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Analyzing Temporalities in Parliamentary Speech about Ideologies Using Dependency Parsed Data

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Abstract

The temporal aspects of politics have been discussed extensively by political theorists, but have not been explored using grammatically parsed textual datasets. This paper explores the ways in which future, present and past are projected and referred to in speeches in the Finnish parliament that talk about ideologies. Ideologies are crucial categories of thinking about the political past and future and therefore serve as a case in which temporality is expressed in a variety of ways. We use a dataset drawn from Finnish parliamentary records from 1980 to 2021 and operationalize morpho-syntactic information on clause structures and grammatical tense system to explore the different temporal profiles of ideologies. We show how some isms, like communism and fascism, are much more likely to appear in the context of the past, whereas others, like capitalism and racism, tend to appear in the present tense. We further develop a framework for analyzing temporality based on clause structures and grammatical tense and relate that to how the study of politics has approached time in parliamentary speaking.

Keywords

temporality, parliamentary records, ideology, natural language processing, universal dependencies

1. Introduction

Parliamentary politics is about the future: winning next elections, responding to forthcoming crises, and articulating compelling visions. But politics is also about the past: evaluating mistakes, recognizing what no longer works, and using experiences as a resource in the present. This political temporality is intertwined with ideologies, abstract and socially shared categories of political thinking. One explicit and systematic means to detect instances of ideologies in political rhetoric are political concepts, of which isms (words ending with the suffix *-ism*) have proven to provide considerable rhetorical potential. Isms are used, e.g., to set a political agenda by naming a threat or a promise in the present [1].


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Temporal aspects of politics have been discussed extensively by political theorists [2] and, in recent years, there has been increasing interest in empirical approaches that exploit Natural Language Processing methods. Such research has predominantly been carried out by focusing on individual words and expressions related to time, the future, the present or the past [3, 4, 5]. Yet there is a paucity of empirical, corpus-driven evidence on how grammatical tenses are used for rhetorical purposes, in general and specifically in political talk. Even if tense systems are partially language-specific, the choice of grammatical tense reflects the temporal perspective the speaker takes to the denoted event. In tensed languages, tense is often a compulsory component of grammatical clauses whereas temporal adverbials are syntactically optional. They for example specify the point of time, and their scope can range from a single clause to a text chapter. Both tenses and time expressions thus contribute to the interpretation of temporality.

In this paper, we seek to examine what kinds of historical interpretations regarding temporality can be fostered by organizing and observing parliamentary records based on information provided by a dependency parser. We use a data-driven approach to explore the ways Finnish MPs use isms in different syntactic positions as rhetorical means to project future, present and past in speeches held in the Finnish parliament. We analyze the distribution of grammatical tenses, illustrate variation between past and present-oriented isms (in Section 3, considering also the change in tenses before and after the Cold War) and discuss the interrelations between particular rhetorical tropes (in Section 4, e.g., presenting an ism belonging to the past or as a threat in the present).

2. Material and methods

2.1. Finnish parliamentary records

Our data have been drawn from the records of the Finnish parliament's plenary sessions from 1980 till 2021, processed with the Finnish dependency parser [6] and stored in a database. Parliamentary reporting is guided by principles and practices of language regulation [7]. Each sentence is enriched with metadata such as the date of the session, the current agenda item, MP's name and party affiliation [8]. For the purpose of our analysis, all sentences that include a word ending with the derivational suffix *-ismi* (ism) were retrieved from the data (19488 sentences with 958 unique isms). This large number, coupled with low frequencies, reflects the productivity of compound words in Finnish. New isms can be coined on the spot for the current rhetorical purpose and used a few times (e.g., *ruoskaparlamentarismi*, whip parliamentarism). Moreover, compounds are always written as single words in Finnish and thus such terms as market capitalism, right-wing populism, national socialism are treated as individual isms.

In order to focus on established political concepts, we filtered out infrequent isms (hand-picked cutoff at <10 occurrences) and the ones not regarded as clearly political, in the sense that they represent politicians' views of dominant political worldviews in the society. How to best categorize different isms has been thoroughly discussed in previous research [9, 10, 11]. We then included names of ideologies such as communism and liberalism, but also dominant political threats to society such as terrorism and racism. It is obviously difficult to clearly define when an ism is political and when it is not. The word journalism, for instance, is not commonly regarded as a political term, but it can be and is sometimes used politically in parliamentary

debates. Our final selection included 85 different isms used in 12931 sentences (260200 word tokens) that appeared in 7261 unique speeches given by 796 politicians.

2.2. Finnish grammatical tenses and identifying them

The Finnish tense system has 4 grammatical tenses: present, preterite, present perfect and past perfect. Tense is a deictic category, which means that its interpretation relates a reference point in time (denotation of action, event or state) to the speaker's speech situation. Moreover, different uses of tenses intertwine with modality and aspect. The present tense can be used to talk about situations and states of affairs occurring at the time of the speech situation as well as in the future. In contrast, using the preterite tense one can talk about events before the speech situation, often at a specific point of time or within a certain time frame. The present perfect and past perfect likewise convey information about the past to the speech situation, but the variety of their discursive functions conflates temporality with evidentiality, aspect and current relevance of the denoted events.[12, 13]. Hence, the speaker's choice among these three past tenses in political discourse is a rhetorical one.

In order to explore isms' *temporal profiles* (distribution of grammatical tenses used with the ism in question), it was necessary to determine the tense of the predicate verb in each ism-clause. The dependency parser's annotations were not always sufficient for this task, since parliamentary records mostly consist of mult clause complex sentences and isms are used in various syntactic positions. Therefore, the tense of the predicate verb nearest to the given ism (preferring verbs not separated by punctuation marks) was taken into account. Present perfect and past perfect are compound forms with an inflected auxiliary verb (or verbs) followed by a participle. Here the dependency relations were offset by the Finnish language's grammatically free word order and complex system of non-finite verb construction. Accordingly, a postprocessing method was developed and piloted in this study to identify compound tenses.

The core assumption of the method is that compound predicates may be interrupted by other words, but not by other verb forms: once a verb appears, its compound will be completed before another compound begins. For example, the verb "had" could be a self-contained predicate in preterite form or the auxiliary verb of a predicate in the past perfect tense and this ambiguity is resolved by looking at subsequent verb forms. The sequence of verbs "had+did" reveals it to be the preterite, the sequence "had+done" suggests the active past perfect and "had+been+done" the passive past perfect. The tense patterns of Finnish are explicitly written out in the algorithm; verbs of a sentence are examined left-to-right until their combination matches a single pattern, which determines the whole expression's tense and mood. The person and number are taken from the first verb and voice is drawn from the last verb of the sequence.

3. Isms of the past and present

In this section, we present our quantitative findings based on the frequencies of tensed ism-clauses. In parliamentary speech about ideologies, each speech act using an ism is equally relevant, irrespective of the ism's frequency in the data. However, while isms notably differ in frequency as well as in terms of syntactic positions, caution must be applied as the findings vary in explanatory power. Quantitative analysis points at two fundamental findings of our study.

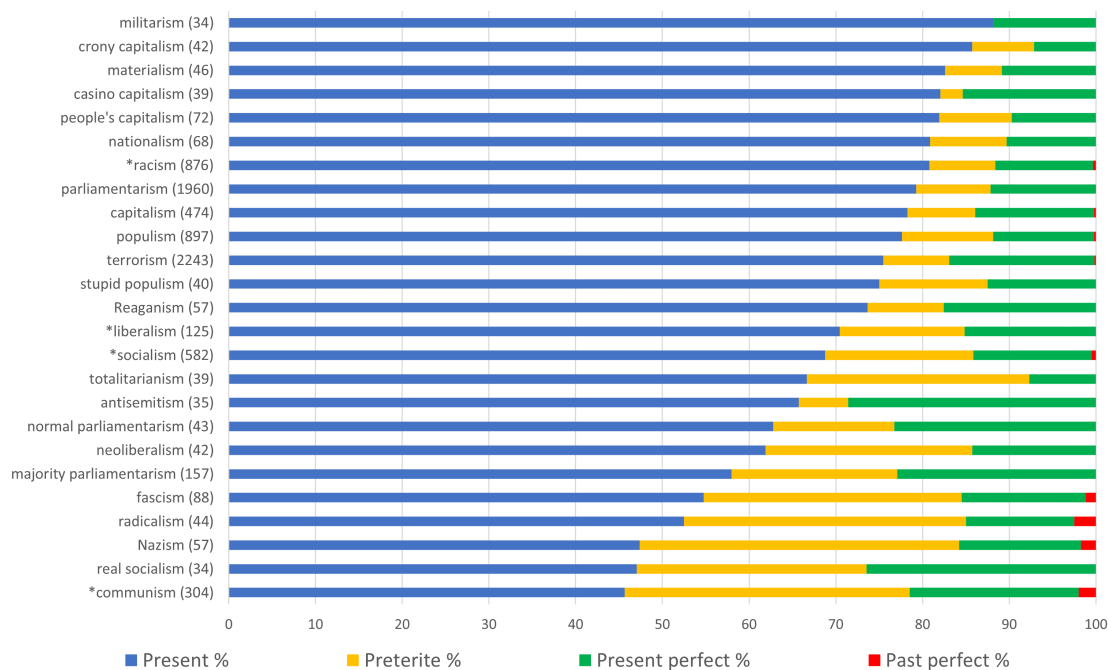


Figure 1: Political isms and their tenses (present, past, perfect, past perfect) in Finnish parliamentary debates 1980–2021, ranked according to use in the present tense. An asterisk indicates isms selected for a qualitative analysis in Section 4.

First, the distribution of verb tenses shows how isms do have grammatically different temporal profiles. That is, some isms differ in terms of how frequently they are used in past and non-past tensed clauses. This finding harmonizes with the claim made in the study of political concepts about temporality in political speech. Second, these temporal profiles can vary over time.

Figure 1 provides an overall picture of temporality of isms in tensed clauses. These temporal profiles are informative when observed in relation to the distribution of the four tenses in our dataset as a whole (74% present tense, 12% preterite, 13% present perfect, 0.3% past perfect): although these are similar to the tense proportions in the subcorpus of 85 selected isms, they differ from the overall proportions across all isms. The present tense makes up 75% of ism occurrences (70% unweighted average over the isms) while the present perfect covers 14% (15% unweighted average over the isms), which rivals the corresponding proportions of preterite. This analysis did not address the issue of isms' diverse syntactic functions, which could have enabled meaningful statistical testing. Usage of tenses is also genre-specific, with e.g. the preterite being the dominant tense in news texts, the present tense in everyday discussions, and the past perfect infrequent regardless of genre [13]. Our data is mostly argumentative, as seen also from the frequent use of the present perfect. A further comparison with frequencies from contemporary Finnish would help to evaluate whether this is a feature of parliamentary speech.

The most present-intensive ism is militarism (88% of all tense uses in the present tense), whereas communism is most often used in connection to the past (only 46% of all uses in the

Ism ($N_{<1992} N_{\geq 1992}$)	Pre-1992				Post-1992				Diff			
	Pres	Pret	Perf	Pp	Pres	Pret	Perf	Pp	Pres	Pret	Perf	Pp
capitalism (227 247)	82,8	4,0	13,2	0,0	75,2	9,7	15,0	0,0	-7,5	5,7	1,8	0,0
communism (27 277)	59,3	18,5	22,2	0,0	36,8	40,1	19,1	3,9	-22,4	21,6	-3,1	3,9
fascism (42 46)	66,7	23,8	4,8	4,8	52,2	30,4	17,4	0,0	-14,5	6,6	12,6	-4,8
liberalism (22 103)	77,3	13,6	9,1	0,0	68,0	16,5	15,5	0,0	-9,2	2,9	6,4	0,0
parliamentarism (493 1467)	80,3	5,9	13,8	0,0	79,4	8,8	11,8	0,1	-0,9	2,9	-2,1	0,1
populism (82 815)	69,5	18,3	12,2	0,0	77,5	10,3	11,9	0,3	8,0	-8,0	-0,3	0,3
racism (57 819)	68,4	15,8	15,8	0,0	80,7	7,3	11,6	0,4	12,3	-8,5	-4,2	0,4
radicalism (20 24)	45,0	30,0	20,0	5,0	66,7	25,0	8,3	0,0	21,7	-5,0	-11,7	-5,0
socialism (249 333)	74,7	8,8	16,5	0,0	64,3	22,5	12,0	1,2	-10,5	13,7	-4,4	1,2
terrorism (41 2202)	75,6	4,9	19,5	0,0	75,5	8,3	16,1	0,2	-0,1	3,4	-3,5	0,2

Table 1

Shares of tenses of selected isms during and after the Cold War, in alphabetical order. Only isms that are mentioned at least 20 times both before and after 1992 are included.

present tense). What is equally interesting in this figure is the difference between proportions of preterite, present perfect and past perfect. For example, even if both communism and socialism are past-oriented and also occur often in coordination [8], communism is more frequently used in all three past tenses whereas socialism's temporal profile in fact resembles that of liberalism. Overall, these results attest that there are isms rooted in the past (rhetorically placed in the past or evaluated from the present), while others feature in the debates as something in the midst of contemporary society or foreseeable future. To allow a deeper insight into isms shaping political temporalities, qualitative methods were adopted for a limited selection of isms. Communism, liberalism, racism, and socialism were chosen because of their manageable frequency, syntactic diversity, even year-by-year distribution (unlike, e.g., fascism) and temporal profiles.

While Figure 1 shows static properties of isms, Table 1 indicates historical changes in their temporal configurations. Research has identified a shift in ism use after the collapse of the Soviet Union [1]. By splitting our dataset into a Cold War and post-Cold War corpus, we see temporal profiles of many isms do not change much over time, but for some a clear shift is evident. The isms show differing use counts pre/post Cold War; here we focus on changes in tense use. Notably communism, socialism, and fascism are less likely, whereas radicalism and racism are more likely to be used in the present tense after the Cold War. These intuitive findings show our method is robust for tracing varying temporal profiles as indicated by tense distribution. They also highlight that temporal profiles change as political actors feel the need to start treating particular words in a new way. This provides interesting quantitative support to the claim in political history that temporality is part of political argumentation about isms.

4. Tenses and temporalities

The following section will elaborate on temporal profiles of communism, liberalism, socialism, and racism and discuss how these temporal profiles – corroborated with manual lexico-

grammatical analysis – resonate with temporal, rhetorical tropes as they are approached and identified in the study of political discourse. Lemmatized data and the dependency parser’s annotations served as a basis and enabled quantitative observations as well as consideration of sentence meanings. Three distinguishable groupings were extracted from the data: an ism as an agent, experiencer, or object; an ism as a modifier in nominalizations of events (*collapse of communism*), states of affairs (*fear of socialism*) and actions (*prevention of racism*); and an ism reflected upon (target of definitions, descriptions, approval, identification, used as a label or a category). We found out that 1) the ways MPs use isms differ in terms of these linguistic groupings and 2) the interpretation of the rhetorical uses of grammatical tenses is connected to these linguistic groupings. What follows is a discussion of rhetorical tropes organized according to the uses of present and past tenses. A reading of example utterances also indicates that as the temporal profiles of some isms changed from the Cold War era to the post-Cold War era, also the distribution of rhetorical tropes changed, in particular with regard to the discourse on socialism and communism.

4.1. Present – from now onward

The most noticeable differences in temporal profiles were found with respect to uses of the present tense. As isms denote abstractions, in the present tense they are used in connection to current states of affairs and general or continuous actions. Liberalism serves here as a pertinent example of how the ism’s meaning is negotiable and constantly contested, which makes it easier to be acknowledged or identified with, fully or in part (Example 1). Racism and communism, on the other hand, seem to be much more fixed and it is rather discussed whether the ism is present in society, how it manifests itself, and how it is treated or acted on (Example 2).

(1) *Liberaalisuutta ei voi olla ilman vastuuta ja liberalismi ei voi tarkoittaa, että polkee toisten ihmisten oikeuksia./ There can be no liberality without responsibility and liberalism cannot mean that one treads upon other people’s rights.* (Biaudet, 1996, 128¹)

(2) *Tällä hallituksella on nollatoleranssi rasismiin./ This government has zero tolerance for racism.* (Urpilainen, 2011, 71)

Labelling with an ism was also a rhetorical trope we expected to emerge from the data, and it was discoverable in, e.g., present tense predicative clauses. Depending on the ism, labelling can be explicit and even stigmatized (racism, fascism), as well as subtle (Example 3).

(3) *Arvoisat kollegat, tämä on esimerkki tämän päivän sosialismista./ Dear colleagues, this is an example of today’s socialism.* (Kopra, 2021, 35)

4.2. Forthcoming future

A noteworthy characteristic of Finnish is that the present tense is used also to denote the future. In our data, concrete suggestions and plans are expressed with a variety of specific future constructions. When it comes to rhetoric of threats and visions, more ambiguous linguistic means are adopted. E.g., a progressive construction (Example 4) is grammatically identifiable

¹MP’s surname, year (Y), session (N); https://www.parliament.fi/FI/vaski/Poytakirja/Documents/PTK_N+Y.pdf

but its meaning is bound to inherent properties of verb meaning (lexical aspect) and therefore it often eludes exact interpretations as well as translations.

(4) *Nyt ollaan sitten menossa toiseen kommunismiin, Euroopan unioniin, joka on suuren rahan ja sosialistibyrokratian liitto, ei yhtä sortava, se on semmoinen pehmeä diktatuuri./ Now we are going into a second communism, the European Union, which is a union of big money and socialist bureaucracy, not as oppressive, it's a sort of soft dictatorship.* (Soini, 2006, 69)

Some isms are presented as a definable, dichotomous space (one is either in or out) or as a period of time, a temporal anchor that can be used to structure the past (such as *a tradition from communist times*), while others appear an existent and self-driving force. In Example 5, socialism strikes beyond the grave – although worded in the present tense, the threat seems timeless in a sense.

(5) *Ne [velat] siirtyvät sitten kuoleman kautta, eli tässä tapauksessa sosialismi iskee vielä haudankin takaa./ Those [debts] transfer then through death, that is, in this case socialism strikes again from beyond the grave.* (Salo, 2004, 76)

4.3. Discourse about and in relation to the past

Discourse about the past is not always used as a means to historicize. With present-oriented isms such as racism, the reference point of past time tends to be remarkably close to the speech situation and the topic touches upon participants' personal experiences via institutions, decisions, media etc., while the ism itself is the object/patient (to mention or speak about racism), a modifier in a noun phrase (attitude towards racism) or adpositional phrase (because of racism) (Example 6).

(6) *Me kävimme viime viikolla eduskunnassa keskustelun rasismiin ja ääriliikkeiden toimintaan puuttumisesta./ Last week we had a discussion in the parliament about clamping down on racism and activity of extremist movements.* (Alanko-Kahiluoto, 2016, 98)

Consequently, aforementioned linguistic groupings are prominent in the interpretation of the rhetorical uses of past tenses. Communism is often presented as an experiencer or undergoer of events in a given time or time frame and as a past-oriented ism it appears more clearly in discourse about the past as a rhetorical historization (Example 7).

(7) *1990-luvun alussa maailma ympärillämme muuttui: kommunismi kaatui, Neuvostoliitto hajosi, Saksa yhdistyi, sotilaallisia konflikteja syntyi paikoissa, joissa niin ei uskottu voivan käydä./ In the early 1990s the world around us changed: communism fell, the Soviet Union dissolved, Germany was united, military conflicts sparked in places where this could not have been believed to happen.* (Mäki-Hakola, 2000, 148)

Also liberalism and socialism are used in order to historicize, but while liberalism appears as a state of affairs (in the name of liberalism, at the mercy of liberalism, tide of liberalism, in front of liberalism, as in Example 8), socialism is in line with its previous observations, more often than other isms presented as a self-driving force (Example 9).

(8) *Tämän lain toisen käsittelyn yhteydessä on syytä vielä todeta, että Suomi oli aivan liian paljon kontallaan liberalismien edessä vuonna 2004./ Given the second reading of this law, it is fitting to*

state further that Finland was far too subservient in front of liberalism in 2004. (Tiusanen, 2008, 124)

(9) *Sosialismia odotettiin tulevaksi idästä, mutta se tulikin lännestä./ Socialism was expected to come from the East, but it came from the West after all.* (Soini, 2006, 8)

As expected, usage of the present perfect brings the past to the parliamentary debates in a different light compared to preterite clauses. In the literature it is described as an evaluative tense, where past and present exist at the same time [12]. This could be illustrated with Example 10. It appears that the MP rather reminds than informs her audiences (the parliament as well as the public) of an action plan that has been drafted. The preterite (was drafted) would have been just as possible in this context.

(10) *Työministeriön johdolla on laadittu ensimmäinen etnisen syrjinnän ja rasismien vastainen toimintaohjelma./ Under the supervision of the ministry of labour [there] has been drafted the first action plan against ethnic discrimination and racism.* (Haatainen, 2002, 195)

A typical use of the present perfect is to express that something has started in the past and the status of the matter continues as such (Example 11) and it can also foster interpretations on evidentiality when something that has happened is deducible from the current state of affairs.

(11) *Liberalismi on aina lähtenyt siitä, että koulutus- ja kulttuuritoiminta on eräs tärkeimpiä keinoja koko kansan henkisen ja aineellisen hyvinvoinnin kohottamiseksi./ Liberalism has always proceeded from the idea that educational and cultural work is one of the most important ways of improving the whole nation's spiritual and material well-being.* (Itälä, 1981, 126)

5. Conclusions

The most evident conclusion of this study is that even if tenses provide a partial conception of such a pragmatic phenomenon as temporality, they offer insights into different rhetorical uses of isms as well as their historical change. When enriched with lexico-grammatical features and metadata, observations from this exploratory study could be further developed for automated analysis with more extensive use of metadata. Our analysis provides a framework that is useful both for linguists and political scientists who are interested in how time is present in political rhetoric. A somewhat surprising finding is that while the most noticeable differences in temporal profiles were found in relation to usage of the present tense, the isms we focus on are surprisingly seldom talked about in connection to the future. The history of political language suggests that especially the ideological isms, coined in the early nineteenth century, carry a specific future orientation [1], but this is not a prominent feature in the Finnish parliamentary debates of the past forty years. The phenomenon requires further study to establish interrelations between usages of past and present tenses, as such a finding supports the claims made about the presentism of current politics [14, 4].

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References

- [1] J. Kurunmäki, J. Marjanen, *Isms, ideologies and setting the agenda for public debate*, *Journal of Political Ideologies* 23 (2018) 256–282. doi:10.1080/13569317.2018.1502941.
- [2] M. Saward, *Agency, design and ‘slow democracy’*, *Time & Society* 26 (2017) 362–383. doi:10.1177/0961463X15584254.
- [3] M. Götzelmann, K. Postoutenko, O. Sabelfeld, W. Steinmetz, *The Historical Semantics of Temporal Comparisons Through the Lens of Digital Humanities: Promises and Pitfalls*, in: S. Schwandt (Ed.), *Digital Methods in the Humanities*, Transcript Verlag, 2020, pp. 269–308. doi:10.14361/9783839454190-010.
- [4] J. van Eijnatten, P. Huijnen, *Something happened to the future. Reconstructing temporalities in Dutch parliamentary debate, 1814–2018*, *Contributions to the History of Concepts* 16 (2021) 52–82. doi:10.3167/choc.2021.160204.
- [5] R. Turunen, *Macroscoping the Sun of Socialism: Distant Readings of Temporality in Finnish Labour Newspapers, 1895–1917*, in: M. Fridlund, M. Oiva, P. Paju (Eds.), *Digital Histories: Emergent Approaches within the New Digital History*, Helsinki University Press, 2020, pp. 303–323. doi:10.33134/HUP-5.
- [6] K. Haverinen, J. Nyblom, T. Viljanen, V. Laippala, S. Kohonen, A. Missilä, S. Ojala, T. Salakoski, F. Ginter, *Building the essential resources for Finnish: the Turku Dependency Treebank*, *Language Resources and Evaluation* 48 (2014) 493–531. doi:10.1007/s10579-013-9244-1.
- [7] E. Voutilainen, *The regulation of linguistic quality in the official speech-to-text reports of the Finnish parliament*, *CoMe: Studies on Communication and Linguistic and Cultural Mediation* 2 (2017) 61–73. URL: <http://comejournal.com/wp-content/uploads/2019/06/5.-CoMe-II-1-2017.-Voutilainen.pdf>.
- [8] M. Andrushchenko, K. Sandberg, R. Turunen, J. Marjanen, M. Hatavara, J. Kurunmäki, T. Nummenmaa, M. Hyvärinen, K. Teräs, J. Peltonen, J. Nummenmaa, *Using parsed and annotated corpora to analyze parliamentarians’ talk in Finland*, *Journal of the Association for Information Science & Technology* 73 (2022) 288–302. doi:10.1002/asi.24500.
- [9] H. M. Höpfl, *Isms*, *British Journal of Political Science* 13 (1983) 1–17. doi:10.1017/S0007123400003112.
- [10] C. Cuttica, *To Use or Not to Use ... The Intellectual Historian and the Isms : A Survey and a Proposal*, *Études Épistémè* 23 (2013). doi:10.4000/episteme.268.
- [11] J. Kurunmäki, J. Marjanen, *A rhetorical view of isms: an introduction*, *Journal of Political Ideologies* 23 (2018) 241–255. doi:10.1080/13569317.2018.1502939.
- [12] J. Lindstedt, *The perfect – aspectual, temporal and evidential*, in: Östen Dahl (Ed.), *Tense and aspect in the languages of Europe*, De Gruyter Mouton, Berlin, 2000, pp. 365–383.
- [13] R. Pallaskallio, *Kertova tempus: finiittiverbin aikamuodon valinta suomenkielisissä katastrofiutisteksteissä 1860–2004*, Ph.D. thesis, University of Helsinki, Faculty of Arts, Department of Finnish, Finno-Ugrian and Scandinavian Studies, 2013.
- [14] F. Hartog, *Regimes of historicity: presentism and experiences of time, European perspectives: a series in social thought and cultural criticism*, Columbia University Press, New York, 2015.