Appendix 1. Methodology and materials for data collection

This appendix provides some notes about the methodology and materials used for data collection.¹ Its purpose is to provide materials that may be useful for researchers when investigating issues in connection to dynamic predicates in general, and to degree achievements in particular.

As indicated in the introduction of the paper, the data discussed are based on two sources of information: previous work on the languages discussed and elicitation materials prepared by the author. For English, relevant references were Hay et al. (1999), Kennedy & Levin (2008), Beavers (2011, 2012). For Aymara, relevant references were Cerrón-Palomino (2008), Gonzalo Segura (2011), Martínez Vera (2018a,b). For Polish, relevant references were Filip (1999, 2005, 2008), Filip & Rothstein (2006), Lazorczyk (2010), Corre (2015). For Hungarian, relevant references were É. Kiss (2005), Piñón (2008), Kardos (2012, 2016). The discussion with regard to the methodology and materials in this appendix is based on works by Matthewson (2004), Davis et al. (2014), Bochnak & Matthewson (2015), among others. The reader is referred to these for discussion regarding the soundness and validity of the methodological choices made here.

In general, the methodology involved was elicitation. The material was run with two speakers of each language—as indicated in the introduction, the sentences that appear throughout the paper report the judgments of these speakers (it is worth noting that the judgements of my consultants are consistent with the judgments that have been reported in the literature). The elicitation process involved the presentation of contextual scenarios using English or Spanish as auxiliary languages. English was the auxiliary language that was used with English, Polish and Hungarian speakers. Spanish was the auxiliary language that was used with Aymara speakers. The presentation of contextual scenarios was followed by a request for a felicity judgment on a sentence given that contextual scenario.

The first important issue was the selection of the verbal predicates cross-linguistically. For the four languages, it has been independently argued that they are degree languages according to the Degree Semantics Parameter, i.e., they are all languages where gradable predicates (i.e., type $\langle d, et \rangle$ and related) are available (Beck et al. 2004; Bochnak 2015). For all these languages, it has been further argued that scalar adjectives and degree achievements are sensitive to the presence/absence of absolute ends. In this regard, see, e.g., Kennedy & Levin (2008) for English, Martínez Vera (2018b) for Aymara, Filip (2008) for Slavic languages, and Kardos (2016) for Hungarian. This is precisely one of the crucial properties with regard to degree and event maximalization. It is worth noting here that, given that the focus is on degree achievements in connection to maximalization, the presence/absence of an absolute degree on the low end of the scale, i.e., the minimal degree (see (53a) in the paper), in the gradable predicate under consideration is not crucial (but see Pedersen 2015 for discussion of cases where this is relevant in connection to degree achievements.) Degree achievements are predicates that indicate change, and, as has been discussed in the literature (Hay et al. 1999; Kennedy & Levin 2008; Beavers 2011), change involves a starting point, i.e., the scale associated with a degree achievement is always bottom-closed. The main difference in this regard is thus the distinction with regard to the presence/absence of a lexical maximal degree in the scale (see (53b) in the paper).

The second issue that was addressed concerns the selection of the themes. Since determining the quantity of the theme was of relevance for the topic under discussion (Krifka 1998; Kratzer 2004; Filip 2008; Beavers 2012; Kardos 2016), countable nouns that could appear in phrases referring to singular or plural individuals were chosen. Two additional methodological choices were made: for cross-linguistic comparison, the transitive version of the verbs was used (the external argument was chosen based on what seemed natural for a relevant predicate), and expressions indicating past events were used (Filip 2008; Kennedy & Levin

¹I would like to thank two anonymous reviewers for inviting me to discuss my materials in more detail, as well as to share them with the broader linguistic community.

2008; Beavers 2011; Kardos 2016; Martínez Vera 2018b). Based on these decisions, contexts targeting particular expressions in the languages discussed were designed.

These criteria give rise to target sentences such as (1)-(2) in English (see (5) in the paper), which are used in this appendix for illustration. Here Mary is conceived of as a person who works on metals and Bill is a worker who is involved in construction projects (e.g., he is involved in making roads wider in parts of the countryside where there are no big roads). The predicate in (1), *straighten*, has a top-closed scale associated with it; the predicate in (2), *widen*, has a top-open scale associated with it. The themes, *the rod* and *the road*, make reference to singular entities. These sentences involve an event description that concluded in the past.

- (1) Mary straightened the rod.
- (2) Bill widened the road.

With regard to sentences such as (1)-(2), the base contexts that were proposed are as follows—uttering (1)-(2) against these contexts is felicitous:

- (3) Base context for (1): Yesterday, as usual, Mary was working on metals. Specifically, she was working on a particular rod that was assigned to her by her boss. It was bent and required straightening. She did her job, as requested. Someone says (1).
- (4) Base context for (2): Yesterday, as usual, Bill was working on construction projects. Specifically, he was working on a particular road that needed widening, because trucks would start going through—this task was assigned to him by his boss. He did his job, as requested. Someone says (2).

Having this basic setup in place, where uttering (1)-(2) against (3)-(4) is possible, the entailment test could be run to establish whether the scale is bounded. In particular, follow-ups along the lines in (5)-(6) were proposed—uttering (5b) against (5a) is degraded; uttering (6b) against (6a) is felicitous:

- (5) a. Bound entailment follow-up for (1): As established, Mary did her job of straightening the rod. What wasn't established was how the rod ended up. Someone says (5b)—what is important here is what you, as hearer, expected in the first place, i.e., whether what is stated corresponds to what you expected or not.
 - b. Mary straightened the rod, ??but the rod didn't end up straight.
- (6) a. *Bound entailment follow-up for (2)*: As established, Bill did his job of widening the road. What wasn't established was how the road ended up. Someone says (6b)—what is important here is what you, as hearer, expected in the first place, i.e., whether what is stated corresponds to what you expected or not.
 - b. Bill widened the road, but the road didn't end up wide.

The next step is to establish what kind of bound may be present. In this regard, there are two relevant issues. The first one is that, as (5a) and (6a) indicate, what is of relevance is what the hearer expected, i.e., what is of interest is how the out-of-the-blue case is. While, as a fieldworker, one is always interested in the consultants' comments to a particular prompt, this is of particular importance in this case. Specifically, questions for the consultants here are as in (7)-(8). My consultants indicated that they expected the rod to end up fully straight (7) and that they expected the road to end up wider (8).

- (7) Follow-up question for (1)/(5b): How straight does the rod end up?
- (8) Follow-up question for (2)/(6b): How wide does the road end up?

While this is necessary, additional testing is required, which brings me to the second issue, which consists of proposing contexts as the ones in (9)-(10), where particular degrees are targeted. The context targeting the lexical maximum in (9a) is only possible if the scale includes it. Uttering (1)-(2) against these contexts is felicitous.

- (9) a. *Context for (1) targeting the lexical maximum:* As established, Mary did her job of straightening the rod. In fact, she straightened the rod the most she could, until it ended up completely straight. Someone utters (1).
 - b. Context for (1) targeting a contextual maximum: As established, Mary did her job of straightening the rod. The end product was to make the rod fit in a mould that required that the rod ended up a little bent (i.e., the rod ends up almost straight but not quite). Someone utters (1).
 - c. Context for (1) targeting barely exceeding the minimum: As established, Mary did her job of straightening the rod. The issue is that she could only straighten it for a bit, because it was late that day and she had to go home soon. As a result, Mary could only straighten the rod for a bit, which means that the rod ended up just a little straighter, but more straightening could in fact take place (e.g., the next day). Someone utters (1).
- (10) a. *Context for (2) targeting a contextual maximum:* As established, Bill did his job of widening the road. Specifically, the road that Bill was asked to widen was located between two steep hills, and he was requested to make the road as wide as possible in that environmental setting. Someone utters (2).
 - b. Context for (2) targeting barely exceeding the minimum: As established, Bill did his job of widening the road. Specifically, Bill made the road wider just a bit; there is plenty of space to make it wider in the future (and he plans to do so the next day). Someone utters (2).

Note that the judgements indicated for (5b) and (6b) would change if they are requested against, e.g., (9c) or (10a) respectively.

Having settled the properties of interest with regard to whether the scale is bounded and what the value of the bound is, I focused on additional properties in connection to the theme. As established in connection to (1)-(4), a case where a specified quantity is in fact possible—the starting point consisted of cases with singular themes. Nonetheless, this could be further tested with the introduction of, e.g., plural themes where, nonetheless, the quantity is established. More importantly, here it should be tested whether a cumulative theme is possible as well. It was felicitous to use themes with a specified quantity, as well as cumulative themes, as in the cases below.

- (11) a. Context in connection to (1) targeting a plural theme with a specified quantity: As established, Mary works on metals. Throughout the day, she was asked to straighten five rods, which were on her working spot. She did as requested. After her shift had ended, someone utters (11b).
 - b. (Today,) Mary straightened the rods.
- (12) a. Context in connection to (1) targeting a cumulative plural theme: As established, Mary works on metals. Throughout the week, she was asked to straighten rods. She straightened so many that, by the end of the week, people had lost count as to how many she had straightened. Once the week ended, someone utters (12b).
 - b. (Throughout the week,) Mary straightened rods.
- (13) a. *Context in connection to (2) targeting a plural theme with a specified quantity:* As established, Bill works on construction projects. Throughout the week, he was asked to widen five roads.

- He did as requested. Once the week ended, someone utters (13b).
- b. (Throughout the week,) Bill widened the roads.
- (14) a. *Context in connection to (2) targeting a cumulative plural theme:* As established, Bill works on construction projects. Throughout the month, he was asked to widen roads. He widened so many that, by the end of the month, people had lost count as to how many he had widened. Once the month ended, someone utters (14b).
 - b. (Throughout the month,) Bill widened roads.

As for telicity contrasts, the main focus here was on the adverbial expressions that are preferred in outof-the-blue cases—see the discussion above with regard to the entailment test. In this regard, I presented contexts like the ones in (15a) and (16a) against sentences with *inlfor* adverbials. The judgments were that the *in* adverbial is felicitous with *straighten* (15b), whereas the *for* adverbial is degraded (15c). The opposite was reported for sentences with *widen*, as in (16b)-(16c). I further tested cases with a plural theme, where the *for* adverbial was preferred overall (these cases are not included below).

- (15) a. Context in connection to (1) targeting telicity contrasts: As established, Mary works on metals, and is currently working on a particular rod, in particular, on straightening it. This job takes between 45 minutes and 1 hour 30 minutes. Later that day, somebody utters (15b)/(15c).
 - b. Mary straightened the rod in an hour.
 - c. ??Mary straightened the rod for an hour.
- (16) a. Context in connection to (2) targeting telicity contrasts: As established, Bill works on construction projects, and is working on a particular road, in particular, on widening it. This job takes between 45 minutes and 1 hour 30 minutes. Later that day, somebody utters (16b)/(16c).
 - b. ??Bill widened the road in an hour.
 - c. Bill widened the road for an hour.

While previous cases constitute the core on which the discussion in the main text is based, to end this appendix, I would like to discuss one additional case, which was introduced in Section 3.3 (see examples (86)-(87) in the paper) in connection to the presence/absence of event maximalization in languages like English or Aymara vs. Polish or Hungarian. This case involves a context where the maximum is reached and the theme is cumulative. As indicated in (17), uttering (17b) is felicitous in English against the context in (17a).

- (17) a. Context in connection to (2) with regard to event maximalization: As established, Mary works on metals. Throughout the week, she was asked to straighten rods. She straightened so many that, by the end of the week, people had lost count as to how many she had straightened. Mary was asked to straighten every rod in such a way that they ended up fully straight (so that no rod ended up slightly bent). Once the week ended, someone utters (17b).
 - b. (Throughout the week,) Mary straightened rods.

References

- Beavers, John. 2011. On affectedness. Natural Language and Linguistic Theory 29(2). 335–370.
- Beavers, John. 2012. Lexical aspect and multiple incremental themes. In Violeta Demonte & Louise McNally (eds.), *Telicity and change of state in natural language: Implications for event structure*, 23–59. Oxford: Oxford University Press.
- Beck, Sigrid, Toshiko Oda & Koji Sugisaki. 2004. Parametric variation in the semantics of comparison: Japanese and English. *Journal of East Asian Linguistics* 13(4). 289–344.
- Bochnak, M. Ryan. 2015. The Degree Semantics Parameter and cross-linguistic variation. *Semantics and Pragmatics* 8(6). 1–48.
- Bochnak, M. Ryan & Lisa Matthewson (eds.). 2015. *Methodologies in Semantic Fieldwork*. Oxford: Oxford University Press.
- Cerrón-Palomino, Rodolfo. 2008. *Quechumara: Estructuras paralelas del quechua y del aimara*. La Paz: UMSS, PROEIB Andes, Plural editores.
- Corre, Eric. 2015. Preverbs in Russian: situation or viewpoint aspect? In Bridget Copley & Jacqueline Guéron (eds.), *Constructing aspect: Syntactic reflections on aspectual distinctions*, 97–122. Paris: Presses Universitaires de Vincennes.
- Davis, Henry, Carrie Gillon & Lisa Matthewson. 2014. How to Investigate Linguistic Diversity: Lessons from the Pacific Northwest. *Language* 90(4). 180–226.
- É. Kiss, Katalin. 2005. First steps towards a theory of the verbal particle. In Christopher Piñón & Péter Siptár (eds.), *Approaches to Hungarian*, vol. 9, 57–88. Budapest: Akadémiai.
- Filip, Hana. 1999. Aspect, eventuality types and nominal reference. New York: Garland.
- Filip, Hana. 2005. The Telicity Parameter Revisited. Semantics and Linguistic Theory 14. 92–109.
- Filip, Hana. 2008. Events and Maximalization: The Case of Telicity and Perfectivity. In Susan Rothstein (ed.), *Theoretical and Crosslinguistic Approaches to the Semantics of Aspect*, 217–256. Amsterdam: John Benjamins.
- Filip, Hana & Susan Rothstein. 2006. Telicity as a Semantic Parameter. In James Lavine, Steven Franks, Hana Filip & Mila Tasseva-Kurktchieva (eds.), *Formal Aapproaches to Slavic Linguistics xiv*, 139–156. Ann Harbor, MI: University of Michigan Slavic Publications.
- Gonzalo Segura, Roger. 2011. *La derivación verbal en el aimara de Pomata*: Pontificia Universidad Católica del Perú MA thesis.
- Hay, Jennifer, Christopher Kennedy & Beth Levin. 1999. Scalar structure underlies telicity in "Degree achievements". *Semantics and Linguistic Theory* 9. 127–144.
- Kardos, Éva. 2012. *Toward a Scalar Semantic Analysis of Telicity in Hungarian*: University of Debrecen dissertation.
- Kardos, Éva. 2016. Telicity marking in Hungarian. Glossa 1(1). 1–37.
- Kennedy, Christopher & Beth Levin. 2008. Measure of change: The adjectival core of degree achievements. In Louise McNally & Christopher Kennedy (eds.), *Adjectives and adverbs: Syntax, semantics and discourse*, 156–182. Oxford: Oxford University Press.
- Kratzer, Angelika. 2004. Telicity and the meaning of objective case. In Jacqueline Guéron & Jacqueline Lecarme (eds.), *The syntax of time*, 389–424. Cambridge, MA: The MIT Press.
- Krifka, Manfred. 1998. The origins of telicity. In Susan Rothstein (ed.), *Events and grammar*, 197–236. Dordrecht: Boston: Kluwer Academic Publishers.
- Lazorczyk, Agnieszka. 2010. *Decomposing Slavic aspect: The role of aspectual morphology in Polish and other Slavic languages*: University of Southern California dissertation.

- Martínez Vera, Gabriel. 2018a. Evidence for [BECOME P] and [BECOME more P]: -pta and -ra in Aymara. Semantics of Under-Represented Languages in the Americas 10.
- Martínez Vera, Gabriel. 2018b. On competing degree morphemes in verbs of change in Southern Aymara. *Sinn und Bedeutung* 22. 125–142.
- Martínez Vera, Gabriel. 2018c. Superlatives across domains: Evidence from degree achievements in Southern Aymara. *Semantics and Linguistic Theory* 28. 1–20.
- Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70. 369–415.
- Pedersen, Walter A. 2015. A scalar analysis of again-ambiguities. Journal of Semantics 32(3). 373–424.
- Piñón, Christopher. 2008. Definiteness effect verbs. In Katalin É. Kiss (ed.), *Event structure and the left periphery*, 75–90. Dordrecht: Springer.