other (earlier) manuscript versions of these two works exist (or once existed).

16 In contrast to these more finalized manuscripts, there are a number of Borges's works for which we have *various* extant manuscripts, which shows a messier, multi-draft process (see Balderston "Variantes").

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