TransVis: Putting Translations to Work

Digital Classicist Seminar        London        June 2013

Tom Cheesman

Swansea University    College of Arts and Humanities
Department of Languages, Translation and Communication
Towards TransVis: Translation Visualised

Phase 1 (Feb-July 2011): “Version Variation Visualisation”

Supported by Swansea University, College of Arts and Humanities
Co-Investigators David M. Berry, Robert S. Laramee, Andrew J. Rothwell
Research assistants Alison Ehrmann (transcriptions), Zhao Geng (data visualisations)
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Current proposal to AHRC Translating Cultures (Theme Large Grant): “TransVis” (2013-2017?)

Co-Investigators David M. Berry, Robert S. Laramee, Jonathan Hope (Strathclyde), Lorna Hughes (Aberystwyth), Pavel Drabek (Hull), Jan Rybicki (Krakow)
Partners Shakespeare’s Globe Theatre, Wolfestone Translation, Studio Nand, National Library of Wales, ABBYY

International Shakespeare translation consultants
“TransVis: Translation Visualised – Understanding World Cultural Heritage”

Proposed digital outputs

• A world Shakespeare translations time-map (launch: 2016) (prototype: http://othellomap.nand.io/)

• A library of aligned translations – core: c.300 texts of *Hamlet* and *Merchant* in 12 languages (10–35 of each play per language)
  – plus smaller corpora including works by Euripides, Sophocles (Drabek), Austen, Dickens (Rybicki), Goethe, Rilke (Cheesman)

• Tools for curating, exploring and analysing aligned translations corpora

• Research-based multimedia demonstrations of the tools, for worldwide students of
  – translated works
  – translation / adaptation / transcreation
  – languages & linguistics
  – comparative & transnational, historical & contemporary cultures
  – digital humanities
Alignment Maps by Stephan Thiel (Studio Nand)

Wieland (1766)
Wieland (1766)

Gundolf (1909)

Zaimoglu (2003)

Zimmer (2007)

Felsenstein, Stueber, Boito (1964)
Tour

www.delightedbeauty.org – crowdsourcing a microsample
othellomap.nand.io – proof-of-concept time-map
www.delightedbeauty.org/vvvclosed – proof-of-concept tool prototypes

Note: visitors to the installation of our tool prototypes at
www.delightedbeauty.org/vvv can use the tools to edit data, without permission

Inspirations:  
www.benfry.com/traces (Fry 2009)
www.understanding-shakespeare.com (Thiel 2010)
Retranslations

adaptations appropriations bowdlerisations hypertexts localisations mutations new editions new productions paraphrases redactions re-interpretations renderings renditions re-presentations re-scriptings revisions retellings rewordings reworkings rewritings transformations transcreations travesties variants versions
Retranslating

Translating again  Chain translating  Back translating

SL

ST(e1) → \(\text{TL1:TT1}\)
→ TT2 → TT2(e2)

\(\uparrow\) \(\downarrow\) \(\uparrow\)

ST(e2) → \(\downarrow\) TT3
\(\downarrow\) \(\uparrow\) \(\downarrow\)
→ TT4 → \(\text{TL2:TT}\)

ST(e3) \(\downarrow\) ...
...

\(\downarrow\)
TT5
...

SL

ST → TT

\(\downarrow\) \(\rightarrow\) \(\downarrow\)

SLTT

Time flows top left to bottom right
SL = source language
TT = target text
\(e = \text{edition}\)
Derrida on several French translations of “The time is out of joint”

“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 [désajustées], because unjust in the gap [l’écart] that affects them: [1] within them, for sure, as their meaning remains necessarily equivocal, then [2] in their relation to one another and thus in their multiplicity, [and 3] 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. 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. A few French examples from among the most remarkable, irproachable, and interesting: [...]”

Specters of Marx, trans. Kamuf, 1994: 19 (adapted)
Anthony Pym:
“[...] 'active‘ retranslations” [not only reveal] “historical changes in the target culture” [they also] “yield insights into the nature and workings of translation itself, into its own special range of disturbances.”

*Method in Translation History, 1998: 82-84*

‘Passive’: merely updating the language

‘Active’: making a significant new interpretive intervention

? Might retranslations (in their multiplicity; the gaps between them) *also* furnish new insights into translated works?

Figure 1: Possible options of a theatre translator

Source text

Invisible translator
Subservient translator
translator is invisible behind original

Partial translator
impossible to translate all aspects

Poetic translator
a poet should recreate the poetry

Visible translator
Rewriting ‘translator’
classes are material to be used

Text over performance
Full version
full metrical integrity

Reduction
acting version, complete within the timeframe of a performance

Emendation
essential aspects that the audience still understands, shorthand

Addition
original structure is inappropriate as a theatre text

Source culture oriented
Archaisation
retaining historical distance

Common ground
valid for both worlds

Upward compatibility
colliding elements of both worlds

Modernisation
text is made relevant for present

Poetic function
Literalist translation
musicality, rhythm

Rationalisation
poetic function of construction

Communicative function
Communicative aspects
clarification
If virtue no delighted beauty lack,
Your son-in-law is far more fair than black.
If virtue no delighted beauty lack,  
Your son-in-law is far more fair than black.

Crux: “delighted”

Puns: “virtue”, “delighted”, “more”, “fair”, “black” (optical, ethical, aesthetic)

Joke ↔ Serious ? Insult ↔ Praise ?

Interpretation: Addressees ? Overhearers ?

Duke: status, character ?

Ideologies of state power, of gender, of race ? — on & off stage ?
Modern English

If valour is the measure of true beauty, your son-in-law is fairer than he’s black.
   – Shakespeare Made Easy. Othello, Alan Durband, 1989

If goodness is beautiful, your son-in-law is beautiful, not black.
   – No Fear Shakespeare. Othello, John Crowther, 2003

If virtue is missing delightful beauty, / Your son-in-law is far more just than black.
   – Othello. Side by Side, James Scott, 2005

A gloss

[...] your son-in-law’s virtues are so fine that they completely overwhelm any qualms you may have at his Negro race. – Othello, ed. C.W.R.D. Moseley, 1974

Rewritings

“If virtue’s qualities are always rare / Your son-in-law is far more black than fair.”
Bit clumsy. What if I change “fair“ to “white“? Um ... what about:
“If virtue lack no beauties that delight / Your son-in-law is far more black than white.”
Better: “white“ has fewer positive connotations than “fair“. Needs more work, though. Certainly needs more work. [...]
Wieland (1760s): wenn Tugend die glänzendeste Schönheit ist, so ist euer Tochtermann mehr weiß als schwarz.
If virtue is the most-bright-shining beauty, then your daughter’s husband is more white than black.

Baudissin (1830s): Wenn man die Tugend muß als schön erkennen, / Dürft Ihr nicht häßlich Euren Eidam nennen.
If one must recognise virtue as beautiful, / you may not call your son-in-law ugly.

If courage does not lack happy beauty, your son-in-law is white rather than black.

Fried (1970s): Wenn Ihr der Tugend nicht Schönheit absprechen wollt, / Ist Euer Schwiegersohn nicht dunkel, sondern Gold!
If you do not wish to deny beauty to virtue / your son-in-law is not dark but gold!

Günther (1990s): Gäbs helle Haut für Edelmut als Preis, / Dann wär Ihr Schwiegersohn statt schwarz reinweiß.
If bright/light skin were a prize for noble-mindedness / then your son-in-law would be pure white instead of black.

Zaimoglu/Senkel (2000s): Solange männliche Tugend mehr zählt als Schönheitsfehler, kann man sagen, Ihr Schwiegersohn ist eher edel als schwarz.
So long as masculine virtue counts more than minor flaws [lit.: beauty-failings/-lacks], one can say your son-in-law is more noble than black.
Schiller (1805): Wenn je die Tugend einen Mann verklärt, / Ist Euer Eidam schön und liebenswert.
If ever virtue glorified [transfigured] a man, / your son-in-law is beautiful and lovable.

If one speaks of virtue as of a light, / Your son-in-law seems not so dark to me.

Von Zeynek (1940s): wenn Mannesmut nicht Reiz und Glanz entbehrt, / so ist er, wenn auch schwarz, höchst schätzenswert.
If manly courage is not without charm and radiance/glory / then he is, even if black, highly estimable.

Schwarz (1940s): 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.

Rothe (1950s): Zählte bei Menschen nur der innre Schein, / würden wir dunkler als Othello sein.
If people’s inward appearance alone counted, / we would be darker than Othello.

Schröder (1960s): Wo so viel Mut bei so viel Eifer wohnt, / Dünkt Euer Eidam minder schwarz denn blond.
Where so much courage resides with so much zeal, / your son-in-law appears less black than blond.
Close and contextualised readings of retranslations in corpora

>> new understandings of (and questions about) cultural histories and intercultural differences

(and of the translated work, too?)
If virtue no delighted beauty lack,
Your son-in-law is far more fair than black.

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If virtue no delighted beauty lack,
Your son-in-law is far more fair than black.

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Towards digital navigational aids that let translations shed new light on translated works even if you don’t know the translating language(s)

‘Eddy’ and ‘Viv’ algorithms

Eddy sorts translations of a segment by predictability (distinctiveness)

Viv maps the varying levels of predictability among segment translations back onto the segments of the translated work
‘Eddy’ is a measure of the lexical distinctiveness (predictability) of a translation text (usually: a small segment), relative to all comparable segments in the same target language corpus.

Eddy for a translation is primitively calculated as \( \sum D/tf(w_1,d \ldots w_N,d) \)

where a translation text segment is a ‘document’, \( d \), containing \( N \) words (i.e. from word 1 to word \( N \), or: \( w_1,d \ldots w_N,d \)); the corpus of all comparable \( ds \) contains \( D \) documents; and term frequency, \( tf \), is the number of times a word occurs in the corpus of segment translations.

**The primitive algorithm**

1. All documents (translations of a segment) are aggregated into a corpus.
2. Term frequencies are calculated for every word in the corpus.
3. For every word, \( tf \) is divided into \( D \). A commonly used word is assigned a low numerical value; a unique word has the highest value, namely \( D \).
4. \( D/tf \) totals for all the words in a document (i.e. “\( w_1,d \ldots w_N,d \)”), are summed (\( \Sigma \)). This sum is the primitive Eddy result for that document.
Eddy analysis process. Font sizes represent D/tf values of words

195 – Wolff, 1920
Leiht Tugend ihre Farbe dem Gesicht, / Ist Euer Eidam weiß, ein Schwarzer nicht.
35, 1.4, 35, 35, 17.5, 35, 1.3, 1.7, 4.4, 7, 11.7, 8.8, 2.1

Leiht Tugend ihre Farbe dem Gesicht, / Ist Euer Eidam weiß, ein Schwarzer nicht.
*If virtue lends its colour to the face / your son-in-law is white, not a black [man].*

240 – Engel, 1939
Spricht man von Tugend, als von einem Licht, / Scheint Euer Eidam mir so dunkel nicht.
35, 11.7, 17.5, 1.4, 1.6, 17.5, 35, 17.5, 35, 1.7, 4.4, 4.4, 17.5, 2.1

Spricht man von Tugend als von einem Licht, / Scheint Euer Eidam mir so dunkel nicht.
*If one speaks of virtue as of a light, / your son-in-law seems not so dark to me.*

180 – Schwarz, 1941
Wenn nie der Tugend lichte Schönheit fehlt, / ist Eure Tochter hell, nicht schwarz, vermählt.
1.6, 35, 2.5, 1.4, 17.5, 2.2, 5, 1.3, 35, 35, 5.8, 2.1, 1.7, 35

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.*
Vertical axis: Eddy results (distinctiveness) for Duke couplet, scaled 1-20
Sets of Eddy results for different sample segments show significantly different ranges and distributions.

These are the basis of calculations of ‘Viv’

Sample A: the Duke’s “delighted beauty” couplet:
   Eddy (manual) range 80-335, mean 182

Sample B: the first sentence in Othello’s great speech to the senate:
   Her father loved me; oft invited me;
   Still question’d me the story of my life,
   From year to year, the battles, sieges, fortunes,
   That I have passed. (1.3.128-131)
   Eddy (manual) range 16-310, mean 144
Figure 10: Samples A and B; Eddy results; chronological sequence

Figure 11: Samples A and B; Eddy results; rising for Sample B
‘Viv’ (*Variant Intensity in Variation*) measures the degree to which a segment of a source text is associated with variation among its translations, or in other words: their predictability.

Primitive Viv formula: \[ \bar{x} \ \text{Eddy}/SN \]

The Viv of a segment of a source text = the mean \( \bar{x} \) of the associated Eddy results (i.e. the sum of results, divided by the number of them), divided by \( SN \) – the number of words in the source text segment.

(To offset the effect of segment length, distributions must be normalised.)
Viv plotting

By plotting Viv across all segments of a source text, we create a new way of reading it – as refracted through multiple translators’ work.

Readers don’t need to understand the translating language(s) – but they might be encouraged to learn them.

Note 1. Viv values are associated with a source segment and all the words as they occur in that segment. Therefore Viv can be used for further analyses of words in contexts, and their associations with translation predictability or cultural and intercultural challenges to interpretation.

Note 2. Viv values derived from Eddy sets in multiple languages can off-set the effects of target-language-specific qualities and constraints. The more languages are included, the more Viv will point to qualities which are proper to the source text.
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International Shakespeare translation consultants
Iago: Look where he comes: Not poppy, nor mandragora, 
Nor all the drowsy syrups of the world, 
Shall ever medicine thee to that sweet sleep 
Which thou ow'dst yesterday.
APPENDIX

JAIME CLARK, Madrid, n. d. (? 1873-74):
—Vedle allī. Ni adormidera
Beleño, ni mandrágora, ni todos
Los zumos soporíferos del mundo
Podrán apropinarte el dulce sueño
Que disfrutaste ayer.

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.

I add the following, and, did space permit, could continue the series in Russian, in Polish, in Bohemian, and in Hebrew,—not, however, as examples of translation, for my having in these languages is a younger brother’s revenue, but as illustrations of the universality of Shakespeare’s presence in every land, and in every tongue:—

JURRIAAN MOULIN, Haarlem, 1857:
Daar komt hij, zie! Geen mankop of alruin,
Geen sluimerdrank ter wereld die uw oog
Ooit aan dien zoeten slaap weêr helpen zal,
Die gister u verkwikte.

DR L. A. J. BURGERSDIJK, Leiden, 1885:
Daar komt hij, zie! Geen heul- noch alruinsap,
Noch al der wereld sluimerdranken brengen
Den zoeten slaap u weder, die nog gist’ren
Het eigen was.