http://dx.doi.org/10.1017/CBO9781316258736.007

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Reading Originals By the Light of Translations
forthcoming in *Shakespeare Survey* *68* (2015)

Tom Cheesman

The first half of this paper discusses the idea that translations, considered as texts, as editions, and as interpretations, can help Shakespeareans re-read the original. The second half discusses some new technology which attempts to put that idea into practice.

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The recent upsurge of interest in non-English Shakespeares, coinciding with a ‘cultural turn’ in Translation Studies, has – as Ton Hoenselaars puts it succinctly – led to ‘Shakespeare without *his* language’ being mostly interpreted as ‘Shakespeare without *his* language’. The ‘verbal component’ of translation, ‘the original core business involving the interaction of foreign languages’, is losing out to other cultural components: those which are more easily transferred back into Anglophone discussions.1 Ruth Morse also calls for new attention to literary-theatrical translations as texts, not just as documents of their original culture, but as pragmatic aids to reading the original original: ‘the translation of metaphor may help the native speaker to alert herself to secondary (or even primary) associations in a text’; translations ‘can be just as thought-provoking when they arouse reservations’; they can ‘preserve what has been lost from the original’ by change in English (the you/thou distinction is among her examples).2 Dirk Delabastita goes further. He points out that ‘every translation [including every interlingual adaptation] incorporates or constitutes an act of total interpretation’ of the original, and that translators are often ‘superbly sensitive readers’, who are less likely than native speakers of English to overlook the significance of ‘misleadingly familiar patterns’ in the original. This means that ‘translations present a vast exegetical potential’, overlooked by Anglophone editors and critics (and teachers and theatre practitioners). Translations, he says, ought to be deployed ‘as key witnesses of the diverse ways in which certain passages can be read and *have been* read’.3

1 Ton Hoenselaars, ‘Translation Futures’, *Shakespeare Survey* *62* (2009), 273-82; p.275. I thank Margaret Tudeau for the invitation to take part in her stimulating seminar, ‘Lost in Translation’, at ISC 2014, and Balz Engler for sharing his expertise in comments on a draft of this paper.
This is a striking thought. An edition which incorporated translators’ readings would be a great advance on the editions we have and are getting, which arbitrarily confine their sources to English. Delabastita reminds us that Shakespeare’s translators were inevitably aware of his texts’ ‘ambiguities, puns, and quibbles’ long before the scholars:

not [...] that all [individual] translators [fully] understood these subtle puns or ambiguities as such, but different translators appear to have disambiguated puns in different ways, so that the [aggregate] picture emerges of readings that are complementary in their respective partialities. The mere collation of such incomplete translations or ‘mistranslations’ thus produces a surprisingly accurate sense of the possible semantic range of Shakespeare’s words. If translations, through their easy availability and their interpretive explicitness, are among the most valuable documents for exploring both the interpretive history of a Shakespeare text and its semantic virtualities, why is it that editors (and critics) are not taking note of them?4

It is a good question.

There is a sort of precedent, but not a happy one. In the 1870s and 1880s, Horace Howard Furness took note of translations in several volumes of his New Variorum edition. Sometimes he simply reprinted parallel translations of a sample passage, without comment. In an appendix to Othello, titled ‘Can Shakespeare Be Translated?’, he presented 35 versions of Iago’s ‘mandragora’ lines (3.3.334-7), in eight European languages.5 His only comment, at the end of the series of quotations, was: ‘Let me not be understood as citing these translations in any carping, critical spirit. They are all good, and some of them admirable, as exact and literal as is possible. Where they have failed, they have failed because they must.’6 Furness combines smug certainty that Shakespeare’s poetry cannot be translated – that is, not at all well – with an impressive show of his own linguistic skills: ‘I could continue the series in Russian, in Polish, in Bohemian, and in Hebrew, – not, however, as examples of translations, for my having in these languages is as a younger brother’s revenue, but as illustrations of the universality of Shakespeare’s presence in every land, and in every tongue.’7 A ‘translation’, for Furness, is a text which he can read: anything else is just an ‘illustration’ of universality. This is a key point, and it largely answers Delabastita’s question. Even if Shakespeare’s editors are beginning to overcome Furness’s ideological insularity (and even if they acknowledge

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6 Furness, Othello, p.458.
7 Furness, Othello, p.458.
both Delabastita’s point that translations are editions,⁸ and Balz Engler’s that editions are translations),⁹ they cannot actually read actual translations, or certainly not all the translations they would need to read; and what they cannot read, they are not comfortable working with.

Furness printed samples from translations, only in order to underline that none was worth reading. The ruse worked: no Anglophone editor since has paid even that much attention to translations. Perhaps the profession is ready now to move on. But it will be necessary to demonstrate a pragmatic gain to be made from engaging with translations, sufficient to justify the intrinsic challenge. International collaborations are necessary between scholars with expertise both in Shakespearean originals and in translations. The clincher could be Delabastita’s immodest proposal. Translations are not just documents of the translating cultures, and of intercultural dynamics (although that is sufficient reason to be interested in them). As interpretations, they can be put to work, serving readers of the original – and in the process, fomenting those readers’ linguistic curiosity.

To implement Delabastita’s suggestion, a network of specialists must help editors tap translations’ ‘vast exegetical potential’. Here ‘help’ implies ‘translate’: in order to contribute to the understanding of a crux in English Shakespeare, renderings of it in other languages must be made accessible in English, that is, at least back-translated and glossed, and ideally subjected to more detailed commentary. We will return to this tricky point. ‘Help’ also means, pragmatically, obtaining copies of translation texts. Delabastita exaggerates the ‘easy availability’ of translations. Collecting them, with necessary information about their contexts, can be far from straightforward. Here Morse’s work on the quasi-canonical French translations by François-Victor Hugo is instructive. His texts have the status of classics, but his copious scholarly, critical and polemical work, essential to his original edition, has been utterly forgotten. Basic book history data is lacking. She notes that even the greatest libraries have failed to collect translations systematically.¹⁰ An important start in plugging the information deficit was made by the bibliographies in 33 languages assembled by the ‘Shakespeare in Europe’ project at Basel University.¹¹ But quite aside from the arbitrary ‘European’ limitation of that particular project, it largely restricted itself to print publications. Many translations of great interest are not and never were in print. Vast numbers of manuscripts and typescripts are scattered in public, theatre, and private archives – never mind audio-visual materials. What’s more, the task is never-ending. New translations and adaptations are being created at an accelerating rate, in more and more languages – some print-published, most not. And finally, merely accessing a text is

never enough: readers need information about its contexts of origin and use in order to assess it and its textual choices.

Would the investment pay off in terms of new and better understandings of the original? Take the first major crux in Othello, Iago’s description of Cassio as ‘A fellow almost damned in a fair wife’ (1.1.20). The phrasing – ‘to damn’, in the passive, with the preposition ‘in’ and a noun for a person (or class of persons) (and a marital ‘wife’ or ‘wife’ meaning woman?) – is so unusual that no clear meaning can be construed. Furness devotes five pages to Anglophone and German editors’ and commentators’ ingenious proposed emendations and glosses, finally admitting defeat.12 (‘The text cannot be altered, and opinions are often just an expression of despair at that.’)13 For Michael Neill, the line expresses Iago’s misogyny and sexual envy of Cassio, but its ‘precise reference [...] remains unclear’: he suggests Cassio is either about to marry and suffer the consequences; or ‘a ladies’ man’; or having an affair with a married woman.14 Balz Engler, on the other hand, neatly explicates ‘damned in’ as either ‘damned because of’ or ‘transformed into’ (citing Macbeth’s ‘damn thee black’, 5.3.11).15 German translators, between them, offer all these interpretations. Their predominant reading is Engler’s second, taking ‘wife’ to mean ‘woman’:16 Cassio is effeminate, ‘damned [to be / by being turned] in[to] a woman’. Wolf Baudissin’s Othello in the Schlegel-Tieck edition (1832, and countless revisions) gives: ‘zum schmucken Weibe fast versündigt’, approximately meaning: ‘sinned [so as] almost to [become] an attractive woman’. This German phrasing is strange too, if not so ambiguous as the original. Most later translators express the same basic idea. The closest version perhaps is: ‘fast in ein schönes Weib verdammt’ (‘almost damned into a beautiful woman’, Friedrich Gundolf, 1909). Some simplify: ‘anzusehen wie ein Weib’ (‘like a woman to look at’, Erich Engel, 1939); ‘ein femininer Schönling’ (‘an effeminate pretty-boy’, Christian Leonard, 2012). Others elaborate: ‘der durch Zufall / nicht als ein hübsches Weib auf diese Welt kam’ (‘who by chance was not born into the world as a pretty woman’, Hans Rothe, 1955); ‘Der Teufel / hat fast ein schönes Weib aus ihm gemacht’ (‘The devil almost made a beautiful woman out of him’, Erich Fried, 1972); ‘N verdammter Schwulenschönling, n Tuntentalent. Kapp ihm den Schwanz und du hast n einwandfreies Blowjobbluder’ (‘A damn fairy-pretty-boy, a faggot-talent. Cut off ‘is cock ‘n’ you gotta

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12 Furness, Othello, pp.5-10. Furness notes that Alexander Schmidt, in revising Baudissin’s ‘Schlegel-Tieck’ (1832) translation of Othello for the edition of the Deutsche Shakespeare-Gesellschaft in 1877, ‘avails himself of a translator’s privilege’ and cuts the line (p.11). Wieland (in 1766) and Schiller and Voss (in 1805/6) had done the same before.

Bibliographic details for translations cited in this paper are at http://www.delightedbeauty.org/vvvclosed (at: Corpus = ‘Othello, German, Act 1 Scene 3). Back-translations are my own.


16 Interference may be a factor: German ‘Weib’ primarily means ‘woman’.
total blow-job-bitch’, Feridun Zaimoglu and Günther Senkel, 2003). Among alternative, minority readings: ‘schon zum Pantoffel fast verdammt’ (‘already almost damned to [be under] the slipper [of a housewife]’, Otto Gildemeister, 1871); ‘dem mal ein Weib zum Schicksal wird’ (‘for whom a woman is going to be fateful one day’, Frank Günther, 1992); ‘Schürzenjäger’ (‘skirt-chaser’ i.e. ‘ladies’ man’, Oliver Karbus, 2006).

This sample of a few versions of a crux raises problems for the potential deployment of translations as exegetical aids. First, it is not always obvious what the translations mean, any more than their original. Arguably the best translations – certainly for exegetical purposes – convey some of the original’s ambiguity, at the risk of exceeding it, multiplying the uncertainty. They have their own ‘semantic virtualities’. Back-translations into English must struggle to convey the sense aptly and fully, never mind the equally essential tone and style; and as for prosody, rhythm, ‘Klangmalerei’ (‘sound-painting’, a well-sounding word in German, partially translatable as ‘onomatopeia’): only with a luck. Second, a translation tradition has its own dynamic of intertextual influence and imitation, resistance and differentiation, which skews the distribution of Delabastita’s ‘complementary […] respective partialities’. In this case, the Baudissin/Schlegel-Tieck reading – the ‘canonical, tacitly evolving’17 ‘original’ for the German poetic-theatrical tradition – predominates. It is noteworthy that Engler’s Studienausgabe text (in the tradition of explication and philological prose versions, whose original is Wieland) gives precisely the reading that is not found in Baudissin: ‘fast verdammt ... wegen einer schönen Ehefrau’ (‘almost damned ... because of a beautiful married woman’, Balz Engler, 1976).

Third, in a Shakespeare translation tradition, paratexts are paramount: annotations, notes, discussions in commentaries. Translators may or may not consult Anglophone editions, but they certainly consult German editions;19 as often as translations rewrite (or plagiarise) previous translations,20 they rewrite editors’ notes and glosses. Karbus (cited above) has most likely taken his reading from Neill. A variorum edition including translations as readings might have a high level of redundancy.

17 Morse, ‘Reflections’, 79.
18 The bilingual Studienausgabe resumes the earlier German philological tradition: Nicolaus Delius’s critical edition with German notes, often offering translations: Complete Works (Elberfeld: Fridrichs, and Leipzig: Baumgärtner, 1854-60, reprinted as late as 1898), the declared basis of Furnivall’s Royal and Leopold editions; Alexander Schmidt, Shakespeare-Lexicon (Berlin: Reimer, 1902) and Leon Kellner, Shakespeare-Wörterbuch (Leipzig: Tauchnitz, 1922), both still valuable; Schmidt’s work is digital at www.perseus.tufts.edu.
19 Translators now draw less often on the Studienausgabe than on the easily accessible explication translations, facing English texts, in the cheap Reclam editions, e.g. the Othello of Hanno Bolte and Dieter Hamblock (Stuttgart: Reclam, 1985).
Nevertheless, if one gathers a fair number of translations in a given language, and if the texts are electronic, it becomes possible to do things which should interest even those who cannot read the translations, as well as those who can. Overviews of translation traditions, for example, in time-maps of metadata – where and when a work’s translations, of what kinds, were created and published, and who was involved. Such online, interactive maps can also afford access to the texts, or samples of them, and information about them.\textsuperscript{21} The maps can be populated with further data, e.g. about performances, with video links, and so on. That could be a relatively ‘populist’ approach. More technically, we can apply computational analysis to compare translations. Stylometry measures occurrences of highly frequent words, to identify unconscious authorial stylistic fingerprints. Such techniques are well known from forensic author attribution studies. Applying them to the comparison of translations has been pioneered by Jan Rybicki and colleagues.\textsuperscript{22} Their software script ‘stypo’ creates a graphic which visualises comparable works forming clusters of genre and of period style. All prose explicatory versions of \textit{Othello} (from Wieland to Bolte and Hamblock) form a cluster, clearly set apart from all the poetic-theatrical texts. All versions of the 21st century or the later 19th century form clusters, clearly set apart from all other versions. Certain particular texts are shown to be linked by common stylometric measures, indicating genealogical, intertextual relations of imitation, dependency or indeed plagiarism.\textsuperscript{23}

Such visualisations of ‘distant readings’\textsuperscript{24} offer starting-points for exploratory investigations. These help us to see – quite literally – the convoluted histories of remediation which lie between each rewriting and its various, unstable sources.\textsuperscript{25} But they concern translations as documents of their cultures, much more than their relations to their ‘original source’, to the so-called ‘untranslated’ Shakespeare.\textsuperscript{26} Can we put translations to work as sources for the interpretation of original texts or passages? Can their variation – their textual differences from one another, compared – even be put to work as a resource for \textit{discovering} difficult original passages?

Before I answer that, another detour into original and translated wordings. Elsewhere I have discussed, at length, differing translations into German and French of a notorious couplet from \textit{Othello} – the Duke’s parting couplet, spoken to Brabantio: ‘If virtue no delighted beauty lack, / Your

\begin{itemize}
  \item \textsuperscript{21} See Stephan Thiel’s ‘Othello Map’ at: \url{http://othellomap.nand.io} (2012).
  \item \textsuperscript{22} See \url{https://sites.google.com/site/computationalstylistics/}. The site is maintained by Jan Rybicki, Maciej Eder and Mike Kestemont.
  \item \textsuperscript{23} Tom Cheesman and Jan Rybicki, ‘Stylistometric Analysis of 40 German Versions of \textit{Othello}’, at: \url{https://sites.google.com/site/delightedbeautywsws/outputs/exhibition or: http://tinyurl.com/vvux} (2014).
  \item \textsuperscript{24} See: Franco Moretti, \textit{Distant Reading} (London, Verso 2013).
\end{itemize}
son-in-law is far more fair than black’ (1.3.289-90).27 (I am also ‘crowd-sourcing’ versions of the couplet in all languages: some 200 so far, old and new, in 30 languages, including ‘Englishes’ – glosses, accounts of performances, literary rewritings, etc.)28 The lines make enormous demands on translators: ‘virtue’, ‘delighted’, ‘fair’ and ‘black’ are all polysemic, ambiguous in the context, echoing other passages which amplify that ambiguity; the Duke’s rhetoric, his intended meaning, mood and effect (sententious, humorous, chiding, commanding, complicit?) are ambiguous. The racist ideological assumption is offensive in many contexts, obliging translators to disambiguate ideologically, either constructing the Duke as a racist, or as an anti-racist, or (more rarely) finding a way to re-ambiguate which is pertinent to their cultural context. Not only ‘race’, but ideologies of gender, kinship, ethics, aesthetics, social hierarchy and political power are all in play in Shakespeare’s fourteen words. The difficulties increase for translators whose translation strategy or norm demands formal correspondence, so they must produce a rhyming, scanning couplet, and for those seeking to ‘archaicise’ their text but, willy nilly, writing in and for their own time. Translators’ varying solutions make each version of the couplet a microcosmic illustration of their interpretation of the play, their translation strategy, and their cultural political times.

What can be called the ‘strongest’ translations (by analogy with Harold Bloom’s notion of ‘strong’ poets in relation to their precursors)29 are rewritings which disrupt translation traditions, performing readings of their own creative contexts. The only German woman to have translated Othello (so far) writes: ‘Wenn nie der Tugend lichte Schönheit fehlt, / ist Eure Tochter hell, nicht schwarz, vermählt’ (‘If virtue never lacks bright-lit beauty, / your daughter is brightly, not blackly, married’, Hedwig Schwarz, 1941). A translator persecuted by the Nazis, returned to Germany after the war, writes: ‘Zählte bei Menschen nur der innre Schein, / würden wir dunkler als Othello sein’ (‘If people’s inward appearance alone [were all that] counted, / we would be darker than Othello’, Hans Rothe, 1955). A translation making both the play and the Duke anti-racist has: ‘Gäbs helle Haut für Edelmut als Preis, / Dann wär Ihr Schwiegersohn statt schwarz reinweiß’ (‘If light skin were a prize for noble-mindedness, / then your son-in-law would be pure white instead of black’, Frank Günther, 1992) – here ‘pure white’ is a sarcastic emphasis, indicating that the Duke disavows the racist equation of whiteness and virtue. Another: ‘Ein Fremder wird zum Freund durch Tapferkeit / Mach

Frieden mit dem Schwiegersohn, nicht Streit’ (*A stranger becomes a friend through bravery / Make peace with your son-in-law, not strife*, Christian Leonard, 2010). A translation making the Duke a neo-fascist has: ‘Solange männliche Tugend mehr zählt als Schönheitsfehler, kann man sagen, Ihr Schwiegersohn ist eher edel als schwarz’ (*So long as male virtue counts more than blemishes, one can say your son-in-law is more noble than black*, Zaimoglu and Senkel, 2003). Such translations make sense as performative readings, cultural interventions in their particular contexts. Can they even be termed ‘interpretations’, manifesting the original’s ‘semantic virtualities’? Can they help readers understand the original? Surely not, if ‘original’ means a finished thing; only if we mean ‘originator of differences’. But then we are well beyond what Delabastita formulated as ‘a surprisingly accurate sense of the possible semantic range of Shakespeare’s words’.

A slightly different proposal would be this: diverse versions can contribute to a new reading of the original in terms of their *differential variability* at the level of *passages*. Consider another short passage, this one provoking far less variation in translations. Brabantio’s ‘Here is the man, this Moor’ (1.3.71) is not a difficult half-line to translate. Only ‘Moor’ can pose a problem. The closest German equivalent, the traditional translating term, is ‘Mohr’, which is just as archaic as ‘Moor’. ‘Maure’, also archaic, signifying a north African rather than sub-Saharan physiognomy, was used by Rothe and Schwarz in the mid-20th century. Since about 1990 (only!), translators often use non-archaic alternatives. ‘Schwarzer’ (‘black man’) is current and neutral (first used in this passage by Frank Günther, 1992). ‘Neger’ (back-translatable as ‘negro’ or ‘nigger’) is current and derogatory (first used by Werner Buhss, 1996). Another strategy is omission (‘Here comes the man’, first used by Christian Leonard, 2010). Translators make such choices either consistently for ‘Moor’ throughout the play (including the subtitle), or in varying combinations, such that their choices in various speeches convey their interpretation of the characters’ attitudes, as well as, implicitly, what the writers expect the audience to expect or want, and/or to be outraged by. Hermann Motschach (1992) gives Brabantio this line: ‘Da steht der Mann, der schwarze Teufel’ (*There stands the man, the black devil*) – making an interpretation explicit. But overall, translations of this short passage vary little, compared with the variation in translations of the Duke’s ‘delighted beauty’ couplet. In any set of variant translations, levels of variation vary, passage by passage. This simple observation can be exploited to interesting effect, with digital technology.

I have collected over 50 different German translations and theatrical adaptations of *Othello*, from Christoph Martin Wieland (1766) to Frank-Patrick Steckel (2014), so far. Most are printed books, but 14 are unpublished theatre scripts, ranging in date from 1939 to 2010. Four are study

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translations in explicatory, ‘prosaic prose’; the rest are intended for leisure/pleasure reading and theatrical performance, using verse or (in some recent adaptations) poetic prose. Nine are versions of the Baudissin ‘Schlegel-Tieck’ text, including the electronic text in the German Project Gutenberg collection (c.2000).\textsuperscript{31} These differ surprisingly much. (‘The great thing about a translation is that you do not need to treat its decisions with respect.’)\textsuperscript{32} So far, 38 versions of Act I, Scene 3 have been digitized with sufficient textual accuracy (correcting the output of optical character recognition processing against scanned page images) to be published online. At the ‘Version Variation Visualization’ (VVV) website,\textsuperscript{33} readers can consult all the versions of this sample scene in parallel text views, side-by-side with an English ‘original’ – more exactly, a ‘base text’, compiled for the purpose from the MIT electronic text,\textsuperscript{34} collated with Neill’s edition for additional material and commoner modern readings.

All versions have been aligned with the ‘base text’, speech by speech; speech prefixes too are aligned. Software enabling ‘multi-translations’\textsuperscript{35} to be segmented and aligned in this way – a machine-assisted process – was developed by Kevin Flanagan. Software enabling readers to explore the resultant aligned corpus through interactive visual interfaces was developed by Stephan Thiel and his team (Studio Nand, Berlin).\textsuperscript{36} At our VVV site, a visual ‘barcode’ is displayed, representing a text’s speech-structure, in order to help readers both navigate within and compare texts. It appears as a narrow vertical strip, divided into horizontal bars of varying thickness: bars represent speeches, and thickness represents length in words. These ‘barcode’ representations enable readers to compare at a glance the speech-structures of a base text and its translations. We can see exactly where versions reduce or cut, add or expand or re-order material. This mode of ‘slightly distant’ reading, representing a scene or a play as a patterned image of the formal structure as represented

\textsuperscript{31} The German e-text was transcribed from Hans Jürgen Meinerts’s edition of 1958, then collated with an English Gutenberg Project e-text, presumably http://www.gutenberg.org/files/1531 (a transcript of an unidentified edition). Where they did not align, material was added (from where?). The volunteer editor was probably Ruediger Wenig, a multiply-aliased slam poet and media design consultant, who first published German e-Shakespeare at http://www.william-shakespeare.de (c.2000) before donating it to the Gutenberg Project.

\textsuperscript{32} Morse, ‘François-Victor Hugo’, 222.

\textsuperscript{33} See www.delightedbeauty.org/vvv. The limitation to one scene is also due to my agreement with copyright holders, who (for a modest fee) permit use of the texts, subject to a variable public access restriction.

\textsuperscript{34} At http://shakespeare.mit.edu. The VVV base text is yet another unauthorised variant edition.


(usually) in typography, can be compared with the practice of holding a page or two of script at arm’s length, in order to ‘see the rhythm’ of a passage of dialogue.\textsuperscript{37} Scale of view makes the difference. A ‘scalability’ which far exceeds that of print on paper is a key virtue of digital representations. We can smoothly, fluidly zoom in and out between close and closer, distant and more distant readings. The other virtue we can exploit is that a digital surface can carry many optional marks. With menus and filters we can represent all sorts of computational analyses or diagnoses of machine-readable features of texts or corpora, as marks on the texts.

Here at last we come to the point where translations may shine new light on the original. Eddy and Viv are algorithms which compare, select, rank and mark text. Eddy (so called because translations are eddies in the stream of transcultural history) compares the wording of versions, segment by aligned segment,\textsuperscript{38} and so measures the relative distinctiveness of each version of each segment. Viv (‘variation in variation’) then maps the results of Eddy’s comparisons onto the original’s segments, as a visual mark. In the ‘Eddy and Viv view’ of \textit{Othello} 1.3 at the VVV site, readers can retrieve all the translations of any chosen segment of the English base text (together with machine back-translations, which are of limited value). They can also order these segments in various ways, including – and this is original – by distinctiveness or unpredictability, as measured by Eddy. At the same time, the English text is displayed, annotated, segment by segment, by the Viv algorithm, showing us how much all the translations of each segment vary – the range of distinctiveness or unpredictability. This is the most conceptually experimental feature of our work so far, and perhaps the most interesting for readers who are interested in translations, but cannot read them.

Recall the examples of the Duke’s couplet and Brabantio’s words. Eddy the algorithm compares all versions of every segment, simply in terms of which words (spellings) each one uses. If a version of a segment mostly uses words which many other versions of the segment also use, it will score a low Eddy value. Versions which mostly use words which few or no other versions also use in that segment will score a high Eddy value. When Eddy ranks all versions of Brabantio’s ‘Here comes...’ in order of distinctiveness, Motschach’s wording automatically comes top. In this way Eddy picks the more ‘original’, more distinctive translations out of the crowd: a very useful function for readers of many translations. Eddy is less useful in comparing versions of the Duke’s couplet, because they vary so much. Nearly all of them have high Eddy values. But this is where Viv becomes useful. Viv is the average (essentially) of all the Eddy values for versions. The Viv value is assigned to the original segment, on the basis of analysis of its translations. The higher the Viv value, the more translations differ; the more translators disagree about how to translate that segment. In the Eddy

\textsuperscript{37} My thanks to Peter Holland for this observation.
\textsuperscript{38} All speeches are defined as segments; we can also choose to define as a segment any string of words which interests us. We can also ‘tag’ segments as any kind of ‘type’.
and Viv view, the Viv values are represented as a variable colour highlight on the English base text. The darker the colour, the higher the Viv value, the more translators differ or disagree. Brabantio’s words are light-coloured; the Duke’s couplet is dark. So Eddy and Viv between them use translations to identify difference-provoking, difficult passages in the original Shakespeare text.

The mathematics is complex. We have developed several versions of the Eddy and Viv formulae. The algorithms currently use word spellings, but it might be better to use lemmas. It might be better to exclude highly frequent ‘function words’. Segment length is a crucial factor: the longer the segment, the more variation is likely, all else being equal. Adjusting results for that factor is tricky. The initial results are (in information theoretical terms) ‘noisy’. But this is an experimental work in progress. Nor is it the aim to identify some objective ‘truth’ about texts. Numerical Eddy or Viv values do not represent quantities; the numbers express relations which are themselves indicative – and of what, we are still finding out. The aim is to enable and instigate new kinds of exploratory investigations of texts in the light of their translations. Here are some initial results for Othello, Act 1 Scene 3.

These results are based on analysis of a sub-corpus of fifteen 20th-century poetic-theatrical German versions of Othello. We selected these because the stylometric analysis showed the importance of period style and genre differences, so we hypothesised that a time-limited and genre-limited analysis should give less ‘noisy’ results. I excluded versions derived from Baudissin, explicatory prose versions, and also adaptations with extensive omissions, contractions, expansions and additions, which would all introduce noise. This left the following versions in the VVV database: Gundolf (1909), Schwarz (1941), Zeynek (-1948), Flatter (1952), Rothe (1955), Schaller (1959), Schröder (1962), Fried (1972), Swaczynna (1972), Laube (1978), Rüdiger (1983), Motschach (1992), Günther (1992), Buhss (1996), Wachsmann (2005). The analysis includes whole speeches only, and excludes segments of fewer than 50 or more than 500 characters, because results for very small or large segments are noisiest. This left a set of some 50 speeches. Table 1 shows those with the ten highest Viv values, in running order (with speech prefixes and first line numbers), alongside absolute rank, and rounded Viv values.

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<tr>
<th>Rank</th>
<th>Viv</th>
<th>Speech</th>
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<td>2</td>
<td>1.06</td>
<td>Duke There is no composition in these news That gives them credit. (l.1)</td>
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<tr>
<td>8</td>
<td>0.94</td>
<td>First Senator Indeed, they are disproportioned; My letters say a hundred and seven galleys. (l.2)</td>
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<tr>
<td>4</td>
<td>1.00</td>
<td>Duke Nay, it is possible enough to judgment: I do not so secure me in the error, But</td>
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<td>Line</td>
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<td>10</td>
<td>0.93</td>
<td>Duke To vouch this, is no proof, Without more wider and more overt test Than these thin habits and poor likelihoods Of modern seeming do prefer against him. (l.106)</td>
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<td>9</td>
<td>0.94</td>
<td>A Senator But, Othello, speak: Did you by indirect and forced courses Subdue and poison this young maid’s affections? Or came it by request and such fair question As soul to soul affordeth? (l.110)</td>
</tr>
<tr>
<td>6</td>
<td>0.95</td>
<td>Duke I think this tale would win my daughter too. Good Brabantio, Take up this mangled matter at the best: Men do their broken weapons rather use Than their bare hands. (l.170)</td>
</tr>
<tr>
<td>3</td>
<td>1.05</td>
<td>Duke And, noble signior, If virtue no delighted beauty lack, Your son-in-law is far more fair than black. (l.289)</td>
</tr>
<tr>
<td>7</td>
<td>0.95</td>
<td>Brabantio Look to her, Moor, if thou hast eyes to see: She has deceived her father, and may thee. (l.292)</td>
</tr>
<tr>
<td>1</td>
<td>1.13</td>
<td>Iago If thou dost, I shall never love thee after. Why, thou silly gentleman! (l.306)</td>
</tr>
<tr>
<td>5</td>
<td>0.96</td>
<td>Roderigo Wilt thou be fast to my hopes, if I depend on the issue? (l.361)</td>
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It is gratifying to see the Duke’s couplet – and Brabantio’s reply to it, too – both ‘discovered’ by the algorithms as passages provoking much variation. In other speeches, archaisms and obscurities demand paraphrase in any language (‘composition’, ‘disproportioned’, ‘possible ... to judgment’, ‘likelihoods of modern seeming’, ‘be fast to my hopes’). But doubt creeps in. Are these translational challenges really greater than others in the text, not shown here? Wherein lies the particular provocation in the Senator’s ‘But, Othello, speak...’, or the Duke’s ‘I think this tale...’, or Roderigo’s ‘Wilt thou be fast...’? All are susceptible of multifarious translations – but more so than other speeches?

These initial results look like an artefact of factors other than the original text: the very limited sample, the exclusions mentioned, and above all, what we can speculate about the behaviour of translators, and observe about cultural-linguistic constraints on them. Regarding translators’ behaviour, it would be no surprise (but rather interesting for Translation Studies) if further studies confirmed that they tend to translate speeches at the beginning of a scene (as here), or speeches by a character of singular importance in a scene (here the Duke), most diversely. Certainly we can explain along these lines why Brabantio’s ‘Look to her’ couplet (which presents little by way of translational challenge, compared with the Duke’s) is very diversely translated: because it is a very conspicuous passage, calling for a verbal tour-de-force. Shakespeare translators are motivated by the desire to achieve distinction – to rewrite differently from, more originally than
their precursors and rivals. Therefore they put in most effort where it is most likely to be noticed. But then the absence of Othello and Desdemona from this table is odd: surely translators ought to invest in writing their parts more distinctively?40 As for cultural-linguistic constraints, what propels Iago’s speech to the number one spot here is probably the fact that the quasi-oxymoronic phrase ‘silly gentleman’, though neither really archaic nor obscure, is peculiarly difficult to render into German, generating a great diversity of paraphrases, as does the colloquial exclamation ‘Why’. We might well say, after the Duke: ‘There is no composition in these numbers That gives them credit’ – at least, not yet as news about the original.

A glance at the eight speeches found to have lowest Viv value in the same analysis (Table 2, ranked low to high) is dispiriting at first. It immediately suggests a problem with the adjustment for segment length: most of these speeches are of one length, as most in Table 1 are of another.

Table 2. Othello 1.3 by 15 C20 translations. Lowest Viv values. Running order.

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Brabantio So did I yours. Good your grace, pardon me; Neither my place nor aught I heard of business Hath raised me from my bed, nor doth the general care Take hold on me, for my particular grief is of so flood-gate and o’erbearing nature That it engluts and swallows other sorrows And it is still itself. (l.52)

Desdemona My noble father, I do perceive here a divided duty: To you I am bound for life and education; My life and education both do learn me How to respect you; you are the lord of duty; I am hitherto your daughter: but here’s my husband, And so much duty as my mother showed To you, preferring you before her father, So much I challenge that I may profess Due to the Moor my lord. (l.179)

Brabantio God be wi’ you! I have done. Please it your grace, on to the state-affairs: I had rather to adopt a child than get it. Come hither, Moor: I here do give thee that with all my heart Which, but thou hast already, with all my heart I would keep from thee. For your sake, jewel, I am glad at soul I have no other child: For thy escape would teach me tyranny, To hang clogs on them. I have done, my lord. (l.188)


The limitation to speeches of under 500 characters is not a factor here. Viv gives (for instance) Othello’s ‘Let her have your voices...’ (1.3.260-74), with the obscure ‘comply with heat’ passage, a very average value (0.86). The great set-piece ‘Her father loved me...’ (127-69) scores 0.8.
Ranked eighth from bottom here is Desdemona’s ‘That I did love the Moor...’, with lines which have provoked much commentary, and would seem likely to provoke variant translations; but Eddy and Viv find variation is low. Reading the translations, it turns out that several standard options for ‘visage’ and ‘mind’ are quite evenly distributed, and no translator attempts the kind of original rewriting we saw with the Duke’s couplet. On reflection, the putative discovery of ‘original non-difficulty’ in Table 2 seems rather more plausible than the putative discovery of ‘original difficulty’ in Table 1. In the sequence of ‘low Viv’ speeches, characters are taking care to express themselves clearly; even if very emotional, they are controlling that emotion; or issuing a crisp command (the Duke); or, in Iago’s case, speaking as if to someone who is slow on the uptake. For all the deficiencies of this preliminary analysis, we can begin to see how it might inform readings by students and players, if not yet editors and critics.
Eddy and Viv have a lot more work to do. We need larger text samples (the whole of *Othello*, more plays), more translations, more languages. If translators into different languages encounter different sets of challenges rooted in the linguistic resources of their target languages and cultures, rather than in the original, then in an analysis of a multi-lingual multi-translation corpus, the impacts of target cultural-linguistic constraints should be spread more evenly across the original text.\(^{41}\) We must improve correction for segment length difference. It will make sense to work on more comparable units (e.g. couplets, other comparable word-strings or n-grams). We can also look for correlations between translation diversity and individual words, word-classes, semantic word-sets, and grammatical features. This would open the way to exploring patterns of repetition and coherence both within translations and in their originals.

Eddy and Viv is only one line of possible digital experimentation. The general aims are broader: to make translations visible, and accessible to new kinds of reading. The comparison of translated versions can resemble the editorial work of collating witnesses and prior editions. We can envisage digitally visualised, translingual variorum editions.\(^{42}\) But as with editorial work, this not an end in itself. The humanistic purpose is to facilitate future re-readings and rewritings. That will include comparing variant English versions of ‘untranslated’ (always-already translated) Shakespeare. True, texts are only one component of translation. They are not even a sine qua non of cultural translation: ‘Shakespeare’ travels very well as rumours of stories by and about him, pictures and clips, tags and snatches in worldwide folklores, memories of private and public performances, ‘appropriations, adaptations, and afterlives’.\(^{43}\) But translators as rewriters are key agents, whether they try to transfer the original faithfully, or cannibalise it gleefully. They are routinely under-credited and increasingly invisible (at least Furness saw and printed their work). Their languages are misunderstood as transparent windows onto an ‘original’ meaning, or silently back-translated, or left out of the discussion altogether, if only because transporting the difference translation makes across another language gap is hard work.

Rejection of or indifference to translations is not a purely Anglophone vice, rooted in the imperialistic global predominance of English. Jacques Derrida resoundingly endorses the privileging of the original as a law-giving act of genius, when he compares several French versions of Hamlet’s ‘The time is out of joint’ (1.5.189):

\(^{41}\) Pavel Drábek and Tomáš Kačer have a Czech Shakespeare translation corpus; Vladimir Makarov and colleagues have a Russian one. We intend to collaborate.

\(^{42}\) Ben Fry’s visualisation of the variorum edition of *The Origin of the Species* was a prime inspiration for our project: [http://benfry.com/traces](http://benfry.com/traces) (2010).

\(^{43}\) In the proceedings of the 9th World Shakespeare Congress, 24 papers are grouped under this subtitle. Only one concerns translation: Martin Hilský, ‘Shakespeare’s Theatre of Language: Czech Experience’, in *Renaissance Shakespeare: Shakespeare Renaissances*, eds Martin Procházkà, Michael Dobson, Andreas Höfele and Hanna Scolnicov (Newark: University of Delaware Press, 2014), 171-180.
The translations themselves thus find themselves ‘out of joint’. However correct and legitimate they may be and whatever right one may acknowledge them to have, they are all disadjusted, since unjust in the gap that affects them: within them, for sure, as their meaning remains necessarily equivocal; then in their relation to one another and thus in their multiplicity; finally or first of all in their irreducible inadequacy to the other language and to the stroke of genius of the event that makes the law, to all the virtualities of the original.44

Recall Delabastita’s ‘semantic virtualities’. Here Derrida cites French translations precisely in order to help himself mine the original’s meaning-potential. But he continues: ‘The excellence of the translation cannot help. Worse, and this is the whole drama, it can only aggravate or seal the inaccessibility of the other language.’ The drama of translation, for Derrida, as for Furness and for most Shakespeare scholars, is that of the Fall; the original ‘other language’ is Eden or Arden. The original is the law; translations are transgressions. Yet a few pages later Derrida comes back to ‘the apparently disordered plurivocity (which is itself “out of joint”) of these interpretations’, to note that they are all, after all, ‘authorized’, for what makes an origin is the power to originate:

Is it possible to find a rule of cohabitation under such a roof, it being understood that this house will always be haunted rather than inhabited by the meaning of the original? This is the stroke of genius, the insignia trait of the spirit, the signature of the Thing ‘Shakespeare’: to authorize each one of the translations, to make them possible and intelligible without ever being reducible to them. (22)

All we have of the haunting Thing is translations in one sense or another. Bring the translations proper – the original rewritings – under one roof, and they will surely tell us new ghost stories.