Is the European Union trade deal with Canada new or recycled? A text-as-data approach

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Introduction

The negotiations for a Comprehensive Economic and Trade Agreement (CETA) between the European Union and Canada were officially finalized after five years of talks on 1 August 2014. Since then we have witnessed heated debates over the content of the treaty on both sides of the Atlantic, particularly in various European countries. For instance on 8 October 2015 over 200’000 protesters took the streets in Berlin to oppose both CETA and the US-EU trade deal known as TTIP (Die Zeit 2015a). In addition, German non-governmental organizations launched the largest-ever constitutional challenge CETA (Die Zeit 2015b). In light of this increasing contestation, the European Commission agreed to put the treaty to an expanded form of ratification allowing national parliaments to vote on CETA (European Commission 2016). At the time of writing, the prospect for successful ratification remains questionable, as opposition to the treaty in a Belgian regional parliament (Wallonia) has led to further delays in EU Ministers agreeing to sign the treaty.

Opposition to CETA and other large preferential trade agreements (PTAs) must be seen against a backdrop of increasing discontent with globalization and market integration. While trade agreements long have been unpopular with grass-roots environmental, human rights, and development organizations, new opposition to international economic agreements has come from a broader segment of workers as well as voters who feel general unease about the transformation of societies. This new opposition also has been fueled by new and old populist movements on the right, such as the Alternative für Deutschland (AFD) in Germany, Front National in France, and the United Kingdom Independence Party (UKIP).

What is lacking in this debate is more systematic information about the content of CETA, in particular how much of its legal obligations and rules have been imported from existing treaties and how much is truly novel. This information is crucial to evaluate the influence the parties have had over the final text and to locate where new templates potentially have been created. In the case of the Trans-Pacific Partnership (TPP) agreement, for instance, power asymmetry stands out. The US largely wrote the rules (Allee and Lugg, 2016), with a significant amount of copy-pasting from prior US agreements. We ask whether similar dynamics are visible in CETA. Was the EU able to use its economic power to insert its previous treaty language? Or has Canada leveraged its position by strategically using templates from its past agreements, such as the TPP or others?

Importantly, we can answer the question whether CETA is an agreement that offers “more of the same”, as has been the case of TPP’s heavily borrowing from earlier US agreements, or whether CETA indeed creates new rules and templates – perhaps validating some of the rising criticism in Europe? In this paper, we therefore ask where the “rules” for CETA come from: how much of the legal text follows the
logic of “imitation” (taken from past agreements) as compared to “innovation” (new text)? Past agreements can serve as the basis for new ones, but if landmark new agreements such as CETA are unique, they in turn can serve as new templates and become focal points for future agreements. After engaging these issues for the entire CETA text, we disaggregate the agreement into its various chapters, since influence and innovation may vary by issue area.

We use text-as-data methods to locate the origins of CETA. Overall, we find that CETA seems to embody much more innovation than imitation. Unlike many trade agreements, the final language in CETA is quite distinct from the previous deals signed by Europe and Canada. This lack of imitation suggests that CETA may serve an important role as a template in future trade negotiations. We also find, perhaps surprisingly, that the EU does not dominate when language is reused from past agreements. Instead, recycled content is slightly more likely to come from past Canadian agreements. However, CETA shares relatively little content with the TPP, the other landmark treaty to which Canada is a party, thus further suggesting how unique CETA really is.

CETA: a brief overview

CETA was negotiated relatively quickly given its complexity and breadth of rules and obligations. The 1,600-page document is a result of negotiators pushing for increased reciprocal market access—outlining a process to deal with regulatory cooperation in years to come and redesigning a series of trade-related areas, most prominently investment protection. For Canada, the EU is the most important trading partner outside North America, accounting for around 9.5% of total external trade in goods. For the EU, Canada accounts for a more modest 1.8% of total external trade in goods, making it the EU’s 12th most important trading partner. But Canada has been seen as a natural candidate for the EU’s market-access oriented trade strategy (Elsig, 2007).

Following this new approach for deeper trade agreements, the discussions quickly moved from lowering existing tariffs to behind-the-border regulation, where the most significant impact of the agreement is expected. Agreement has been reached on granting improved access to the public procurement markets, easing services trade, aligning intellectual property rights, fostering regulatory cooperation, and re-engineering and including investment protection. Addressing these areas has sparked a number of heated debates in Europe about importing lower standards and curtailing policy space in European states, regions, and communities. This has translated into attempts to further clarify some of the commitments. Notably, in September 2016 the German vice chancellor travelled to Canada to meet with the Canadian prime minister to address these rising concerns while at the same time seeking support from his own social-democratic party to “save CETA” while abandoning TTIP (Spiegel 2016). Also, in a move to further address criticism, in October 2016 Canada and the EU agreed on a general interpretative note. Accordingly, CETA is set to be ratified on a provisional basis through a vote in the European Council at the end of 2016.

European trade officials argue that CETA is “the best trade agreement the EU has ever negotiated” (Malmström, 2016). Evoking one of Canada’s national heroes, Canadian proponents call it the “Wayne Gretzky of trade agreements” (Global Affairs Canada, 2016). Both sides tout the agreement because they
say that it reflects shared values on the nature of the relationship between binding international trade rules and national policymaking priorities. Viewed in this light, the central argument coming from Brussels and Ottawa is that the agreement is unique and represents a fusion of the preferences of both actors. Trade officials on both sides of the Atlantic frequently use this logic, calling CETA an innovative 21st century agreement that will serve as a “model for future deals” (BBC, 2016).

But critics worry that the agreement is more of the same. The argument from many anti-globalization groups is that the agreement reflects the same logic of agreements like NAFTA and TPP. They fear that “modern trade agreements” are “about big business versus citizens”, which will impair the ability of government to legislate in the public interest (Dearden, 2016). In particular, many contend that the new investment court system contained in CETA does not go far enough in reforming investor-state dispute settlement provisions contained in past trade agreements (EPHA, 2016).

Although many assessments on CETA have been carried out, no study has systematically studied the text of the entire agreement. While it is public knowledge that the chapter on investment protection underwent renegotiation after the initial text was on the table (e.g. Alschner and Skougarevskiy, 2016), we lack information on the past agreements that might have inspired the final commitments in this chapter. More generally, we do not have a good sense of the possible sources of language for other CETA chapters, including the behind-the-border regulatory ones, or indeed whether much of the agreement was drafted from scratch. Below, we outline our approach and show the patterns of innovation and imitation in CETA.

**Data and Methods**

In order to measure the extent to which CETA is comprised of past PTA text, we apply a text-as-data technique that is computationally similar to that used in commercial plagiarism software. Before doing so, several background steps must be performed. First, we use the comprehensive DESTA database to identify the PTAs signed by each signatory prior to CETA and obtain their English language texts. Second, we remove idiosyncratic information – primarily dates, times, and locations – from the beginning, end, and footnotes of the treaties. Finally, we convert all treaties to .txt format to facilitate comparison.

Our primary text-as-data methodology analyzes documents at the word level and looks for identically matching consecutive strings of six words or greater. Our approach is similar to that used in other studies (see Allee and Lugg, 2016; Corley et. al., 2011; Spirling, 2011) and is particularly useful for analyzing legal language where word order is meaningful. We use the program WCopyfind 4.1.5 (Bloomfield, 2015) to carry out the comparisons, and require that the text be perfectly matching. For each PTA-CETA comparison we calculate the number of consecutive matching words shared between the two documents and then report a percentage match, with the total number of words in CETA (or the relevant CETA chapter) serving as the “denominator,” or standard for comparison. Therefore, each match percentage represents the amount of CETA text comprised of language from the previous PTA text.

Using this methodology we compare the entirety of CETA to the 49 PTAs signed previously by the EU and Canada. We also compare the texts of the 15 agreement chapters that are most commonly found in modern PTAs: investment, financial services, general services, environment, labor, government
procurement, technical barriers to trade, intellectual property rights, telecommunications, sanitary measures, safeguards, movement, dispute settlement, anti-dumping, and e-commerce. Disaggregating the agreement in this manner provides important insights into patterns of imitation and innovation across the most substantive and contested parts of the agreement text.

Findings

As an important foundational step we first compare the texts of all previous EU and Canadian PTAs to confirm that the two actors have had differing approaches to past PTAs. The results are presented in the heat map in Figure 1, which is organized chronologically, with Canadian agreements in the bottom left corner. Each cell represents the amount of perfectly matching text between that PTA and all other signatory PTAs, with red cells indicating higher overlap.

The most striking result is that there appear to be three distinct clusters. The first, in the bottom left corner, shows a degree of consistency among previous Canadian PTAs. Moving outward to the right (or up) it is clear that Canadian PTAs do not overlap substantially with past EU agreements, as represented by the preponderance of yellow cells. Among EU agreements there appear to be two distinct clusters. One cluster, the large square in the middle of the heat map, illustrates consistency among earlier EU agreements like development and association agreements. The final cluster in the upper-right corner represents consistency among newer PTAs like EC-Singapore and EC-Colombia-Peru. Overall, the central take-away is that the EU and Canada brought distinct language with them to the CETA negotiating table.

Our first examination of CETA focuses on the amount of total language that is taken from past Canadian and European Union PTAs. Table 1 presents the main results. Overall, the overlap numbers are strikingly low, particularly if we compare CETA to the amount of TPP text that was copied from previous US agreements (Allee and Lugg, 2016). On average the final text of CETA takes only about 7% of its language from any of the 49 past EU and Canadian PTAs. Furthermore, if we relax the matching parameters to account for minor edits in CETA this only increases the average to about 8%. Even if the focus is only on newer generation agreements, those signed in the last 5 or 10 years, the average overlap does not exceed 20%. This considerable lack of imitation across the universe of Canadian and EU PTAs provides important evidence that CETA contains a considerable amount of innovation.

Comparing the impact of Canadian and EU agreements separately, we observe more past Canadian text being copy-pasted into CETA. Just under 15% of the language in CETA is comprised of text from the average Canadian agreement compared to about 5% for the average EU agreement. But if we focus only on more recent agreements the numbers are not quite as lopsided: 23% for Canadian agreements in the past 5 years compared to 18% for the EU. If we look at agreements from the past 10 years the differences are of a similar magnitude: 17.6% and 13.1%, respectively. This provides evidence that the EU and Canada drew more heavily and more equally – albeit still modestly – from their recent PTAs.
Figure 2 breaks down further which individual PTAs were most influential. Each dot represents the amount of CETA made up of that PTA’s text, with blue dots representing EU PTAs and red dots for Canadian PTAs. The most striking feature overall is the relatively low amount of overlap. Individually, no agreement exceeds 30% overlap, and the majority are below 10%. This corroborates the results from Table 1, which indicate a notable absence of imitation overall. Furthermore, the distribution of the most-copied agreements does not appear to heavily favor either the EU or Canada. The most influential agreement is the EU-Singapore Agreement, followed closely by TPP, Canada-Korea, Canada-Peru, and EU-Colombia-Peru. Figure 2 also confirms that older EU development and accession-related treaties have hardly any imprint at all, which should not be surprising given the different priorities of those agreements.

In sum, comparing the entirety of CETA to past signatory PTAs indicates that CETA contains a large amount of new text. And while some recent PTAs have an imprint on CETA, there does not appear to be any agreement(s) that served as a clear or dominant template for negotiations. Both parties brought distinct ideas about what they wanted, as indicated by the heat map, and ended up writing a mostly unique agreement.

If we analyze chapters separately (Table 2), we observe some subtle but important differences. Consistent with the earlier results in Table 1, more recent agreements seem to have a higher imprint, but the overall amount of copying is relatively low. Only one issue area (telecommunications) exceeds 50% on average, whereas most of the overlap for other chapters (10 of 15) is below 20%. Also notable is that there seems to be an even distribution of whether a Canadian or EU agreement was the most influential agreement for that issue area. For seven issue areas Canada has the most influential agreement, whereas the EU has eight. These numbers are also low compared to the amount of issue-area overlap that was found in a comparison of the TPP to past PTAs (Allee and Lugg, 2016). The TPP had ten issue-areas where an individual agreement overlapped greater than 50%; by contrast, CETA has only two (telecommunications and public procurement).

Table 2 also indicates that overall Canada’s past agreements have a greater imprint on issues like general and specific services sectors. Focusing on the most modern agreements (those signed in the past 5 years) the amount of language being drawn from Canadian agreements on financial services (36%) and general services (39%) is much higher than that being drawn from EU agreements (11.8% and 11.2% respectively). This is surprising given that the EU is the worldwide leader in trade in services and has a significant services-account surplus with Canada.

Other Canada-influenced chapters that stand out are those on investment, technical barriers to trade, telecommunications, and the environment. In these areas where past Canadian PTA language is dominant the difference in influence is often quite large. For example, CETA’s telecommunications chapter draws 52% of its language from Canadian agreements in the past 5 years versus 20% for EU agreements. Nonetheless, the general pattern seems to be a large amount of novel text, but with a clear Canadian imprint. For example, the investment chapter has low overlap in general, indicating that the
system proposed in CETA is largely novel, but there is some evidence that Canada was able to copy more from it’s recent agreements like Canada-Korea (22% overlap). A similar dynamic is present in the environmental chapter, with Canada-Korea (23% overlap) as the most copied agreement. These findings are particularly interesting given that recent citizen protests in Europe have focused in on these issue areas.

The EU for its part has more direct influence through past agreements in the areas of trade remedies (safeguards and anti-dumping), intellectual property rights, sanitary and phytosanitary measures, dispute settlement and movement of people. For example, 79% of the public procurement chapter in EU-Singapore was copied and pasted in CETA, the highest for a single agreement in any issue area. This confirms the importance the EU attaches to this area. There is also evidence that language from the EU-Singapore agreement was copied substantially in intellectual property (32% overlap) and anti-dumping (36% overlap) rules. This is not surprising given the EU’s offensive interests in IPR (e.g. to protect geographical indications in the PTA partner market) and the EU’s substantial experience as one of the main users of trade remedies. While the EU has greater influence across several notable issue areas, the difference does not appear to be as stark as it was for Canadian agreements in areas like telecommunications and services. Nonetheless the pattern is a low amount of overlap overall, indicating that across these controversial areas EU and Canadian negotiators ended up generating a substantial amount of new PTA language.

Conclusion:

EU Trade officials have called CETA an innovative 21st century agreement that will be a “model for future deals” (BBC, 2016). Our findings provide some novel evidence that CETA is indeed more forward-looking than backward-looking. Relatively little of its treaty text is recycled from past trade agreements – much lower than has occurred in comparable treaties (e.g. TPP). Content is particularly unique in new areas of trade regulation, where the EU imprint is surprisingly low. Therefore, our study validates the argument of societal groups that CETA offers new rules and potentially new commitments beyond existing ones. How these new rules and commitments will be interpreted remains unclear and the subject of much speculation. Future work will need to zoom in on the commitment language that is new and consider how those obligations might be interpreted and enforced.

CETA also appears poised to affect trade cooperation moving forward – assuming it is ratified. In the immediate future, CETA may serve as a blueprint for other PTAs that the EU and Canada each is negotiating. It also could play an important role as a template for aspects of the ongoing TTIP negotiations. Therefore, the mostly-new content of CETA reveals important clues about the likely spillovers to other small and large EU and Canadian agreements currently being negotiated.

More generally, our approach and findings also can stimulate the long-standing debate in international political economy as to whether PTAs like CETA serve as a stumbling block or stepping stone for multilateral cooperation. New templates that are found in CETA may be more or less compatible with WTO obligations, something that can be further assessed through additional text analysis (Author) as well as in-depth case analyses. What is clear at the moment is that CETA is a particularly novel trade agreement and thus is worthy of the increasing attention it is receiving.
References:


Bloomfield, LA (2016) WCopypfind 4.1.5. Available at: http://plagiarism.bloomfieldmedia.com/wordpress/software/wcopyfind/


Figure 1: Heatmap of PTA Overlap between Past EU and Canadian PTAs
<table>
<thead>
<tr>
<th>Grouping</th>
<th>Average % from all Past PTAs</th>
<th>Average % from all Past PTAs (relaxed match)</th>
<th>Average % from PTAs in Past 10 years</th>
<th>Average % from PTAs in Past 5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>14.6</td>
<td>15.8</td>
<td>17.6</td>
<td>22.5</td>
</tr>
<tr>
<td>European Union</td>
<td>4.6</td>
<td>5.1</td>
<td>13.1</td>
<td>18.2</td>
</tr>
<tr>
<td>Overall</td>
<td>7.1</td>
<td>7.7</td>
<td>15.1</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Note: All comparisons require six consecutive words to constitute a match and are generated in Wcopyfind 4.5.1.
Figure 2. Amount of CETA Comprised of Past PTA Text
### Table 2. Amount of CETA text taken from Canadian and EU PTAs, by chapter

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Average % Copied from Canadian PTAs</th>
<th>Average % Copied from EU PTAs</th>
<th>Average % Copied from Canadian PTAs (past 5 years)</th>
<th>Average % Copied from EU PTAs (past 5 years)</th>
<th>Relative Comparison 5 years (Canadian – EU)</th>
<th>Most influential PTA, % of CETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>15.4</td>
<td>0.9</td>
<td>20.3</td>
<td>4.4</td>
<td>15.9</td>
<td>Canada-Korea (22%)</td>
</tr>
<tr>
<td>Financial Services</td>
<td>30.3</td>
<td>4.7</td>
<td>36.3</td>
<td>11.8</td>
<td>24.4</td>
<td>Canada-Korea (38%)</td>
</tr>
<tr>
<td>General Services</td>
<td>28.2</td>
<td>3.4</td>
<td>39.0</td>
<td>11.2</td>
<td>27.8</td>
<td>Canada-Korea (43%)</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>45.3</td>
<td>6.2</td>
<td>51.5</td>
<td>19.5</td>
<td>32.0</td>
<td>Canada-Korea (58%)</td>
</tr>
<tr>
<td>Safeguards</td>
<td>3.5</td>
<td>2.6</td>
<td>3.3</td>
<td>11.5</td>
<td>-8.3</td>
<td>EC-Singapore (18%)</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>16.5</td>
<td>4.7</td>
<td>26.5</td>
<td>20.0</td>
<td>6.5</td>
<td>EC-Singapore (32%)</td>
</tr>
<tr>
<td>Procurement</td>
<td>21.7</td>
<td>6.1</td>
<td>28.0</td>
<td>28.3</td>
<td>-0.3</td>
<td>EC-Singapore (79%)</td>
</tr>
<tr>
<td>Dispute Settlement</td>
<td>11.4</td>
<td>5.7</td>
<td>14.0</td>
<td>23.3</td>
<td>-9.3</td>
<td>EC-Korea (32%)</td>
</tr>
<tr>
<td>Environment</td>
<td>4.9</td>
<td>0.8</td>
<td>9.5</td>
<td>6.7</td>
<td>2.8</td>
<td>Canada-Korea (23%)</td>
</tr>
<tr>
<td>Technical Barriers</td>
<td>14.8</td>
<td>2.3</td>
<td>18.0</td>
<td>6.8</td>
<td>11.2</td>
<td>Canada-Peru (36%)</td>
</tr>
<tr>
<td>Movement</td>
<td>6.2</td>
<td>5.1</td>
<td>8.3</td>
<td>17.8</td>
<td>-9.6</td>
<td>EC-Colombia-Peru (26%)</td>
</tr>
<tr>
<td>Labor</td>
<td>2.9</td>
<td>1.0</td>
<td>5.3</td>
<td>10.0</td>
<td>-4.8</td>
<td>EC-Colombia-Peru (14%)</td>
</tr>
<tr>
<td>Sanitary and Phytosanitary</td>
<td>3.0</td>
<td>4.1</td>
<td>4.0</td>
<td>9.5</td>
<td>-5.5</td>
<td>EC-Ukraine (12%)</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>27.0</td>
<td>11.0</td>
<td>29.0</td>
<td>18.7</td>
<td>10.3</td>
<td>Canada-Colombia (34%)</td>
</tr>
<tr>
<td>Antidumping</td>
<td>6.3</td>
<td>6.6</td>
<td>17.0</td>
<td>28.8</td>
<td>-11.8</td>
<td>EC-Singapore (36%)</td>
</tr>
</tbody>
</table>

Note: All comparisons require six words to constitute a match and are generated in Wcopyfind 4.5.1.

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**Endnotes**

1. This EU strategy differs from other models, such as development-oriented trade agreements (e.g. with African, Caribbean and Pacific (ACP) states, Mediterranean countries) or association agreements with a view of future EU accession (e.g. treaties with Central and Eastern European states). The first market-access type of EU agreement based on the new strategy was with Korea (Elsig and Dupont, 2012).


3. Joint Interpretative Declaration on the CETA, 5 October 2016


5. See [http://www.designoftradeagreements.org](http://www.designoftradeagreements.org)

6. We also remove the harmonized tariff schedules contained in the annexes of the agreement.

7. In order to count as matching the text must be in a sequence of six consecutive words with no spelling deviations. We also choose to ignore numbers, uppercase letters, and punctuation.

8. The red cells along the diagonal represent that treaty compared to itself since the language overlaps 100 percent.

9. We relax the match parameters to allow for up to 5 minor edits in any matching text-string as long as the edited words do not account for more than 15% of the matching text in that string.