

‘Sich ausgehen’: On modalizing go constructions in Austrian German

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Abstract

The goal of this paper is to diagnose a verbal construction based on the verb *gehen* (‘go’) conjoined by a particle and the reflexive, which has made it to common use in Austrian German and is typically unknown to many speakers of Federal German who have not been exposed to Austrian German. An argument for a degree-based sufficiency construction is developed, the analysis of which is constructed by extending existing approaches in the literature on *enough* constructions and suggesting a meaning of the specific construction at hand which is presuppositional in multiple respects. The results of diachronic corpus searches as well as the significance of the results in the space of possibilities for the semantic change of motion verbs are discussed.

Keywords: ‘go’ constructions, sufficiency, modality

1 Introduction

The goal of this paper is to diagnose a construction based on the verb *gehen* (‘go’), a particle, and the reflexive, which has made it to common use in Austrian German:

- (1) Context: Stefan has an appointment in half an hour. Before that, he would like to have a cup of coffee and a quick chat with Paul. This could be a bit tight, but then he thinks:

Ein Kaffee mit Paul **geht sich** vor dem Termin **aus**.
a coffee with Paul goes itself before the appointment out

‘I can have a (cup of) coffee with Paul before the appointment.’/‘There is enough time for a coffee with Paul before the appointment. /‘There is the necessary amount of time for a coffee with Paul before the appointment.’

We will situate the construction in a landscape of modal and ‘go’ constructions and we will propose that its semantics is based on measurement as a sufficiency construction. Semantically, sufficiency involves modality and implicativity, and we will see that the present construction is no exception. (A classical implicative is a predicate the complement of which holds true not only in possible worlds but in the actual world, e.g. *manage*.) Recent studies have already adduced strong theoretical evidence that modal and implicative expressions are more diverse than classically thought (see Hackl 1998, Bhatt 1999, Piñón 2003, Hacquard 2006, Rullmann et al. 2008, Yanovich 2013, Gergel 2017, Nadathur 2017). A question from a historical perspective is what the sources for such items are. Another issue is what modal trajectories look like. Yanovich (2013), for instance, argues that in the case of the Old English modal *motan* (‘be able to, must etc.’) a more intricate entry is required than previously thought. Going further back, the Oxford English Dictionary indicates a

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reconstructed connection of *motan* to measurement ('to have something measured out'), but reconstructed sources for very old modals make it hard to ascertain their source construction with semantic precision. We will see that our construction in fact also shows potential connection to measuring entities out, even if the trajectory we will argue it underwent is quite distinct. Similarly, in view of modal analyses (e.g. Kratzer 2012), a relevant issue pertains to the connection between degrees and modality, and sufficiency is an area in which degrees and modality have been recognized to interact for some time (Meier, 2003). Thus, it may be worthwhile to expand the empirical inventory. This background motivates our enterprise from a larger perspective.

In section 2, we will describe the basic morphosyntactic ingredients and the main semantic characteristics involved. In section 3, we will present the results of our corpus research, before moving on towards an interpretation of *sich ausgehen* in section 4. Section 5 discusses the Austrian German construction against the backdrop of some similar constructions in German and beyond. The potential role of contact is discussed.

2 Properties of *sich-ausgehen* (SAG) constructions

In this section, we lay out the minimal descriptive basis for our understanding of the SAG construction. The construction finds routine mention in dictionaries and lexical collections of German Austriacisms (Ebner 1998, Sedlaczek 2004, Dürscheid et al. 2018). We will begin by pointing out some of its diatopic and morphosyntactic distributional properties in section 2.1, to continue in 2.2 with further contextualized description pertaining to the modal flavors and possibilities of scales involved.

2.1 Distributional and morphosyntactic properties

The construction under discussion, which we will abbreviate on the basis of its morphemes as SAG ('sich ausgehen'), is available in all current Austrian states. According to some descriptions, it is not available in Federal German (cf. Dürscheid et al. 2018).¹ For the less familiar reader: Austrian dialects belong to the family of Bavarian with the exception of the dialect spoken in the federal state of Vorarlberg, which belongs to the Alemannic family. The Austrian branches of both families have the construction; cf. Fig. 1. The purpose of this figure is merely to give a synchronic orientation. The numbers do not amount to 100% due to rounding errors; the nine federal states of Austria are grouped into four 'regions' on neither a political nor a dialectal basis (e.g. Alemannic and Bavarian dialects are lumped together). Regarding the overall frequency of SAG in Austrian German, based on a 1-% randomized sample of the Austrian Newspaper Corpus (ozk - Österreichisches Zeitungskorpus, spanning the years 1991 – 2018), a subcorpus of the DeReKo which yielded 126 SAGs, we have calculated a frequency of 0.00107% (in the ozk-subcorpus).

Conversely, specialized dialectal works written from the perspective of Austrian German dialects do not mention SAGs, as they belong to the common inventory of Austrian German (Eckner 1973, Haasbauer 1973, Hutterer 1987, among others).

Syntactically, SAGs exist in two major patterns in Austrian German. The first type takes a nominal subject in the nominative as its only argument and was introduced in (1). We call it nominal. The second major pattern involves a clausal and typically finite complement. Hence this type involves a *dass*, 'that', finite complement clause. So, in addition to the version in (1), an alternative as in (2) is available in the same context:

- (2) Es **geht sich aus**, dass wir vor dem Termin eine Tasse Kaffee trinken.
 it goes itself out, that we before the appointment one cup coffee drink
 'We can have a cup of coffee before the appointment./There is enough time for us to drink a cup of coffee before the appointment.'

¹A distinct picture obtains from the so-called atlas of German daily language (www.atlas-alltagssprache.de/pilotprojekt/). Our purpose is not to determine a dialectal map and we have had opportunity to observe the "contagious" character of the construction, i.e. a number of speakers of Federal German in our research who had in some form or another picked up the construction. We have had, at the same time, ample feedback of speakers of Federal German who considered it plainly ungrammatical. Augustin Speyer (p.c.) reports yet another 'medium' option, in that for some speakers of Federal German a more general version of the construction seems to be available (typically only with the subject *das*, 'that' and without clausal complements), without necessarily possessing intuitions about its details.

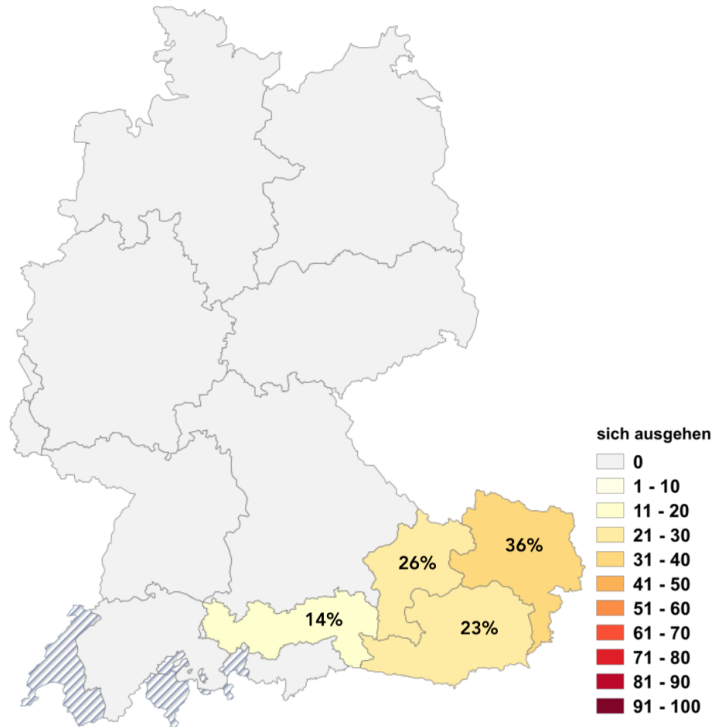


Figure 1: Areas of occurrence of SAG in Present Day German (Dürscheid et al., 2018)). Austria is divided into four ‘regions’ which have neither a political nor a dialectal basis. E.g. 36% for the Northeast, which includes Vienna, means that 36% of all SAG examples in the sample are from that region.

The slightly more abstract syntactic patterns are, then, as follows:

- (3) a. Subject nominal + SAG (cf. (1))
- b. Dummy-pronoun-subject + SAG + *that*-clause-CP (cf. (2))

The nominal pattern involves opportunity relating to an event built around the nominal subject (e.g. *ein Kaffee*, ‘a coffee’ in (1)). We call this type of nominal the *key* and return to a semantic property of the key in the next subsection. The clausal pattern seems more transparent, in the sense that it has a proposition-denoting syntactic complement to the SAG. It contains, for example, an overt verb in the complement (‘drink’ in (2)), something that needs to be reconstructed in the nominal variant. However, as we will discuss in section 4, both patterns are underspecified from the perspective of compositionality.

Despite the relative poverty of overt building blocks, (Austrian) speakers across the board report temporal judgments for sentences such as (1) and (2) (cf. also the local, i.e. sentential context set up including an appointment and the preposition *vor*, ‘before’ – but neither is obligatory). By temporal judgments, we mean temporal sufficiency judgments (i.e. ‘there is enough time’, and not temporal in the sense of shifting or quantifying in the sense of tense semantics). We will also discuss environments different from time, but the key point is that some scalar notion is involved in all of the examples that we found licensed.²

Some speakers – without being asked about this property – also comment that there is not much time left, that there would not be time for two cups of coffee, etc. This component of meaning, however, is not

²Our focus was on the context-based investigation of the relevant meanings. The diachronic attested examples *a fortiori* always had context. At the same time (and somewhat against what we perceive to be mainstream in semantic theorizing), we think that the elicitation of non-contextualized material is a useful addition, especially when the meaning of an expression is not fully known yet, even in a familiar language. The assumption is not a *tabula-rasa* for consultants (cf. Tonhauser and Matthewson 2015, among others), but specifically that a non-null context is available in the speakers’ minds. The intention beyond such additional testing was to find out what the non-null and somewhat less biased context may have been. The testing was instructive as not only sheer ratings have been asked for, but also comments; the paraphrases speakers offered were telling and useful for our further thinking.

obligatory in all cases. If the context is slightly changed, then the inclusion of other modifiers such as *gut*, *locker etc.* ‘well, easily, etc.’ can easily retract the implicature.

We will focus on the two typical patterns of the construction introduced, which can convey similar notions, with the nominal pattern doing so in an informationally more dense way (Shannon, 1948). However, to some extent (less idiomatically), it is also possible to have infinitival *zu*, ‘to’ complements. The latter feature an obligatory expletive *es*, ‘it’, in the matrix clause (i.e. control structures are excluded; cf. issues in the literature related to raising vs. control status of *can* and other modals; Hackl 1998, Reis 2001, Wurmbrand 2001, Gergel and Hartmann 2009, among others).³

- (4) Es **geht sich aus**, eine Tasse Kaffee zu trinken.
 it goes itself out a cup coffee to drink
 ‘We can have a cup of coffee.’

The modern patterns we have looked at are semantically largely equivalent. For instance, the nominative argument in the clausal pattern (often this is the beneficiary for whom the opportunity holds) can be introduced in the nominal pattern as well. But this then happens through obliques, e.g. as a dative or via prepositional phrases (illustrated with *bei*, ‘at’ below – but other prepositions are also possible, e.g. *für*).

- (5) Eine Tasse Kaffee **geht sich** bei uns vor dem Termin **aus**.
 one cup coffee goes itself at us before the appointment out
 ‘We can have a cup of coffee before the appointment.’

There is, furthermore, a wide range of possible context setters in SAG constructions. For instance, explicit inclusion within the range of *in*-phrases is possible:

- (6) 1 Liter Wasser **geht sich in** 1/4-Liter Glas nicht **aus**.
 1 liter water goes itself in 1/4-liter glass not out
 ‘1 liter of water does not fit into a 1/4-liter glass.’

While the range of morphosyntactic possibilities is large, there are also syntactic restrictions on SAGs. For instance, the nominal (*car*) in (7), below, around which the event (parking) is built in the embedded clause cannot be made a clause mate of SAG while keeping the finite complement clause and taking up the entity of the noun either resumptively or as a potential trace in the embedded clause, as in (8):

- (7) Ich werde den Nachbarn fragen, ob **es sich ausgeht**, dass ich mein Auto heute bei ihm
 I will the neighbor ask whether it itself out goes that I my car today with him
 parke.
 park
 ‘I will ask my neighbor if I can park my car at his place today.’

³Dialects can bring in their morphosyntactic intricacies. We take this variation to be orthogonal and modular, but briefly exemplify with Upper Austrian to give an idea:

- (i) A Kaffee **dageht si'** nimmer **aus**.
 A coffee goes itself not anymore out
 ‘We cannot have a cup of coffee.’
- (ii) A Kaffee is **si'** nimmer **ausdagaunga**.
 A coffee is itself not anymore outgone
 ‘We could not have a cup of coffee.’
- (iii) I woak ned, ob **si'** a Kaffee **ausdageht**.
 I know not whether itself a coffee outgoes
 ‘I don’t know if we can have a cup of coffee.’

The patterns have the same meaning as Standard Austrian SAGs and they are not attested in our sources diachronically. Their morphosyntax is hence left as a topic for further research.

- (8) *Ich werde den Nachbarn fragen, ob mein Auto **sich ausgeht**, dass ich (es) heute bei ihm
 I will the neighbor ask whether my car itself out goes that I it today with him
 parke.
 park

Intended: ‘I will ask my neighbor if I can park my car at his place today.’

Another relevant distributional restriction is that SAGs do not take progressives. More pedantically, they do not take progressive periphrases, as there are no morphological progressives in German. First, independently of SAGs, neither the verb *go*, nor particle verbs, nor reflexives block progressives. The degree to which progressives are grammaticalized as functional markers can be debated and more variation and interesting issues exist (cf. Ebert’s (2000) overview on Germanic), but for our purposes the very existence of a form from the imperfective family should suffice to make the descriptive point, cf. (9)-(10):

- (9) Jonathan war gerade am Gehen, als die Chefin reinkam.
 Jonathan was just at going when the boss in came
 ‘Jonathan was leaving when the boss came in.’
- (10) Sie waren dabei, sich der neuen Kollegin anzuvertrauen.
 they were there at themselves the.DAT new colleague confide
 ‘They were confiding in their new colleague.’

When it comes to SAGs, however, progressives are ungrammatical:

- (11) *Ein Kaffee ist am/bei **sich Ausgehen**.
 a coffee is at/in the vicinity itself out go
- (12) *Ein Kaffee ist dabei **sich auszugehen**.
 a coffee is there at itself out to go

The lack of the progressive cannot be blamed on incompatibility of SAGs with tempo-aspectual inflectional morphology (as e.g. in the Modern English modals). Both the preterite and the perfect form licit inflectional paradigms with SAGs:

- (13) Ein Kaffee {**ging sich aus** / **ist sich ausgegangen**}.
 a coffee went itself out / is itself out gone
 ‘It was possible to have a coffee.’ / ‘There was enough time for a coffee.’

We will return to the lack of progressives in section 4.

2.2 Further meaning coordinates

From the examples inspected, a first impression emerges that a notion of modal opportunity is involved. This is, however, by far more restricted than the nuances expressed e.g. by other types of possibility core modals as known from English or German. First, neither laws, regularities, permissions, etc., nor states of affairs related to knowledge or evidence (sources) yield felicitous modal readings for SAGs. That is, deontic or epistemic readings cannot be construed for SAGs. An example such as (1) or (2) presented above is perfectly natural on a reading involving the circumstances and the background of the amount of time available. But it cannot be interpreted in terms of permission or some type of evidence pointing towards having a cup of coffee. Furthermore, even a sentence such as (7), which appears to bias the context towards a deontic reading, given that the speaker asks the neighbor, cannot be interpreted deontically. Rather, the statement is interpreted as asking for the information whether the space available in the parking spot will suffice for parking. We offer additional contextualized evidence to illustrate our claims. An example such as (14) is licit, while examples like (15)-(17) are not:

- (14) Context: With his oversized car Mr. Rossbacher has issues finding good parking. However, the parking area at the City Mall has unusually large parking spaces. Upon arrival he immediately thinks to himself:

Hier **geht** es **sich** locker **aus**, dass ich mein Auto parke.
here goes it itself easily out that I my car park

‘I can easily park here.’

- (15) Context: Anna has just moved to a new town. It reminds her a lot of Greece: warm and temperate climate, loose and sandy soil. She thinks to herself:

#Jetzt **geht** es **sich** **aus**, dass in meinem Garten Olivenbäume wachsen.
now goes it itself out that in my yard olive trees grow

Intended: ‘Now I can grow olive trees in my yard.’

- (16) Context: Leo asked his mother to allow him to ride his bicycle. She responds:

#Ja, das **geht sich aus**.
yes that goes itself out

Intended: ‘Yes, you can do that.’

- (17) Context: Dominica can see that Martina’s windows are lit and thinks:

#Es **geht sich** sicherlich **aus**, dass Martina zu Hause ist.
it goes itself surely out that Martina to home is

Intended: ‘Martina must be home.’

What the examples above show, is that on the intended circumstantial (15), deontic (16), and epistemic (17) readings induced by the respective contexts, SAGs are not licensed at all in current Austrian German. However, some ambiguities can still arise with SAGs. Recall e.g. our parking example in (7) repeated here as (18):

- (18) Ich werde den Nachbarn fragen, ob **es sich ausgeht, dass** ich mein Auto heute bei ihm
I will the neighbor ask whether it itself out goes that I my car today with him
parke.
park

‘I will ask my neighbor if I can park my car at his place today.’

But the interpretations available for (18) are all related to scales. For instance, are my and my neighbor’s schedules compatible (time), are space and shape issues solved, etc. This means that, although there is room for ambiguity, it usually involves the type of scale, and not, for instance, the modal flavor (say, epistemic vs. deontic). Further scales can appear in SAGs, too. Here are just a few additional examples:

- (19) Context: The chocolatier Zotter bought a Citroën Saxo électrique, model 1996. He travels at least 70 km daily in it. The car has a range of 120 km.

‘Das **geht sich** gut **aus**’, meint Zotter, [...] that goes itself well out means Zotter

‘That works out just fine’, says Zotter.

(2009; e-connected, via <http://www.e-connected.at/content/die-s%C3%BC%C3%9Fen-seiten-des-lebens>)

- (20) Context: Participation at a world championship

Wenn er noch einen Punkt schafft, **geht sich** die WM-Teilnahme **aus**.
if he yet another point scores goes itself the WC-participation out

‘If he manages to score another point, he can go to the world championship.’

(21) Context: Bank clerk asking customer

Geht sich das **aus** mit dem Überziehungsrahmen auf Ihrem Konto?
goes itself that out with the overdraft-limit on your account

‘Is the overdraft limit on your account sufficiently high?’

The available readings are that the range of a car, the points in a competition, and the money allotted for overdraft, respectively, are large enough. The relevant restriction for SAGs then becomes apparent with respect to a scale. Licensors can be time, volume, two- or three dimensional space to park one’s car, the range of a car, points achieved in a competition, amount of money on an account etc. Sentences intended with a purely circumstantial reading that do not offer an immediate interpretation in terms of scales/degrees garner low average acceptability (cf. the results of a (relatively) informal elicitation experiment in appendix C (p. 37)).⁴

Having noted the restrictions with regards to modal flavors and scales, we conclude this section with an additional generalization regarding SAG subjects. In the clausal pattern, recall, the subject is an expletive and the complement proposition is expressed in the embedded clause, without much possibility of relocating material into the superordinate SAG clause. However, something is betrayed by the apparently more fragmentary nominal pattern. The generalization we suggest for it is as follows. The nominal argument (*ein Kaffee*, ‘a coffee’ in (1)), i.e. the key, is an entity that is causally affected by an event which must usually be reconstructed contextually – e.g. the drinking event for a cup of coffee. Notice also that this is not a restriction based on non-animacy of the nominative argument, but one that has to do directly with its strict character of an entity that is causally not acting in any way. All of the examples of SAGs shown so far illustrate this fact, but they could also be interpreted in terms of a non-animacy constraint. Therefore consider (22):

(22) Context: Several people are waiting to take an elevator. After the elevator has come and as many of them as possible entered, an observer can utter:

Die Professorin **ist sich** nicht mehr **ausgegangen**.
the professor is itself not more outgone.

‘The professor didn’t fit in (anymore).’

The example (22) shows that it is possible to have an animate nominative subject. But then the interpretation cannot be that the professor acted in a particular way or brought something about, but rather (and only) that she could not fit into the space available in the elevator and was thus caused to remain outside. Thus, in a construction which seems to be otherwise fragmentary on multiple levels, the only obligatory argument (as far as the nominal pattern goes) is the key, which encodes a relatively specific causal participant (the current suggestion being that this is a causee); cf. section 4 for the relevance of causation in the current context.⁵

⁴An interesting type of example we have found in our synchronic searches is as follows:

- (i) Man kann durchaus für Meinungsfreiheit und dennoch gegen (...) rassistische Hetze sein – das **geht sich**
one can by-all-means for freedom of opinion and nonetheless against racist hatred be – that goes itself
gut **aus**.
well out

‘You can advocate freedom of opinion and still oppose racist hatred - that works.’

(2015.02.04; diepresse.com)

(i) pitches two seemingly irreconcilable perspectives against one another and claims for them to be compatible without e.g. an obvious or contextually available scale (cf. section 4 for details). Given that these examples do not show up in the diachronic records, we will not analyze them in detail, but it would be possible to still accommodate them in the family of *enough* constructions. The idea is that there is enough space in the moral domain of the speaker to accommodate the two apparent opposites.

⁵While several apparent quirks of elliptical constructions across languages are known in the meantime (cf. e.g. McCloskey 1991, Cyrino and Matos 2002, Dvořák Gergel 2004, Merchant 2007, Gergel 2006, 2010, to name a few), they are usually deferred to an interplay of syntactic and phonological language-specific factors such that the overall interpretation is (standardly) still retrieved as a function of identity with an antecedent at the level of Logical Form. The current process, the way we view it, does specifically not rely on such a retrieval - there are no characteristic phonological or structural hallmarks to lead to such conclusions.

3 Diachronic attestations

This section describes the methods and sources we have used (in its first subsection) and subsequently illustrates the main types of examples detected by applying them. We make a distinction between genuine or prototypical SAGs, presented in the second subsection, and candidates for being proto- or pre-SAGs in the final one.

3.1 Methods, sources, and searches

The overall goal has been to identify relevant form-meaning pairings and interpret them against the backdrop of the contexts available. Specifically, we searched for constructions that had the formal ingredients of SAGs (i.e. the motion verb, the reflexive, and the particle), but for which a compositional interpretation of ‘going out’ in some sense or another, was unavailable. This in turn meant that we either (i) ended up with an SAG or (ii) with what we define as a pre-SAG, i.e. a construction which is not acceptable in current Austrian German, but which can still not be computed compositionally on the basis of the overt items as they stand. The term pre-SAG is used in this purely predated sense and without any teleological implication that (any of) the precursors had to yield SAGs. From earlier corpus studies (cf. e.g. the studies reported and compared in Gergel and Beck (2015: 37ff), Gergel et al. (2016: 113 ff)) we knew that readings (including ambiguities and readings that do not exist today) can be empirically decided in a productive way on the basis of context also for relatively larger amounts of historical data. In fact, the identification of meaning on the basis of context was, comparatively speaking, the rather easier task in the present case, and we describe the two major groups of meanings in the next two subsections. The key difference in the present study, however, was that no appropriate corpus that was large enough to produce hits was available, much less a parsed one (as in the earlier studies cited). For single items such as *again*, *noch*, ‘still’, or *motan*, ‘can/must’ (see Beck et al. 2009, Kopf-Giammanco (forthc.), and Yanovich 2013, respectively), the issue whether a parsed corpus is used or not is secondary (unless one is specifically interested in testing correlations with structure; cf. Gergel 2017). But given that we are dealing with a construction and not a single lexical item, this impasse amplifies in the present case. There is, for instance, no lemma or corpus notation that would identify an SAG as such and the three ingredients are all frequent items. A number of sources and strategies were therefore pursued in mining for diachronic data and we describe the most prominent ones in the remainder of this subsection.

First, our main focus in the diachronic context was to trace back the construction in time. Hence we did not concentrate on a corpus study of the present, but rather on ascertaining its profiles in the past. Therefore, our main sources will be primarily concerned with identifying profiles of SAGs and related data preceding WW II.

In the German Reference Corpus (‘DeReKo – Deutsches Referenzkorpus’, via the COSMAS II web application), the Archive HIST was used to gather diachronic data. The Archive HIST covers the period from 1700 to ~1918 and contains 66.58m word forms. A corpus search for SAGs yielded a list of 1,887 potential hits which after manual review all turned out to be false hits. Another effort was made in the Archive W which is also a sub-part of the German Reference Corpus and contains fictional literary writing from the 20th and the 21st centuries. Its size is 9.89m word forms and our search parameters yielded a result list with 452 potential hits, two of which were SAGs (unfortunately - from a diachronic perspective - from 2009 and 2011).

The Early New High German Corpus Bonn (‘Bonner Frühneuhochdeutsch Korpus’) covers the period from 1350 – 1700, contains 300,000 word forms, and also includes Viennese-based texts. Yet, no SAGs were found in that corpus. Other attempts at finding historical SAGs included text searches in the Project Gutenberg⁶, the Internet Archive⁷, Google Books, and various Google Searches. Additionally, we targeted historical magazines and journals such as *Die Fackel*, *MAK-Hauszeitschriften*, etc. Further targeted text searches in writings of Austrian authors (largely fiction) also failed to yield any SAGs.

The most useful resource proved to be the ANNO (*AustriaN Newspapers Online*) corpus published and continuously updated by the Austrian National Library. At the time when we conducted our research, a number of methodological issues had to be solved. The interested reader is invited to follow the presentation of all the relevant points on our various corpus searches in the ANNO corpus in the first appendix. The most telling data themselves are presented in the next two subsections. Before going into the presentation

⁶<https://www.gutenberg.org/>

⁷<https://archive.org/index.php>

of examples, let us note that we found a total of strict SAG examples and a superset of examples under the inclusion of pre-SAG constructions, the specifics of which we discuss in section 3.3. The diachronic development in the frequencies of the examples we have been able to observe thus far is rendered in figures 2 and 3.

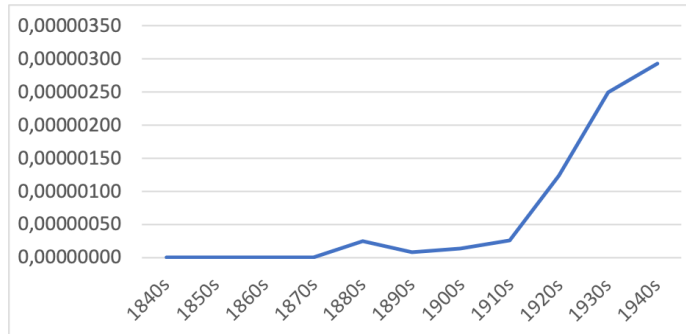


Figure 2: Frequencies relative to the overall number of wordforms per decade in the ANNO corpus; SAGs (pre-SAGs excl.) (%); detailed numbers in table 3 (p. 38)

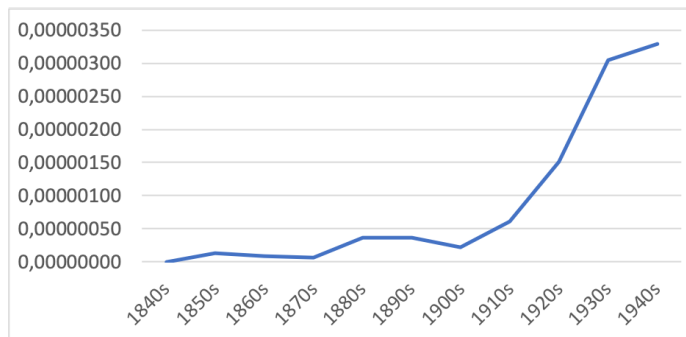


Figure 3: Frequencies relative to the overall number of wordforms per decade in the ANNO corpus; SAG and pre-SAG constructions (%); detailed numbers in table 3 (p. 38)

From a diatopic point of view, the SAG examples have been identified in the regions of Austria given in figure 4 (p. 10). We use the current Austrian map for simplicity and because we could not find SAG examples in territories outside of the current state (although there was one pre-SAG construction from Bohemia).

Figure 4, which only includes the genuine SAGs and not its precursors (cf. the following sub-sections for fleshing out the distinction) seems to suggest a Viennese concentration and perhaps origin and a spread westward. The caveat is, of course, that the majority of the newspapers originates in Vienna (cf. table 4, p. 38 in Appendix A).

3.2 Diachronic SAG examples

The present subsection offers an overview of the patterns of genuine SAG examples we were able to identify based on the searches described in the previous subsection and appendix A (p. 33). An interesting use of SAG in this sense, i.e. one which already shows properties available in current Austrian German is rendered in (23) below:

(23) Context: Protagonist is short on money and on a date.

“Ich möchte was trinken!” sagte Hedy plötzlich und der Kavalier griff verlegen nach
 I want something drink said Hedy suddenly and the gentleman reached awkwardly for

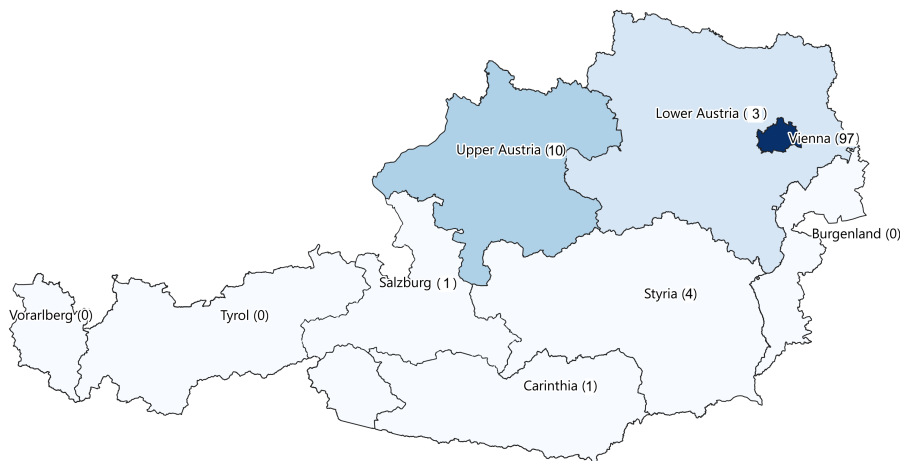


Figure 4: Diachronic SAG occurrences in Austria based on current ANNO findings

der Weinkarte, denn er wußte nicht, ob es **sich** noch **ausging**. Aber es **ging sich aus** und
 the wine menu since he knew not whether it itself still out went but it went itself out and
 er bestellte eine Flasche.
 he ordered a bottle

‘I want to drink something!’ said Hedy suddenly and the gentleman nervously reached for the wine menu since he didn’t know if he had enough money on him. It was enough and he ordered a bottle.’
 (1940.03.26; Wiener Neueste Nachrichten, via <http://anno.onb.ac.at>)

An earlier SAG example based on a monetary scale is (24), while the even earlier SAG in (25) from 1888 features a width scale.

- (24) Diese achtundzwanzig Kronen, die er eben eingenommen hatte oder in der nächsten halben
 these twenty-eight Crowns that he just earned had or in the next half
 Stunde ausgeben sollte, mußten **sich** auf irgendeine Rechnung „**ausgehen**“. Sie
 hour spend should had themselves on some calculation/bill ‘out-go’ they
gingen sich aus, das sah ich an seinen befriedigten Mienen.
 went themselves out that saw I in his satisfied faces

‘The twenty-eight crowns he had just earned and the ones he was supposed to spend within the next half an hour had to somehow fit into the same calculation. And they did, as I was able to judge from the satisfied expression on his face.’

(1918.05.26; Reichspost, via <http://anno.onb.ac.at>)

- (25) The context is about the concept of a *Wender* (a ‘healer’/‘shaman’) who, by measuring the length of their patients’ arms (from the shoulder to the tip of the middle finger) with their own hand widths, determine the severity of a sickness and, consequentially, the chances of survival.

Fällt das Ende der letzten Spanne mit dem des Mittelfingers zusammen, so verkündet der
 falls the end of the last span with that of the middle finger together, so announces the
 Wender: “Es **geht sich aus**!” Fällt aber die letzte Spanne mit dem Mittelfingerende nicht
 healer it goes itself out falls however the last span with the middle finger end not
 zusammen, so erklärt der Wender: “Es **geht sich nicht aus**!” Der erstere Orakelspruch bedeutet,
 together so explains the healer it goes itself not out The first oracle means
 daß die Krankheit mit Genesung, der letztere, daß sie mit dem Tode enden werde. Je
 that die sickness with recovery the last that it with the death end will the

häufiger indes sich der Kranke auf diese Weise wenden läßt, desto
 more frequently however themselves the sick in this manner heal let the
 günstiger endet die letzte Spanne, und desto besser “**geht es sich aus**”.
 more favorable ends the last span and the better goes it itself out

‘If the last last width of the healers hand ends precisely with the end of the middle finger, the healer announces, ‘It will be okay!’ But is the last width doesn’t fit the length of the arm, the healer explains, ‘It will not be okay!’ The first oracle means that the sickness will be followed by recovery, the latter means that it will end with death. The more often the patient chooses to have their arm measured, the more likely, ‘It will be okay!’.’

(1888.12.23; Linzer Tagespost, via <http://anno.onb.ac.at>)

Temporal scales also feature prominently in the early SAGs, as the following example from 1883 shows:

- (26) Context: Mr. Franz Etzelsbacher was sentenced to eight days of jail on a Saturday. He tried to negotiate for his sentence to be suspended for Sunday service the next day. Upon having his request denied, Mr. Etzelsbacher suggests the following:

Nu, in Gott’s Namen, b’halten’s mi glei do, ’s **geht sich** grad **aus** bis zum anderen Sunntig.
 well in God’s name keep me now here it goes itself just out until to the other sunday

‘Well then, in God’s name, why don’t you keep me here right away. That way I can be back out for the Sunday after tomorrow./That way there’s enough time to make it to mass the Sunday after tomorrow./That way there’s enough time to complete my sentence until next Sunday.’

(1883.08.05; Neues Wiener Tagblatt, via <http://anno.onb.ac.at>)

The examples in (23), (24), (25), and (26) can be understood and recognized as such by current speakers. Moreover, they introduce degrees and a sense of sufficiency on certain scales. The scales are unspecified monetary units, crowns, hand widths, or e.g. days. Interestingly, some of the examples also appear in contexts in which dialogues are reproduced or with the relevant verb in quotation marks. We cannot (and do not want to) claim that this should be significant theoretically or numerically given the scarcity of the examples, as described. But the fact that the examples seem to appear in some sort of orally flavored contexts may offer a hint as to why they have been harder to identify in the written sources utilized in the first place.

The following examples show scales such as number of fingers, beers, and time:

- (27) Context: A little boy is asked how old he would be if his current age was multiplied by a factor of five.

Der kleine Junge nahm seine Finger zu Hilfe, aber es **ging sich** nicht **aus**, [...]
 the little boy took his finger to aid but it went itself not out

‘The little boy tried to count with his finger but there weren’t enough fingers.’

(1937.12.16; Neue Freie Presse, via <http://anno.onb.ac.at>)

- (28) Context: Pfeifer and Hackl are discussing a wager at the horse racing track. Their friend Stingl is trying to mediate:

Damit aber die G’schicht an andern Schan kriegt, so wettet von mir aus um zehn
 in order to however the story a different purpose receives so bet from me out for 10
 Seitel Bier – halt aus, das **geht sich** net **aus**, denn i will a mittrinken – also sagen
 pints beer hold off that goes itself not out because I want also with drink therefore say
 wir um 15 Seitel Bier, das tut keinem weh’!
 we for 15 pints beer that does nobody hurt

‘So, to do this properly, I suggest you bet for say ten pints – no wait, that won’t be enough beer, I want to have some beer too – let’s say 15 beers and everybody’s happy.’

(1907.04.24; Neuigkeits-Welt-Blatt, via <http://anno.onb.ac.at>)

- (29) Context: A family is rushing to the showing of a film that features one of their children on screen. They barely make it.

Knapp ist es **sich ausgegangen**, ganz knap [sic!], denn kaum wird es finster, beginnt
narrowly is it itself outgone entirely narrowly because hardly becomes it dark begins
der Film aus dem Städtischen Opernhaus abzurollen.
the film from the municipal opera house rolling off

‘It was very tight but they made it just in time for the auditorium to go dark and the film to start.’
(1944.03.19; Illustrierte Kronen Zeitung, via <http://anno.onb.ac.at>)

We end this subsection with another example based on a time-scale. Note, at the same time, that the example offers multiple positive contextual clues, i.e. it allows more than one reading:

- (30) Context: A tavern owner has a new, mysterious guest staying in her tavern. Upon knocking at the guest’s door to find out more about him and his business, the guest asks her to come back in an hour. This gets her in an impatient frenzy. There are two time-measuring devices at her disposal: a large clock with a pendulum and her husband’s wrist watch (who’s currently in the basement, doing chores). At some point a maid accidentally stops the clock’s pendulum. When the maid is asked to go ask the husband what time it was, the husband knocks over the candle in the basement before being able to read the time off of his watch. The maid rushes back upstairs to get matches but without a time specification to relay to the impatient lady of the house. Upon the maid’s return without a time specification the lady exclaims:

So schön, wie ich halt schon bin! ’s **geht sich** Alles aus.
so pretty how I PRT already am it goes itself all out

‘Oh dear, look at me! It’ll all work out./It’s all going to be alright./There’s enough time.’
(1865.08.01; Gmundner Wochenblatt, via <http://anno.onb.ac.at>)

On the one hand, (30) contains temporal clues such as getting the work done within an hour and keeping track of time. But the candle and the pendulum could literally go out. While such a use would not feature the reflexive in Modern varieties, reflexive uses appear to be more common in the 19th century, so that theoretically, another reading than an SAG could also obtain. Yet another interesting reading is one of suitability or compatibility. In this case, the desires of the subject and the projected course of all relevant events (via *Alles*, ‘all’) are viewed as compatible. We think such readings are some of the potential precursors of SAGs, to which we turn next.

3.3 Pre-SAGs

In this subsection, we present examples that do not have the narrow semantic properties of SAGs described in section 2, but which – after the inspection of all contextual factors available to us – do not have either (i) a literal and compositional meaning of *gehen* (‘go’), *aus* (‘out’), and *sich* (‘itself’/Ref.), or (ii) the meaning of another (reflexive) verb-particle construction that is available to us from Present-day German. While we call these constructions pre-SAGs, notice that as a set, they do not all precede all occurrences of SAGs. This should not be too surprising for historical linguists, but worth keeping in mind when dates are considered (recall also the overviews in figures 2 and 3 above).

- (31) Context: The author describes a situation on a bus in which a passenger decides to forgo the change for his fare.

Gibt jemand Trinkgeld und murmelt dabei leise: “Es **geht sich aus!**”, will aber der
gives somebody tip and mutters in-doing-so quietly it goes itself out wants however the
Kondukteur, der diese Bemerkung überhört hat, trotzdem die vier Heller auf zwanzig
conductor who this remark missed has nevertheless the four Hellers to twenty
zurückgeben, so mengt sich die Dame vom Stand drein und brüllt mit Stentorstimme:
back-give then joins herself the gentlewoman in and bellows with stentorian voice
„Lassen S’ es, es **geht sich aus**, hat die Freiln gsagt!”
leave you it it goes itself out has the miss said

‘If someone decides to tip the conductor and quietly mutters, “keep the change!”, but the conductor, who missed the remark, hands back the four Hellers of change nevertheless, then the gentlewoman interferes and bellows in a stentorian voice, ‘Leave it! The miss said it’s alright!’
 (1913.03.23; Fremden Post, via <http://anno.onb.ac.at>)

The example (31) once more mimics direct speech, as the previous ones to different extents, and it can also be viewed as degree-based, as money is involved. But its pragmatics at least at face value is distinct from what would be licensed today. The meaning ‘It’s alright’ would (and could, of course) be conveyed in a multitude of other ways. But essentially for conveying ‘You can keep the change’ it would be very puzzling to use a SAG from the point of view of Modern Austrian. A very marginal context that would allow that might be along the lines of ‘I already have just about enough money for a clear goal that is established in the common ground’ and as an implicature, the hearer might be invited to keep the change. But the situation does not license any such inferences.⁸

Another example which shows a (more general) sense of compatibility and is also decidedly not acceptable to speakers of Modern Austrian German is the following:

- (32) Context: This article ponders how greeting habits have changed over the years. In particular WW2-era and post-WW2 customs are at issue.

..., die Fußballer sagen wieder „Hipp, hipp, hurra!“ denn mit „Sieg Heil!“ **ging es sich**
 the football players say again hip hip hooray because with Sieg Heil went it itself
 nicht **aus**.
 not out

‘..., the football players exclaim ‘Hip, hip, hooray’ again since it did not work out with ‘Sieg Heil.’
 (1945.11.30; Weltpresse, via <http://anno.onb.ac.at>)

Unlike the earlier SAG examples of the previous subsection, (32) shows appropriateness, or rather lack thereof due to negation, in an eventive context, but it does not make reference to any either obvious or overtly contextualized sense of degrees.

We next show additional examples which are attested in the historical records but are unacceptable SAGs in Modern Austrian German:

- (33) Context: Taxation of sugar production and exports is about to undergo reform to the benefit of the state and disadvantage of the sugar industry. The article is in favor of the reform, the following passes judgment on the old, soon-to-be-abolished status quo:

Das ist etwas ganz und gar Unnatürliches, es **geht sich** ja an den anderen ehrlichen
 that is something downright unnatural it goes itself indeed at the other honest
 Steuerzahlern **aus**!
 tax payers out

‘That is something downright unnatural since it is to the detriment of the other, honest tax payers.’
 (1887.05.07; Neue Warte am Inn, via <http://anno.onb.ac.at>)

- (34) Context: The article is about the efficiency of steam-powered mills. The following remark is w.r.t. the steam mill in Debrecen and its cost-effectiveness and appears in a footnote of the article:

[Die Debrecziner Dampfmühle wird] in den Jahresausweisen mit 49 fl. Mille angeführt, welches
 the Debrecen steam mill becomes in the year passes with 49 fl. Mille listed which
 Kapital bereits auf beinahe Null herabgekommen ist, weil **sich** die Maschine in 10 Jahren
 capital already at almost Zero down come is since itself the machine in 10 years
ausgegangen hat und tatsächlich durch eine ganz neue größere ersetzt werden mußte.
 outgone has and indeed by a completely new larger replaced become must

⁸As a reviewer points out, it cannot be ruled out that the existing actions are sufficient, i.e. the conductor need not do anything else, implicating that he need not return the change. The puzzle then, however, would be that if such a putative sufficiency reading had developed, why did it become impossible in Modern Austrian, when sufficiency is broadly conveyed.

‘[The Debrecen steam mill] is annually listed at 49000 fl. which amount is already almost reduced to nothing since the mill wore out in ten years and indeed needs to be replaced with a new, larger machine.’

(1856.09.16; Morgen-Post, via <http://anno.onb.ac.at>)

- (35) Context: The article is about the necessity to open a new hospital in Pfarr-kirchen (Upper Austria). The following token is in reference to an analogy human body vs. clockwork and the idea that having a hospital in town is worth supporting even when you’re feeling fine:

...; das beste Uhrwerk **geht sich aus** und kommt durch das Stocken des Oeles, durch
the best clockwork goes itself out and comes through the clotting of the oil through
angesammelten Staub um den sicheren Gang; ...
accumulated dust for the save run

‘the best of clockworks will stop working and loose its smooth run due to oil going hard and dust accumulating; ...’

(1889.08.09; Mühlviertler Nachrichten, via <http://anno.onb.ac.at>)

In the example in (33), the event anaphorically referred to happens to the detriment of the taxpayers. Examples like (34)-(35) are related to a sense of wearing out. What (33)-(35) have in common, in addition to being neither fully compositional nor acceptable in Modern German, is that they depict undesirable outcomes. This is in a clear and additional counterdistinction to the SAG constructions which express sufficiency. If modern SAGs express a type of sufficiency that additionally presupposes desirability, a topic which we detail in the next section, and one sub-type of pre-SAGs expresses stereotypically non-desirable outcomes, then the question is what an appropriate bridging context may be. Examples like the following, involving the predicate *gut ausgehen*, ‘go out well’/‘have a positive ending’ are particularly relevant (cf. also subsection 5.2, p. 21):

- (36) Context: This is the story of Mrs. Zapplberger who invites a fortune teller (Mitschke) into her home and has all the obscure ‘predictions’ interpreted by her friends and neighbors and, as it turns out, confirmed in retrospect.

„Aber Frau Zapplberger!“ ruft Fräulein Nelli, „aber Frau Zapplberger! **es** is ja schon
but Mrs Zapplberger exclaims Ms Nelli but Mrs Zapplberger it is yes already
ausg’gang’n! Hab’n Sie net g’sagt, daß Ihna künftiger Hausherr gar a kaiserlicher Rath is?“
out gone have you not said that your future landlord truly a imperial councilor is
– „Ja, das is er.“ – „No also, is das Mieth’n von der Wohnung ka G’schäft’?“ – „Meiner Seel’, Sie
yes that is he well so is the renting of the apartment no business of my soul so
hab’n recht!“ – „Na also, da hab’n S’ ja den groß’n Herr’n! na, und ihna Ruh’ und Ihna
have right well so there have you yes the great man well and your quiet and your
Fried’n, is Ihna der net verlorn’ ganga? Is des vielleicht nix? Na, und seg’n S’, Frau
peace is you that not lost gone is that maybe nothing well and see you Mrs.
Zapplberger, weil die Mitschke g’sagt hat, daß **sich** wieder Alles guat **ausgeht**, können S’
Zapplberger since the Mitschke said has that itself again all good outgoes can you
ganz beruhigt sein, Alles wird sich wieder mach’n!
totally reassured be all becomes itself again make

‘“But Mrs Zapplberger”, says Ms. Nelli, “but Mrs Zapplberger”, it has already turned out that way! Didn’t you say your future landlord was an imperial councilor?” “Yes, he is.” “There you go, isn’t renting an apartment a business deal?” – “Oh dear, you’re right!” - “Well, there’s your ‘great man’! And your ‘peace and quiet’, did you lose that? Is that nothing? And look, Mrs. Zapplberger, since Mitschke said that, everything will work out again, you can remain absolutely calm. Everything will be just fine.’

(1898.09.25; Deutsches Volksblatt, via <http://anno.onb.ac.at>)

The example in (36) is interesting also because it shows a free alternation between the reflexive and the non-reflexive form of the verb *ausgehen*.

Finally, we briefly present one more type of example, which – even though neither pre-SAGs nor SAGs – happens not to be used as such in Modern German (whether Austrian or Federal):

- (37) Context: This is a list of reasons for bringing cattle out onto the meadows. The following is reason nr. four:

Viertens daß sie **sich** **ausgehen**, und auf den Füßen härter werden.
fourth that they themselves out go and on the feet harder become

‘Fourth, they should walk themselves into shape so their hooves toughen up.’

(1783.02.01; Churbaierische Intelligenzblätter, via <http://anno.onb.ac.at>)

- (38) Context: Entry of *Ausgehen* in Weigel’s (1804) German-Greek dictionary.

Die Stufen haben **sich** **ausgegangen**.
the stairs have themselves out gone

‘The stairs are worn down.’

(Weigel 1804)

Examples like (37) and (38) are however very straightforward to understand compositionally. There is a literal walking event (or iteration of such events) on the stairs that causes them to wear out and similarly there are walking events that cause the cattle to have their feet in shape. (Notice that we identified the example in (38) outside of ANNO, that it is simply based on a dictionary entry from an author who was born and died in Saxony, i.e. most clearly a speaker of a non-Bavarian variety.⁹ As we will discuss in section 5, this shows once more that the initial ground for the construction was (unsurprisingly) available in presumably all varieties of German, but it must have taken more, for it to develop modal meanings of the SAG (i.e. sufficiency) and pre-SAG type (with appropriateness and compatibility as one major sub-type identified).

To summarize: while it is not difficult to find current attestations of SAGs, issues arise diachronically. This could mean that more research needs to be done or that the construction is relatively recent. We think: presumably both and repeat the caveat about the oral character at early stages, even though newspapers at the time have a fair deal of oral discourse. At this point, we take the construction to be relatively recent and to have arisen in the nineteenth century. The earliest example we could find and which provided evidence for an SAG in the current sense was from 1865. The potential precursors started naturally earlier. A particularly relevant meaning within this class of constructions seems to be a more general notion of compatibility or suitability.

4 SAGs in the landscape of *enough* constructions

4.1 A note on more general issues of modality and degrees

The empirical generalization from the discussion so far is that SAGs have developed from motion to intensional markers which involve both a restricted sense of modality and crucially a scale. SAGs thus represent an area in which degrees and modality come together, although neither needs to be explicitly mentioned. While several theoretical options would be available which connect modals and degrees (cf. Lassiter 2017, Kratzer 2012, Hegarty 2016), the meaning of SAGs lends itself to an analysis in terms of a rather standard approach, namely one couched in terms of sufficiency, i.e. *enough* constructions (ECs) which is orthogonal to the way one sees modality. As in most of the literature on ECs, this is not the place to settle the issue whether, for instance, modality itself is to be viewed probabilistically, as gradable per se, or related issues.¹⁰ What we

⁹Thanks to Winnie Lechner (p.c.) for help with the translation and confirming to us that the Greek version is the literal meaning and unrelated to the modern Austrian SAG meaning.

¹⁰A probabilistic approach, which we are not aware of having been pursued in key semantic approaches to ECs, seems to be less tractable for SAGs, as epistemic readings are and have been unlicensed. A similar qualification must be made with respect to connecting deontic modality to degrees (and e.g. the domain of extreme vs. non-extreme adjectives), cf. Portner and Rubinstein (2014), as deontic modality never obtains for SAGs. The task of connecting the knowledge amassed from gradable adjectives to the modal domain at a more general level (i.e. beyond e.g. deontic or epistemic modalities) is left as an interesting topic for future research.

claim at a descriptive level is that the existence and development of SAGs themselves show that degrees and intensionality interact rather closely in SAGs. The same point can be made, of course, with classical ECs, as e.g. von Stechow et al. (2004) do. In the following subsection, we will consider what we take to be the relevant aspects in the panorama of ECs and situate SAGs more specifically there.

4.2 SAG as a sufficiency construction

We propose an analysis of SAGs as sufficiency constructions, by approximating them with ECs. We will first point out what we take to be the main similarities and differences between SAGs and ECs, to then move on towards a proposal regarding the computation of meaning in SAGs by building on suggestions from the literature on *enough* and *too* constructions (Karttunen 1971, Meier 2003, Hacquard 2005) and specifically more recently endeavors that connect such intensional constructions with causality (cf. Schwarzschild 2008, Nadathur 2017, Nadathur 2019, among others). In a nutshell, then, our own suggestion will be that SAGs are roughly speaking ECs, but with two main addenda: (i) a presupposition of desirability and (ii) the way meaning is computed from the available and implicit building blocks, respectively.¹¹

A first reason to view SAGs and ECs on a par is that they both combine degrees and modality. A second intuitive reason to adopt such an approach is that the most natural paraphrases available for SAGs contain expressions of the type ‘the available time/money/space/volume etc. suffices’. Third, just like in the case of *enough* constructions, a goal also appears evident and necessary in SAGs for the purposes of interpretation (time available in order to drink coffee, space to park one’s car, money available to operate with, etc.). Fourth, SAGs and ECs show implicative behavior (Karttunen 1971, Meier 2003, Hacquard 2005, Nadathur 2017). Consider (39):

- (39) #Es ist **sich ausgegangen**, dass sie eine Tasse Kaffee getrunken haben – sie haben aber keinen
it is itself out went that they a cup coffee drunk have they have but no
Kaffee getrunken.
coffee drunk
‘It worked out for them to have a cup of coffee, but they didn’t have coffee.’

In addition to conveying that the subjects of the embedded clause had enough time to drink a cup of coffee, (39) implicates that they did drink a cup of coffee (in the actual world). The actualistic behavior in SAGs is in fact even stronger. Thus, while the recent literature has suggested certain exceptions to the actuality entailment of ECs, we have not been able to find, elicit, or produce any non-entailing examples of SAGs at this point. (Cf. Gergel 2020 for a quantitative assessment on the implicativity of SAGs compared to modals and entailments.)

When translating an SAG structure into an EC, a number of differences from the original interpretive effects of SAGs obtain, but we will do it nonetheless as we thereby hope to facilitate seeing the parallels as well as the differences. The closest we can get to a standard EC this way seems to be along the lines of (40):

- (40) The time available was long enough for Stefan and his friend Paul to have a cup of coffee.

Let us review the differences in the building blocks of SAGs compared to the ECs.¹² First, notably the gradable adjective based on a scale (*long* in 40) is not visible in SAGs. Second, the goal is only directly visible as a whole in the propositional variant. We are of the opinion, however, that those differences should not impede an account in terms of sufficiency, even in more elaborate follow-up compositional research. We have already seen, specifically, two things, which are strongly available as meaning components (in the sense that speakers of Austrian German have intuitions about them): the scale is necessary and modalized SAGs

¹¹As the panorama of sufficiency is larger than that, we refer to the so-called modal sufficiency construction (SMC) analyzed in von Fintel and Iatridou (2007). We compare SAGs and SMCs in appendix B (p. 37), where the (non-)implicativity of SMCs is for the first time tested. We also point the typologically interested reader to Fortuin (2013), which does, however, not include SMCs or SAGs.

¹²We crucially face the issue that the computation of meaning is based on building blocks that are for the most part not drawn from overt pieces of morphosyntax. Coming from a focus on ECs in languages like English, German or French, this may seem surprising. From a broader typological perspective, this may seem less so, cf. Fortuin (2013) and references cited there. We will not go into the typological discussion for space reasons and because, while interesting in its own right, it did not throw light on SAGs. But there are two points we share with this discussion: (a) a broader variety of patterns for sufficiency is available than what the usual focus in the formal literature on EC constructions consists of; (b) implicit sufficiency constructions exist.

of a variety of modal flavors that lack a scale are either infelicitous or coerced into scalar readings. Second, we have illustrated empirically that the nominal pattern, in fact, has a requirement with respect to being the entity causally affected in an event.¹³ What we assume to be a baseline, is the semantics of ECs starting with Meier (2003) and developed further in von Stechow et al. (2004), Hacquard (2005), Nadathur (2017, 2019), among others. We do not reproduce its computation here, (i) for space reasons, given its involvement and (ii) because the way the computation is achieved is distinct in SAGs. However, we may point out up front that the shared element in most of the literature is a semantics based on a universal modal combined with an equative. The idea behind such thinking is that if there is enough time to have a cup of coffee, the participants have as much time as is required for having a cup of coffee. On a basic level, we also assume a degree semantics, but leave aside discussions whether gradable adjectives are functions or relations (cf. e.g. Beck (2011) for an overview), because they largely represent translatable variants of one another for our purposes, as long as there is agreement that degrees belong to the semantic ontology of natural language. We model our computation relatively closely after (Nadathur (2017, 2019)) and we slightly simplify, correct, and adapt those suggestions for SAGs. The main ingredients we make use of for the meaning computation of SAGs are as follows:

- the scale of a usually implicit gradable expression GRD;
- an entity x ;
- a proposition Q expressed either explicitly through the embedded clause in the clausal pattern or induced via the key in the nominal pattern.

The resulting proposal we suggest for SAGs is given in (41):

- (41) Let S be a sentence containing an SAG based on a contextually available gradable expression GRD, a contextually available entity x which serves as an argument of GRD, and Q a proposition which is (as a function of the syntactic type of SAG) either (i) directly introduced by the interpretation function applied to the complement clause *sub* that is subordinated to the SAG in the clausal SAG pattern, or (ii) contextually induced by the denotation of the key k in the nominal pattern. Then, evaluated with respect to a world w :

- a. SAG (and thereby S) presupposes a degree d_{nec} that is necessary for Q :

$$\exists d_{nec} : \forall w' \in \text{ACC}(w)[\text{GRD}(x)(w') < d_{nec} \rightarrow \neg Q(w')]$$

- b. S presupposes that Q is desirable

- c. S asserts that x has/is (at least) d_{nec} of GRD in w :

$$\text{GRD}(x)(d_{nec})(w)$$

- d. In case GRD induces a dynamic (action-characterizing) eventuality within the SAG construction, SAG (and thereby S) presupposes the contextual causal sufficiency of a manifestation of d_{nec} -GRD for Q :

$$\text{INST}(\text{GRD}(x))(d_{nec}) \triangleright_c Q$$

Some comments are in order. The first two conditions in (41) are presuppositional, as is the fourth one. Condition a. introduces the existence of a necessary degree, which most accounts of ECs have in some form or another. Specifically, for all relevant possible worlds, there will be no Q if the necessary degree is not reached. Condition b. requiring desirability, is tailored for SAGs only and we will motivate it further. A third presuppositional component is introduced through the condition d, which states that dynamic eventualities induced in the SAG will presuppose that a manifestation (or instantiation) based on the gradable property is causally sufficient for Q to hold (in the actual world); cf. Nadathur (2019) for ample discussion in the context of ECs. A simplified way to think about instantiating (gradable) properties is by delimiting them

¹³If causes are relationships between eventualities, as in Copley (2018), then one can still view the nominal argument as the anchor to the result-state eventuality that is caused; e.g. of the coffee being drunk, of the car being fit into the space available, of the milk being poured etc.

from latent capacities. For instance, it is easy to imagine that a property such as speed (i.e. *fast*, when expressed through an adjective) is instantiated in a race, but it requires a lot more contextual background to instantiate ‘loud’ in the context of a race.

Let us now consider what the ingredients of (41) mean via an example. In our standard coffee-drinking example, the scale is temporal, the gradable property is temporal length, the entity supplied contextually is the time available and Q is the proposition that a cup of coffee is drunk. The latter can be introduced either directly or via the key ‘a cup of coffee’.

For (41a), the existential presupposition is that of a degree of temporal length necessary to drink a cup of coffee (d_{nec}); in all the accessible worlds from the world of evaluation w , there will be no relevant coffee drinking if the necessary degree (i.e. length of time in the specific case) is not reached. For (41b), S , e.g. (1) presupposes that having a cup of coffee is desirable. For (41c), S asserts that the time available (x) is at least as long as the time that is necessary to have a cup of coffee (d_{nec}). (41d) presupposes that a manifestation/instantiation (‘INST’) of making use of the available time causally results in drinking a cup of coffee.

The key difference is that Nadathur’s approach tailored for ECs establishes the instantiation mainly on the basis of the adjective alone (e.g. in simplified terms, in ‘Juno was fast enough to win’ an instantiation is established by Juno running fast to d_{nec} which causally leads to winning). The question then becomes whether length can be acted out in some way. This doesn’t seem so, and this makes the correct prediction for ECs, as such examples are not actuality-entailing:

- (42) The time available was long enough to have a cup of coffee - but everybody just wanted to have tea, so they did not have coffee.

Just as empirically accurate, however, seems to us the modification geared towards getting the instantiation directly from the event introduced by the key (i.e. the cup of coffee) in the case of original SAGs. For them, this makes the correct prediction of actuality entailment (and similarly the propositional variant, cf. (39 above):

- (43) #Ein Kaffee vor dem Termin ist **sich ausgegangen**, sie haben aber keinen Kaffee
a coffee before the appointment is itself outgone, they have but no coffee
getrunken.
drunk
‘There was enough time for a cup of coffee, but they didn’t have enough coffee.’ (interpretation not obtainable via SAG)

In other respects, we largely follow Nadathur (2019) and the literature on causation and implicativity which the approach builds on. For ECs, the issue how the realization of the event is, after all, cancelled in the imperfective needs classically to be addressed, as the literature reaching back to Bhatt (1999) has been doing. While the same mechanisms could be theoretically applied to SAGs, we will not go into the discussion, because the imperfective cannot attach to SAGs morphosyntactically in the first place, as demonstrated in section 2 above.

Finally, while not all of the causation data available for ECs can be transferred to SAGs, we will next show some evidence that causation is relevant on a descriptive level (also beyond the properties of the key). Consider (44):

- (44) Weil wir noch eine halbe Stunde haben, **geht sich** ein Tee **aus**.
because we still a half hour have goes itself a tea out
‘Because we still have half an hour, we can have a cup of tea.’
- (45) #Weil es so laut ist, **geht sich** ein Tee **aus**.
because it so loud is goes itself a tea out
‘Because it is so loud, we can have a cup of tea.’

Discriminating evidence from causal relation can be observed in SAGs as well. First, note that while a straightforward causal relationship as in (44) is legitimate, a non-causal one as in (45) - expectedly - is not. More importantly, however, the causal relationship needs to target precisely the same scale in SAGs. In (44)

this is the scale of the time available. Just having a(n otherwise legitimate and plausible) causal relationship will not do, if the relevant scale is not targeted, as (46) shows:

- (46) #Weil es so kalt ist, **geht sich** ein warmer Tee **aus**.
because it so cold is goes itself a warm tea out
'Because it is so cold, we can have a cup of tea.'

Cold weather may well cause somebody's drinking hot tea. But what is needed in the SAG, is a causal relation that targets exactly the same relevant scale (and not e.g. temperature), i.e. the temporal one in such examples (just as given in (44) above).

We end the subsection by showing a further empirical point regarding the relevance of the additional presupposition we introduced in (41b) above. A manifestation of the property in question cannot always be taken to be desirable in ECs. Consider exclamatives (e.g. in a context in which stopping a child from playing for too long is relevant, or in any context in which the speaker has had enough of their interlocutor's previous action). ECs are licensed:

- (47) Das ist genug!
that is enough
Intended, e.g. as : 'There has been enough of that!'

SAGs are, however, illegitimate in such contexts:

- (48) #Es **geht sich aus!**
it goes itself out
Intended, e.g. as : 'There has been enough of that!'

Presupposing a desirable goal offers a way to explain such types of clashes (and similar ones). For example, in (48), the speaker (say, the father of the child in question) cannot felicitously utter such a sentence. This follows if a presupposition as the one we suggested is incorporated. It would be infelicitous to presuppose that the event performed by the child is desirable and use the utterance to try to stop them from performing it further.

- (49) Context: A student reports on how they fared in an exam:

Ein Fünfer ist **sich ausgegangen**.
a fiver is itself out went

Intended, e.g. as: 'I was able to get a failing grade on the exam.'

- (50) Es **ging sich aus**, dass ich (ernsthaft) krank geworden bin.
it went itself out that I (seriously) sick became am
Intended, e.g. as: 'I was able to get (seriously) sick.'

As suggested by Igor Yanovich (p.c.), to further test for the desirability presupposition, we consulted with native speakers of Austrian German on 49 and 50 – both of which featuring SAGs paired with normally undesirable outcomes (one as nominal key, one in the clausal pattern). Regarding 49, speakers report that the student must have been scheming and/or strategizing to fail the exam and, in doing so, spinning an otherwise undesirable outcome for exams into a desirable outcome. Among the possible motivations for doing so was the wish to take the entire class again. When confronted with 50, speakers responded that generally becoming sick is not something desirable but it would be imaginable that there was some form of strategy along the lines of coming down with an infection amidst an epidemic and recovering from it in time before having to take a flight. When pressed about the seriousness of the sickness, speakers concluded that "there must be something going on" or it's just plain infelicitous ("makes no sense").

5 SAGs and approaching the larger picture(s) in change

What did it take for SAGs to develop? What does their development show us about patterns of change in the domains of the source (motion verbs) and result of the change (modality and sufficiency)? In this section we will present observations made during our research in order to strengthen the plot presented so far, to identify the key conditions that have favored the rise of the construction, and to offer further thoughts about its significance. The first subsection will offer the essence of a brief comparative study, which - despite, but also because of, its negative outcome - strengthens the dating suggested in section 3. Conducive factors in terms of constructions available in German that may have primed speakers in subtle ways and thus promoted the constructions will be pointed out in the second subsection. But since we think that the triggering experience must have been stronger than just the autochthonous panorama of particles and reflexives, we will go a step further and investigate the role of language contact in the third subsection. The fourth subsection considers the broader panorama of changes from motion to intensional markers.

5.1 A comparative experiment: linguistic islands

In this subsection, we use language variation to gain supporting evidence for dating purposes. We have dated the beginning of the SAG construction in the data that have become available to us to the nineteenth century (cf. section 3). The picture is complicated by the fact that we are dealing with a far-below-average modal construction in terms of its frequency. The fact that SAGs are bound to orality and may have been so at early times too, is only partially a problem (if it had not been for its low incidence in the data), as Austrian writers (as other writers at the time) were quite receptive to orality and to depicting parts of it in prose. Given the intractability of asking native speakers for periods lying more than a century back, we conducted a small comparison with relevant related varieties. What we wanted to see is whether they possess SAGs.

A relevant comparison can be drawn to the Landler variety of German. The variety constitutes a conservative linguistic island – itself situated within another conservative linguistic island. A current estimate is that approximately 200 elderly speakers speak Landler.¹⁴ It is spoken in Transylvania and the larger linguistic island by which the Landler variety has historically been encompassed is Transylvanian Saxon. This variety in turn is based on German speaking settlements dating back over eight centuries and originating mostly in Western German (Mosel river) varieties. These need not concern us much further here, but note that they do not contain SAGs (i.e. all SAG structures we tested with native speakers were not only marked but ungrammatical, regardless of context etc.). The main surrounding languages of this island are Hungarian and Romanian, both of which have no SAGs.

The Landler variety originated much more recently in historical terms compared to Transylvanian Saxon; namely (only) almost three centuries ago. It consisted of several waves of religious refugees as reverberations of the counter-reformation movement, all of them in the for us relevant 18th century and beginning in the 1730s (cf. e.g. Capesius 1990). Most of the banished refugees were originally from Upper Austria and the region around Salzburg (slightly later and in smaller numbers, also from Carinthia and Styria). While Transylvania was part of the Austro-Hungarian empire, it already had a long history of religious freedom and was remote enough from the center, both via sheer distance and geographical (mountainous) conditions for the time, for the banished families to be considered less of a threat to the Catholic court. Linguistically this ensures its isolated character, as we have no reason to assume that close contact to the Viennese center might have influenced the colloquial speech of the banished communities. While the Landler variety naturally contains loans from Transylvanian Saxon, Hungarian and Romanian, it is crucially well documented to have preserved its Austro-Bavarian features both phonologically and lexically (cf. Obernberger 1964, Capesius 1990, Bottesch 2006 and references therein.) The speakers settled in a concentrated manner around the area of Sibiu/Hermannstadt, essentially in three villages. The important part for our purposes is that Landler contains no SAGs or direct precursors of the construction, i.e. on any meaning, so that all the SAG constructions available to Austrian speakers today are ungrammatical in this variety. Lexical descriptions are rather sensitive to Austriacisms and typically note them (cf. e.g. Bottesch 2002, 2006 on the basis of several types of data collections and elicitation), but they do not contain SAGs. We have been able to

¹⁴Cf. <https://de.wikipedia.org/wiki/Landlerisch>. Bottesch (2002: 23, 25) does not give a concrete figure for the current size of the speaker community, but states that it is "very small" at present and that it historically never exceeded 6000 speakers. Capesius (1990: 65, in a reprint of an article from 1959) offers an estimate of 4500 speakers at the time.

additionally interview one speaker of the variety who decidedly failed to understand the construction and gave it ungrammatical ratings for her own speech and those speakers she was aware of (regardless of context):
15

- (51) *Ein Kaffee **geht sich aus**. (Landler variety of German.)
 a coffee goes itself out
 No interpretation available.

While we are aware that additional factors could have played a role, the simplest scenario is that the Landler variety does not have SAGs, because when it was formed, SAGs did not yet exist in the grammar of its speakers, or at the very least not in a manner that could have been robust enough to be transmitted in communities in which linguistic transmission was key to identity preservation up into recent times. While this may be indirect (negative) evidence in support of the nineteenth century dating suggested in section 3 above, we now move towards discussing some of the positive clues that might have motivated speakers to come up with the right constructional scaffolding.

5.2 Propitious ground in the landscape of German particle verbs

In order to convey the scalar meanings discussed in the previous sections, SAGs as they are attested in Austrian German require a number of prerequisites at the level of surface form, including the minimal requirement of having the verb *gehen*, ‘go’, the preverbal particle *aus*, ‘out’, and the reflexive *sich*. While this may seem a lot already, note that the verb is extremely common, it appears in many meaning-form pairings with different particles in all varieties of German, and middle constructions – which are based on reflexives – are common in all varieties of German as well. So, the puzzle is genuine – why do we not see the construction in more varieties, at earlier times etc.? For example, while Austrian German is established as a Bavarian variety, we are also not aware of it appearing in the records in autonomous fashion in Federal German Bavarian (despite the fact that some Bavarian speakers nowadays are aware of it partly at least as an Austriacism through exposure to the Bavarian variety across the border).¹⁶

Consider the examples in (52)-(54).

- (52) Doch nein, über dem Rande der höchsten Wolke zeigt sich eine lange schwarze Linie, die zu
 but no, over the rim of the highest cloud shows itself a long black line that too
 fest und unbeweglich ist, um ein Luftgebilde sein zu können, und vier scharfe Nadeln von
 firm and unmovable is in order to an air structure be to can and four sharp needle from
 sich **ausgehen** läßt.
 itself out go lets

‘But no, above the rim of the highest cloud, there was a thin black line, which appeared too firm for something to be made of air, and it had four sharp needles protruding from it.’

(1870.06.04; Wiener Zeitung, via <http://anno.onb.ac.at>)

- (53) Es kommt gewiß sehr häufig vor, daß Ehen, die nicht aus Liebe geschlossen wurden,
 it comes certainly very frequently PRT that marriages that not out love locked became
 sehr gut **ausgehen** und sich überaus glücklich gestalten.
 very well out go and themselves indeed happily form

¹⁵The closest the speaker came to an interpretation was by partially assimilating the SAG to *ausgehen* in the sense of ‘run out (of something)’ so that for a standard sentence as our primary example intended with the meaning ‘There was enough time for a cup of coffee’, she wondered whether it might have been intended to mean ‘We ran out of coffee’, but considered it unacceptable nonetheless noting that the reflexive would not fit the construction.

¹⁶While neither our corpus searches and elicitation nor, for example, the IDS grammar (Dürscheid et al., 2018) find the construction as genuinely extant in other varieties than Austrian, we did find cases of German speakers (including linguists) who were not natives of the Austrian variety, but used the construction nonetheless and with similar intuitions in the contexts tested. Further questioning of their background and double-checking with speakers of the same varieties did however show that the construction was not of their native varieties and that cases of contact – whether direct or indirect – may most likely have been the case. At the same time, this shows that the construction is relatively easy to learn for German speakers (who did not have it in the original acquisition process), as soon as they have some triggering experience and necessary contextualized positive input.

‘It surely happens quite frequently that marriages that aren’t entered into out of love have very positive endings and develop particularly happily.’
(1920.04.23; Neues Wiener Journal, via <http://anno.onb.ac.at>)

- (54) Immediate context: The characters, Marcher and Strobel, are discussing seeds and their sprouting behavior.

„Was?“ brauste Marcher auf. „Wer geht nicht auf? Ich sag’ Dir – die Rechnung **geht auf!** Du
what rushed Marcher up who goes not up I tell you the calculation goes up you
hast das Rechnen verlernt, mein Lieber!“
have the calculating forgotten my dear

“What?” Marcher erupted. ‘What is not sprouting? I’m telling you – the calculation will work out!
You’ve forgotten how to do mathematics, my dear!’
(1897.11.06; Znaimer Wochenblatt, via <http://anno.onb.ac.at>)

The examples in (52)-(54) represent samples of Austrian German around the approximate time at which SAGs arose, but they are perfectly acceptable in terms of the constructions used in any variety of German. They involve different degrees of literal meanings of ‘go + particle’ ranging from ‘going out from a particular center’ towards ‘go out’ conveying something like ‘take a particular type of ending’ (which can still be used of marriages, stories etc.), and ‘go up’ in the sense for a calculation to ‘work out’. In particular the latter type of example could, for instance, be a good candidate for featuring as a close relative of SAGs, as there is a sense of a match between two states of affairs (the way a calculation should be conducted and the way it is - viz. if the two fit one another, then the calculation is properly conducted).

The example in (55) is another interesting candidate for a relative of SAGs.

- (55) Context: A manual on how to measure fields (agriculture).

Wie man das Feld **ausgehen** und messen / auch zu Triangel oder vierung machen sol /
how one the field out go and measure also to triangle or square make should
werden die blinden Linn / durch das Feld dich allenthalben in nachstehender Demonstration
become the blind lines(?) through the field you everywhere in following demonstration
oder Figur sechs Triangelfelder berichten / ...
or figure six triangle fields report

‘How to walk the length of and, thereby, measure a field, how to split it into triangles and rectangles, will show you the ‘blind lines(?)’ through the field in the following demonstration or in figure six ‘triangle fields’ ’

(1591; Vom Feldmessen nach der Geometrie, via <https://books.google.com/>)

(55) features the meaning of ‘going out’ in the sense of ‘measuring out’ a field (cf. the co-occurring *messen*, ‘measure’). This meaning has been standardly available in High German and is attested in the Grimm Brothers’ classical dictionary of the language. All it would take from here is a middle construction realized through a reflexive, which is attested with many verbs in German. While we think this scenario is theoretically attractive, it has two major drawbacks. The first one is shared with the constructions we introduced above in (52)-(54) and it consists in the fact that all these constructions have existed in standard non-Austrian varieties of German as well. The second disadvantage has to do with the following fact. If the construction was the origin of SAGs, then following all standard accounts of language change, we would expect it to appear particularly frequently in the variety in which the putative descendant (i.e. SAG) is later attested, i.e. at the time preceding the rise of SAG constructions. To verify this, we have conducted multiple collocational searches in the Austrian corpus ANNO (including other objects that according to the Grimm dictionary could co-occur with *ausgehen* on this meaning), but we found virtually no bona-fide hits in labor-intensive searches. In fact, unlike with the other constructions discussed, as the careful reader will have noted, (55) does not stem from the Austrian German ANNO source (but rather from a book published in Leipzig). We then see a mismatch in terms of the evidence available to us and the possibility of having

the close meaning of measuring out an object as a likely scenario. Our interim summary therefore looks as follows: while apparently related constructions may have offered propitious ground towards accommodating SAGs in Austrian German, none of them has both the necessary meaning components and the power of the attested evidence to be classified as ‘the’ legitimate predecessor.

Before moving on to a relevant contact situation available in Austrian German in the next subsection, we will end this section with a slightly more associative view, but which we hope may help the reader to grasp some of the main developments and key meanings available in the route to SAGs. Consider figure 5).

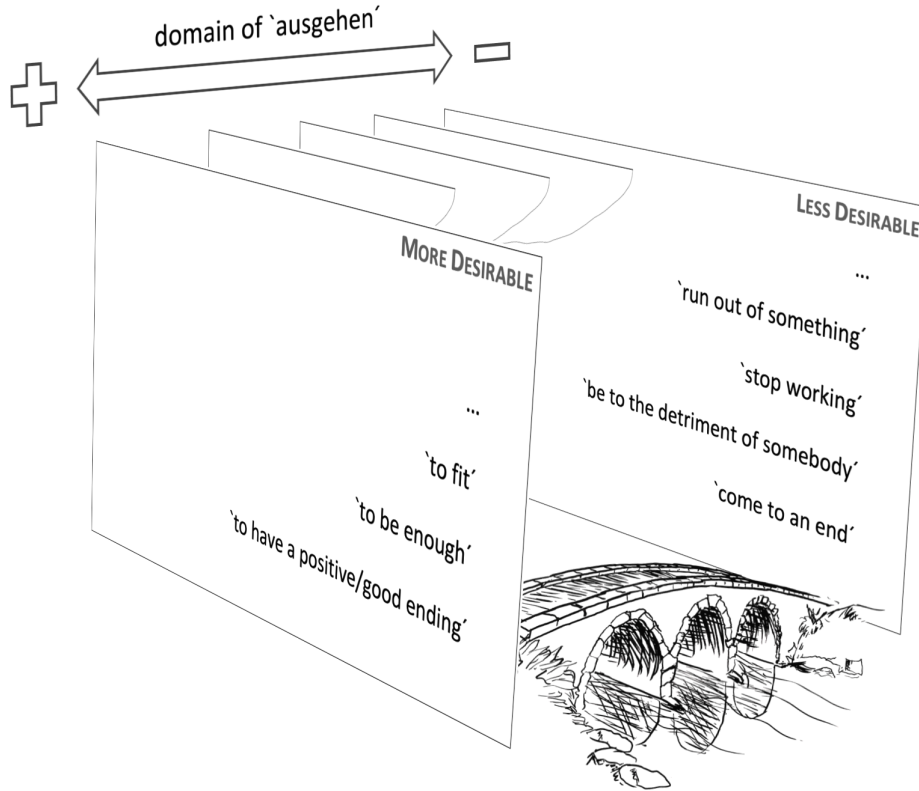


Figure 5: Conceptualization diachronic change, domain of *aus+gehen*

One intuitive feature that sets apart genuine SAGs from many other constructions based on *ausgehen*, ‘go out’ such as ‘run out of something’, ‘be finished’, etc. is its positive, more specifically: desirable - character; we incorporated this in section 4 as a presupposition. As a usage-based tendency, certain predicates we observe in the data appear to be associated more easily with contextually desirable outcomes than others. Some of the major players among these predicates are schematically given in figure 5. There are, of course, more apparently (un)desirable particle constructions, however. And there are connections between the two domains. For instance, having an ending might appear as negative, but having a positive ending (*gut ausgehen*) is highly idiomatic and clearly positive. In fact, the frequency of *gut ausgehen*, ‘go out well’ rises in the period during which SAGs develop, as figure 6 shows.

So a possibility is that such bridges towards positive completions, have brought a desirable character into the picture.¹⁷ Similar facts can be observed with the cognate particle *out* in English - cf. *work out*, *pan out*, *play out* etc, where the result state is usually contextualized as desirable.

¹⁷Given the initial character of our description, we remain agnostic about the status of such bridges in theoretical terms, but there are some options that can be explored; cf. e.g. Evans and Wilkins (2000), Beck and Gergel (2015) and further references there.

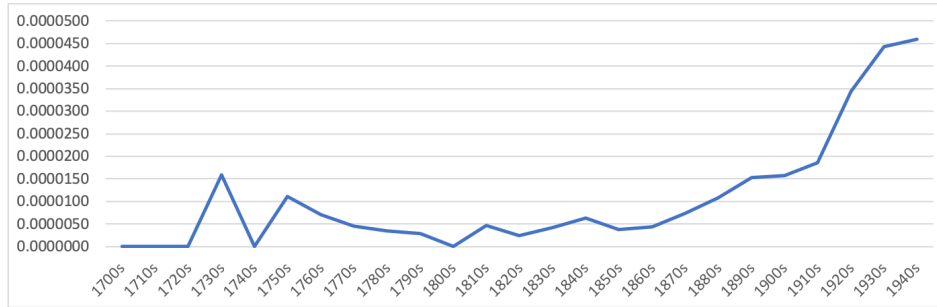


Figure 6: frequencies: *gut ausgehen* (%); detailed numbers in table 8 (p. 41)

5.3 Contact

We now turn to a different perspective on language change, i.e. we move from internal towards external factors and specifically the issue of language contact. A quick socio-historical background reminder is that the Austro-Hungarian empire (the relevant entity when SAGs first appeared) was a multi-national state. Austrian German up to this day contains a large heritage in its lexicon (but partially also beyond; cf. e.g. Hofmannová 2007 and references) of several languages earlier spoken within the same cultural area. While we could not find a relevant construction in Hungarian, we will sketch the role of Slavic and in particular Czech in the potential rise of SAGs.

In doing so, we essentially follow a hint from Glettl (1985), a rather comprehensive study to illustrate the role played by the large Czech-speaking community in particular in 19th century Viennese society from a historical point of view. The study yields a large background in cultural and sociolinguistic terms and it also addresses some putative direct linguistic influences from Czech. Glettl (1985: 105) in fact claims that SAGs are a loan construction from Czech in the negative past tense. Unfortunately, while Glettl offers examples and citations of attested examples to substantiate many of her claims in other borrowing contexts, she mentions the relevant lexical items, but does not offer either sources or any full Czech (or Austrian) SAG sentence (much less context) to substantiate her interesting claim. We want to point out, however, that the possibility of having an implicative possibility construction based on a verb of movement imported as a calque to some extent from Slavic seems to us very likely in the given sociolinguistic context. German and Slavic varieties certainly had a history of contact in many other contexts, too, but as Glettl points out, it is crucial that many expressions from Czech make it to fashionable and well-respectable Viennese items in all registers. Newerkla (2013: 2) claims a particularly intensive contact situation starting in the last third of the nineteenth century, noting, for instance, that 25,186 citizens were registered in Vienna in 1880 with a Czech/Slowak/Bohemian linguistic background. While Newerkla’s views on language contact are refined, here, too, when it comes to SAGs: we couldn’t find any systematic discussion of actual attestations.¹⁸

While we think that an analysis (and even description) of related Slavic constructions might deserve a (large) study in its own right, we will simply point out some of the main coordinates when it comes to the parts relevant for SAGs.

First, notice that verbs based on ‘go out’ in Slavic have developed a modalizing semantics also beyond Czech, as the following Russian examples (Igor Yanovich, p.c.) illustrate:

(56) Požaluj, u menja vyjdet vypitj čašečku kofe.
 I.guess at me go.out.PERF.FUT.3SG to.drink cup.DIMINUTIVE coffee
 ‘I guess it will be possible for me to drink a cup of coffee.’

(57) Ja sprošu u sosedu, vyjdet li postavitj moju mašinu na ego
 I ask.PERF.FUT.1SG from neighbor go.out.PERF.FUT.3SG Q to.put my car onto his
 parkovočnoe mesto.
 parking place.

¹⁸Newerkla’s translation of SAG with the Federal German *es klappt nicht*, ‘it doesn’t work (out)’ is also too imprecise for an SAG, which was not at the center of that study.

‘I’ll ask the neighbor if it is possible to park my car at his parking space.’

While the examples mimic the SAG examples from Austrian German, interestingly, as Igor Yanovich points out, they do not require a notion of a scale. Furthermore, the example about the possibility of growing olive trees – which, recall, is not felicitous in Austrian German – is also not acceptable in Russian as the two possibilities illustrate.

(58) *Olivkovye derevja vyxodjat zdesj (rasti).
olive trees go.out.IMP.PRES.3PL here (to.grow)
Intended: ‘Olive trees can grow here.’

(59) #U olivkovyx derevjev vyxodit zdesj *(rasti).
at olive trees go.out.IMP.PRES.3PL here to.grow
‘Olive trees manage to grow here.’

We follow Igor Yanovich (p.c.) once more and assume that the reason for the different status of this example is not identical to the reason we suggested for the infelicity in the Austrian German counterpart (lack of an obvious scale). Rather, this seems to be related to the agreement pattern available in Russian (in the first version, the nominative argument of the modal *vyvoditj* is the infinitive clause, while the second version is strange pragmatically, because it more or less anthropomorphizes the trees). We conclude that the Russian construction has slightly distinct properties and leave it to future research to consider the points of micro-variation in such modalizing constructions in Slavic.

We finally turn to considering Czech, following Glettler’s hint. Czech has indeed several related modal constructions. Mojmír Dočekal (p.c.) points out that one construction consists of the subjunctive of the motion verb ‘go’. While this is a very interesting alley in its own right, we will not focus on it here because the subjunctive free morpheme *by* essentially comes down to ‘would’ in English. Therefore, so does the modalization itself (as expected). What we wanted to know is, however, how constructions based on the past negative motion verb *nevyšlo*, i.e. as pointed out by Glettler (1985) (and reverberated, unfortunately also without examples, by Hofmannová 2007 and others) behaved. Mojmír Dočekal (p.c.) points out the following paradigm of the relevant examples in this case:

(60) Nevyšlo mi vypít si šálek kávy.
it-didn’t-work-out me to.drink SE.dat cup coffee.gen
‘It did not work out for me to drink a cup of coffee.’

(61) Nevyšlo mi zaparkovat tu auto.
it-didn’t-work-out me park here car
‘It did not work out for me to have the car parked on my neighbor’s spot.’

(62) Nevyšlo mi vysadit tu olivy.
it-didn’t-work-out me plant.pef here olives
‘It did not work out for me to have olive trees growing here.’

Notice that translations can be problematic and obscuring here too. While *nevyšlo* has been translated by the negative past of ‘work out’, *vyšlo* could be translated by ‘went out’, i.e. we are indeed dealing with the relevant motion verb. A further relevant point for our purposes, however (in this case, one of divergence), is that all the examples are felicitous in the first place, i.e. in particular also the example (62). However, an example like (62) is not felicitous for the Modern Austrian counterpart, i.e. SAG, as we have shown. The construction then has some strong similarities with the Austrian SAG, but it is not identical. The latter point does not rule out identity at an earlier historical time, of course. On the contrary, given that the pre-SAG constructions allowed more general compatibility and fitness readings, it is quite likely that they may have been influenced by contact.¹⁹

¹⁹Clearly, a historical investigation of 19th century Czech is necessary in future research to ascertain whether Czech has not moved away from an earlier semantics of earlier constructions.

5.4 SAGs in the larger panorama of ‘go’ constructions

In this subsection, we point out the significance of two points from our findings in the landscape of grammaticalizing ‘go’ constructions, viz. emerging presuppositions and the role of the compatibility reading of early (pre-)SAGs found in the investigation. We show that this pattern is in fact more general than what we believe has been observed so far. We thus hope to open the door not only to further detailed investigations of SAGs themselves but also more generally to a side of ‘go’ constructions that has received less attention thus far.

The grammaticalization literature has noted the patterns of change (cf. e.g. Bybee et al. 1994: 240, Narrog 2012: 83) schematically represented in figure 7. Rubinstein and Tzuberi (2018: 2) refine the picture by suggesting that, based on a case-study conducted on Hebrew, it is also possible to get a vertical developmental path in figure 7, directly from movement to desires as well.

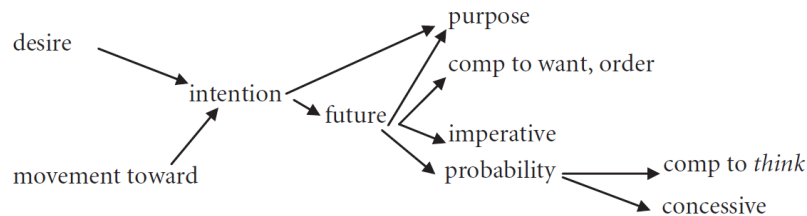


Figure 7: Paths of Motion Verbs (Originally after Bybee et al. 1994: 240, reproduced in Narrog 2012: 83 and Rubinstein and Tzuberi 2018: 2)

Our plot is not directly comparable in its details to these paths, but we point out the following two observations in connection with ‘go’ (for space reasons, we will not go into a comparison, but refer interested readers to the works cited). First, desirability may be introduced as a presupposition and not only as the at-issue-meaning, as it is clearly not the asserted meaning in SAGs. We underline the point as we are not aware of many studies on emerging presuppositions and believe this deserves more attention in future research (cf. Schwenter and Waltereit 2010, Beck and Gergel 2015, Gergel et al. 2017).

The second and broader point is the following. In addition to making excellent futurate markers (not only in English, as pointed out and analyzed e.g. by Eckardt 2006), but of course in a broad range of languages as known from the typological literature (cf. e.g. Ultan 1978, Giger 2008, among many others), ‘go’ constructions can also give rise to compatibility and sufficiency constructions. This is also interesting from the perspective that the emphasis on previous grammaticalization research has been from ‘go’ or movement to necessity operators (Bourdin, 2014). The noted development in the grammaticalization literature would nicely incorporate futurates (as these are usually viewed as necessity operators; cf. e.g. (Copley, 2009)) and certainly also to sufficiency constructions from a general perspective. However, it appears too simplistic to state that sufficiency *just* corresponds to a universal operator in the process of semantic change and that this should be the same type of development (i.e. of a motion verb towards a universal). Recall that the pre-SAG meanings seem more like possibility than necessity meanings.

Thus the completive particle ‘out’ discussed earlier is not the only source that might have primed speakers towards easily accepting and using a construction, originally with a sense of compatibility, as the diachronic evidence from section 3 indicates. The verb *gehen*, ‘go’, itself also has a clear potential towards developing markers of compatibility, success, suitability etc. Constructions as the following are common in varieties of German.

- (63) Student: Ist es möglich die Hausarbeit einen Tag früher abzugeben? – Lehrer: Ja, das geht.
 student is it possible the homework one day sooner to submit teacher yes that goes
 ‘Student: ‘Is it possible to submit homework a day early? – Teacher: ‘Yes, that’s possible.’ ’
- (64) Context: Commercial for Maultaschen (=traditional filled pasta squares in Swabia, South-Western Germany):
 Maultaschen gehen immer!
 Maultaschen go always

‘Maultaschen are always an option./We can always have Maultaschen.’

The case of French also shows this, where *Ça va* can mean, among many other things, ‘This works out’, ‘This is fine’, ‘I agree’.²⁰ Interestingly, one available meaning is of sufficiency, used in a type of example that is disallowed in SAGs.

(65) Context: Vendor addressing customer buying cherries to ask whether the quantity packaged suffices:

Ça va?
this goes

‘Will that do?’/‘Is that enough?’

Having established empirically the relevance of compatibility readings in the contexts of ‘go’ constructions both in our specific SAG plot diachronically, but also more generally, two more detailed questions are imminent. First, why is it so easy for compatibility and sufficiency in some cases to be conflated? Part of the answer has to do with the fact that the sufficiency reading entails the compatibility reading in numerous contexts. If there is enough time to have a cup of coffee, then it is possible to have a cup of coffee. In this case, also the reversed entailment obtains. Furthermore, if the specific contexts in which the two readings are roughly co-extensive are numerous, then it is possible for the construction that was recruited (i.e. relevantly: SAG) to take over the sufficiency reading. Why then – and this is the second question – does this kind of specialization via grammaticalization only happen in some cases (notably SAGs), but not others (say, *gehen* by itself or the French verb *aller*)? Part of the answer, we believe, may lie in the easy ability of the construction to be recognized as a form-meaning correspondency of its own (recall its quirks of involving a reflexive, a particle, in propositional contexts an expletive etc.). Other expressions in Austrian German in the nineteenth century that could signal compatibility in discourse situations are *passt*, ‘fits’ and *das geht*, ‘this goes’ (also in conjunction with further discourse particles such as *schon*, unfortunately untranslatable, but cf. Zimmermann (2018) for an analysis). In fact, both of them were on the rise, as figures 8 and 9 indicate.²¹

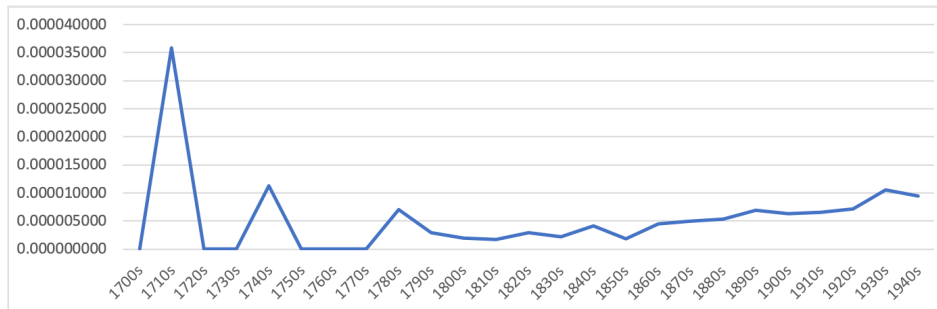


Figure 8: frequencies: *passt!* (%); detailed numbers in table 6(p. 41)

There was, then, no possible pressure for SAGs to maintain the more general function of compatibility/suitability, as the two alternatives (among others) were popular and increasingly so.

To summarize, in the course of this paper we have offered a description of Austrian SAGs, the core of which we have suggested to analyze in line with *enough* constructions. We have provided initial diachronic attestations, as well, but had to come to a slightly unusual conclusion. Given that the language-internal ingredients have been widely available in all varieties of German (without ever giving rise to the construction), together with the relative singularity of the construction in Austrian German, we adopted a contact-based approach, following a hint of Glettl (1985) and others who mention the construction in passing. It has to be emphasized that the sociolinguistic situation was propitious for Czech constructions to be imported to

²⁰Cf. <https://de.pons.com>. The dictionary we have used did not have contexts, but we describe one below provided by a native speaker.

²¹The apparent two early maxima in 8 are due to the fact that there is less data in these periods and one hit can already produce a high; cf. the figures in table 6

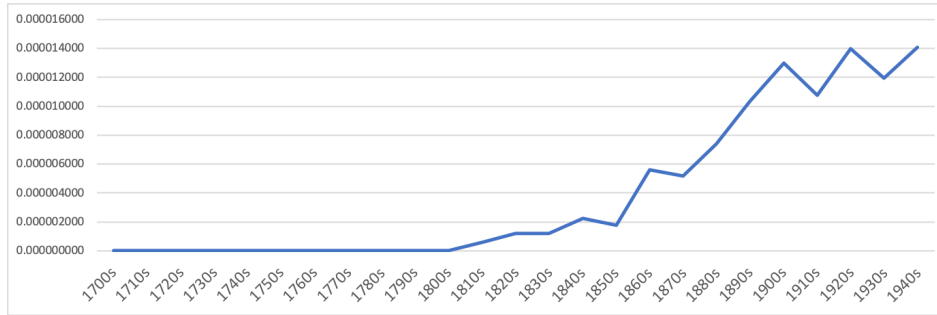


Figure 9: frequencies: *ja das geht schon* (%); detailed numbers in table 6 (p. 41)

Austrian (and in particular Viennese) German in the 19th century and this would match the late attestations we have found (keeping in mind the possible delay in the attestations due to the discussed oral character of the construction). At the same time, what we called the core of SAGs (i.e. their sufficiency semantics) is not visible (to us) in their Czech counterparts as such. Several possibilities become theoretically available (imperfect transfer in contact, changes in either language since the borrowing event etc.). But given that a conspicuous meaning in the pre-SAGs we found is one of appropriateness or compatibility, it is possible that such a meaning was first borrowed. Our hope is that the window is open widely enough for further diachronic research to contribute to the landscape of modalizing ‘go’ constructions.

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6 Appendix A

6.1 ANNO-Corpus - general description

The ANNO-corpus (AustriaN Newspapers Online) is a historical newspaper corpus published and continuously expanded by the Austrian National Library. According to the ANNO-website, the corpus covers the periods 1689-1948. We focused on the material which was available as txt-files, i.e. starting after 1700. For the last phase of corpus study on ANNO, there were 1288 titles available (including double listings for rebrandings/-launches of newspapers etc.). There was a total of about 1.312 million newspaper issues online, resulting in a word count of about 21.6 billion word forms. While the ANNO corpus is quite extensive, it is also diachronically imbalanced. Table 1 (p. 34) shows the word counts per decade across the entire corpus (as far as available in txt format). The median year lies between 1900 and 1910.

6.2 Web-based search in ANNO

In an initial effort to skim for SAGs in the ANNO corpus, we were left to rely on the rather weak web-based search tools the ANNO website comes with. There is no additional annotation layer that could be used for a more refined search. Any search would ignore sentential boundaries and a search for <geht sich aus> would include any text that contains *geht*, *sich*, and *aus*.

Due to the search tools available for the ANNO corpus, every list of search hits has to be manually reviewed. Occurrences of SAG had to be detected in a pool of other non-relevant uses of *sich*, *aus*, *ausgehen*, and *gehen*, see e.g. (66) and (67).

(66) Man kann davon ausgehen, dass sich eine Lösung finden wird.
one can thereof out go that itself a solution find will
'One can assume that a solution will be found.'

(67) Der Prinz kleidet sich gut und geht aus.
the prince dresses himself well and goes out
'The prince dresses well and goes out.'

Via the website, two major strategies were pursued in finding SAGs in the ANNO Corpus. The first strategy was an initial, 'targeted' search for <"geht sich aus"> (with phrase search tool " ") which returned 31 search hits, three of which were SAGs. Consecutive searches also returned amounts of hits that could be sorted out manually with relative ease. Based on <"ging sich aus">, <"ging sich nicht aus">, <"ist sich nicht ausgegangen">, <"wird sich ausgehen">, and <"gingen sich aus"> another 7 SAGs were found. In total, we ended up with 10 SAGs with suchlike targeted searches.

The second strategy was a wider search. A distance parameter was added to four search terms ('~4', i.e. distance of four words to one another and in arbitrary succession). For each of these four diachronically ordered searches, we manually went through the first 1,000 hits, i.e. 4,000 in total, to identify SAGs. The search hits that were reviewed manually did not contain any SAGs but only other, non-relevant uses of the above mentioned building blocks, i.e. 'non-SAGs'. See details on the corpus search below, in table 2.

6.3 Offline searches in ANNO corpus

6.3.1 General strategy

As an in-depth search of the corpus we applied the following strategy. We downloaded the txt-files in the ANNO-corpus (download function is available for all corpus texts in txt-format as well as pdf-format). We then ran a number of Python scripts skimming for SAGs based on regular expressions (regexes). Those scripts returned high volumes of hits – predominantly false hits – which we manually skimmed for positive hits.

Decades	Word Counts	Distribution of WC
1700s	1,865,867	0.01%
1710s	2,791,047	0.01%
1720s	7,223,737	0.03%
1730s	6,305,430	0.03%
1740s	8,920,609	0.04%
1750s	8,982,331	0.04%
1760s	14,136,356	0.07%
1770s	22,180,291	0.10%
1780s	28,348,021	0.13%
1790s	34,608,695	0.16%
1800s	51,660,187	0.24%
1810s	172,405,798	0.80%
1820s	337,263,987	1.56%
1830s	421,339,181	1.95%
1840s	584,887,865	2.71%
1850s	727,977,441	3.37%
1860s	1,214,946,200	5.63%
1870s	1,600,560,967	7.42%
1880s	1,659,183,278	7.69%
1890s	2,449,875,093	11.36%
1900s	3,613,865,197	16.75%
1910s	3,450,706,844	16.00%
1920s	2,440,446,483	11.31%
1930s	2,164,897,810	10.04%
1940s	547,590,076	2.54%
Total	21,572,968,791	100%

Table 1: ANNO, diachronic structure; by Jan. 20, 2019

search term	hits	manual checks	last date covered by man. check
“geht sich aus”~4	8,509	1,000	March 1st, 1871
“sich ausgehen”~4	7,688	1,000	April 15th, 1868
“sich ausgeht”~4	3,863	1,000	March 22nd, 1884
“sich ausgegangen”~4	6,647	1,000	March 1st, 1870

Table 2: Searches and search hits in ANNO corpus; numbers of hits from Feb. 5th, 2018

6.3.2 Handling of OCR errors

Since the ANNO-corpus files are based on digitized newspapers, there is a high density of optical character recognition (OCR) errors. One of first steps for our search was creating a list of common OCR errors for *sich*, *aus*, forms of *gehen* – the building blocks of SAG – and *nicht* (Ger. ‘not’). This was done by human visual detection of those items in the scanned pdf-files of the papers and looking up their OCR-correspondences in the parallel txt-files. The list of OCR-correspondences informed some of the regular expressions searches on the entire corpus (cf. below). This tracking of OCR errors was not done for the web-based searches of ANNO as described above.

6.3.3 Regular Expressions

The following is a break-down of how we proceeded in making sure we catch as many SAGs as possible and at the same time limit the number of false hits. As mentioned before, our search for SAGs included *sich*, *aus*, and forms of *gehen* (and all their plausible dialectal spelling variants). Additionally we included negation (*nicht*, *nie*, *nimmer*, etc.). We will focus on the most recent and most effective mode of searching, the most important details in the regexes below are the following. We relied on periods, exclamation points, question marks, colons, and semicolons as sentence/clausal boundaries. We excluded comma-symbols appearing across the S, A, G, (and N) members of SAG in order to ensure that (in the list of hits) all three items occur in the same clause and, thus, increase the probability to exclude false hits. As a consequence, potential positive hits with embedded clauses or enumerations occurring between SAGs (which are grammatical in present day Austrian German – and marked with commas) were excluded. The only characters allowed between the building blocks of SAGs are captured in (69). We allowed a maximum of 50 characters between each respective building block.

For ease of handling regexes based on the three items making up SAGs (four counting negation), we had a multiple-level strategy for compiling our regexes. The following are our four items formulated as regexes (in Python) accounting for spelling variants – all stored as variables (S, A, G, N) to be used in another regex:

```
(68) s = '(?<= )(sich|si)(?= )'
      a1 = '((?<= )aus )'
      a2 = '((?<= )aus(?=g))'
      a3 = '((?<= )aus(?=\'))'
      a = '('+a1+'|'+a2+'|'+a3+')'
      g1 = '(?<= )(gegangen|\'gangen|ginge?st|ginge?n?|geht|gehst|gehe|
      gehen|geh|gehn|geh\'n)(?= )'
      G = '(?<= )(Gegangen|\'Gangen|Ginge?st|Ginge?n?|Geht|Gehst|Gehe|
      Gehen|Geh|Gehn|Geh\'n)(?= )'
      g2 = '(?<=s)(gegangen|\'gangen|ginge?st|ginge?n?|geht|gehst|gehe|
      gehen|geh|gehn|geh\'n)(?= )'
      g = '('+g1+'|'+g2+')'
      n = '(?<= )(ned|nid|net|nit|nic?ht|nie|nimmer)(?= )'

(69) tc = '[\w\s\"\'`']

(70) snag1= '((?<=\.)[^\.]*?'+s+tc+'{0,50}'+n+tc+'{0,50}'+a1+g1+'.*?(?=\.))'
      snag2= '((?<=\.)[^\.]*?'+s+tc+'{0,50}'+n+tc+'{0,50}'+a2+g2+'.*?(?=\.))'
      snag3= '((?<=\.)[^\.]*?'+s+tc+'{0,50}'+n+tc+'{0,50}'+a3+g2+'.*?(?=\.))'
      sag1 = '((?<=\.)[^\.]*?'+s+tc+'{0,50}'+a1+g1+'.*?(?=\.))'
      sag2 = '((?<=\.)[^\.]*?'+s+tc+'{0,50}'+a2+g2+'.*?(?=\.))'
      sag3 = '((?<=\.)[^\.]*?'+s+tc+'{0,50}'+a3+g2+'.*?(?=\.))'
      gsna = '((?<=\.)[^\.]*?'+g+tc+'{0,50}'+s+tc+'{0,50}'+n+tc+'{0,50}'+a+
      '.*?(?=\.))'
      Gsna = '((?<=\.)[^\.]*?'+G+tc+'{0,50}'+s+tc+'{0,50}'+n+tc+'{0,50}'+a+
      '.*?(?=))'
      gsa = '((?<=\.)[^\.]*?'+g+tc+'{0,50}'+s+tc+'{0,50}'+a+'.*?(?=\.))'
      Gsa = '((?<=\.)[^\.]*?'+G+tc+'{0,50}'+s+tc+'{0,50}'+a+'.*?(?=\.))'
```

(71) `regex = '('+snag1+'|'+snag2+'|'+snag3+'|'+sag1+'|'+sag2+'|'+sag3+'|'+gsna+'|'+Gsna+'|'+gsa+'|'+Gsa+')`

With the above regex (68-71), we received a list of 3348 hits. We have so far manually reviewed 2042 hits, which yielded 119 hits of (pre-)SAGs. This number can be reasonably projected to the full length of 3348 since – during the run of the regex-script – the filenames were chosen at random and the 2042 hits were checked top-down. The resulting projection on the above assumptions would bring us to 195 SAGs.

In addition to the above strategy, we did targeted searches accounting for OCR-errors. The following should serve as examples (in the form of regexes) as to what potential errors we tried to account for:

(72) variants of *sich*:
`S = '([sc]?[sffi1\[]i[ceä][hky1z]|[sffi][it]\.\.)|7\1\|[WskFe\.]'`

(73) variants of *aus*:
`A = '(a[un][sße]?|muß|gtY|auf\?)'`

(74) variants and forms of *gehen*:
`G = '((([gGq]h?e-?[hbdfk][e\']?[cntk]|[Gg]hen|[Gg]enn|gehtauf|ge-fet|[gGqQ]ie?n[gq]e?n?)|(((en)?[gq]e)?[gq]a(n1,2)[gq](e?n)?|[gq]e[gq]a<-))'`

(75) variants of *nicht*:
`N = '(ni[cea][ichb]t|n[ie][dt]|nitt|nfchc|me|mcc)'`

The regex variables from (72)-(75) were plugged into larger regexes (similar to the procedure for 68-71). We ran multiple scripts, and variations regarding the degree of accounting for OCR-errors, distances and excluding potential noise, e.g. the German preposition *auf* (albeit being a probably candidate for OCR errors based on the ‘descending s’). With these additional probing strategies, we were able to increase the number of unambiguously identified (pre-)SAGs to .

Table 4 shows the geographic distribution of the papers in the ANNO corpus whose main place of publication is within present day Austria.

7 Appendix B - The sufficiency modal construction

Consider (76) below analyzed in von Fintel and Iatridou (2007):

(76) To get good cheese, you only have to go to the North End!

As von Fintel and Iatridou (2007: 446) put it: the sentence “seems to say that going to the North End is enough or sufficient to get good cheese, so we will call the construction in [(76)] the sufficiency modal construction (SMC).”

We may observe that, compared to classical ECs (i.e. those based on words such as *enough* in English, *genug* in German, or *assez* in French), there is a feature that SMCs and SAGs may share, in counterdistinction from ECs. The latter have an acknowledged intensional dual in the *too* constructions in English (and similarly in other languages). E.g. if *Sally is too young to drive*, then Sally is, equivalently, not old enough to drive. According to von Fintel and Iatridou, only the universal is a licit modal in SMCs. We observe that SAGs indeed do not have a precise dual.

There are, however, some important differences, which set apart the SMC and SAGs (so that the two analyses must also be distinct). First, as von Fintel and Iatridou point out, the SMC is cross-linguistically stable, with variation ranging largely alongside two types of patterns (for the details of which we refer the reader interested in SMCs to the original paper for space reasons). For all we have been able to identify so far (cf. our elaborations in the previous three sections, but also within the subsequent section 5 for further details of comparisons with other constructions), SAG is not in any way a universalist tendency, even within German varieties, although certain relatives and possible precursor constructions can be identified.

Second, the SMC involves an *only* operator, which can be overt or covert, depending on the language. English (and similarly German) has the overt version (cf. (76)); while for instance French has a covert version and a different way of encoding the construction). This becomes crucial in the analysis of SMCs which is developed in terms of scopal properties of the operator. SAGs, however, do not require such an operator in either fashion. Therefore, we take it to be analytic parsimony that a first description should not appeal to it in this case (as convincing the case for *only* in SMCs appears to be).

A third point on which SMCs and SAGs part ways (not investigated in von von Fintel and Iatridou’s contribution), has to do with actuality entailments. We note here that SMCs do not show implicative behavior with respect to their complement:

(77) (To get good cheese,) you only had to go to the North End, but you took the wrong bus (and miserably failed)!

Sentences such as (77) show retraction of the implication and hence do not display the relevant actualistic behavior. This is in contrast with SAGs (cf. main text).²²

8 Appendix C - Acceptability ratings and readings obtained

We designed a questionnaire to be completed on Google forms. Austrian German speaker subjects were recruited via social media platforms. The questionnaire consisted of 10 sentences, cf. Table 5. For each of the sentences presented, the subjects were asked to (i) rate acceptability on a scale ranging from 0 (“not good”/“sounds wrong”) to 10 (“good”/“sounds right”) and (ii) provide a paraphrase as to their reading/interpretation of the sentence. The experiment yielded 84x10 responses, i.e. the judgments of 84 speakers. We invite the reader to consult Table 5 next. We then begin with a discussion of some of the results.

A first point is that sentence number 1 obtained the overall highest rating at 9.14. No other reading than the temporal one was detected in the paraphrases offered for this sentence. Of course, the noun *Termin*

²²In German, there is an additional factor that the most specific form of the overt modal has to be taken in such cases; the effect, then, is even clearer, as the subjunctive indicates precisely the lack of actuality:

- (i) Du hättest nur dahin gehen müssen/brauchen – du hast es aber nicht geschafft!
you had.SUBJ only there go must/need you have it but not made
‘You only would have had to go there, but you failed.’

As the point of this paper is not an investigation of the German modal system, we will not go deeper into the facts surrounding them here (cf. Gergel 2017 for a comparison of German modals with the closely related Old English ones from this perspective).

decade	SAG freq.	(N)	pre-SAG freq.	(N)
1840s	0.00000000	(0)	0.00000000	(0)
1850s	0.00000000	(0)	0.00000014	(1)
1860s	0.00000000	(0)	0.00000008	(1)
1870s	0.00000000	(0)	0.00000006	(1)
1880s	0.00000024	(4)	0.00000036	(6)
1890s	0.00000004	(1)	0.00000029	(7)
1900s	0.00000003	(1)	0.00000006	(2)
1910s	0.00000006	(2)	0.00000020	(7)
1920s	0.00000033	(8)	0.00000037	(9)
1930s	0.00000032	(7)	0.00000042	(9)
1940s	0.00000073	(4)	0.00000091	(5)

Table 3: SAG; freq. & no. of hits

no	region	WC	proportion
1	AT-Wien	11 930 939 298	55,31%
2	AT-Upper Austria	1 256 731 208	5,83%
3	AT-Styria	1 137 751 147	5,27%
4	AT-Salzburg	884 963 729	4,10%
5	AT-Tyrol	681 410 818	3,16%
6	AT-Vorarlberg	591 085 242	2,74%
7	AT-Carinthia	368 046 794	1,71%
8	AT-Lower Austria	226 491 535	1,05%
9	AT-Burgenland	6 454 043	0,03%

Table 4: ANNO, geographic structure, by main place of publication; by Jan. 20, 2019

Ger. Sentence & Engl. Translation	mean rating
(1.) Eine Tasse Kaffee geht sich vor dem Termin noch aus. 'We can have one cup of coffee before the appointment.'	9.14
(2.) Es geht sich aus, dass in meinem Garten Olivenbäume wachsen. 'I can grow olive trees in my yard.'	3.96
(3.) Es geht sich aus, dass Peter hier parkt. 'Peter can park here.'	6.85
(4.) Ich werde den Nachbarn fragen, ob es sich ausgeht, dass ich mein Auto heute bei ihm parke. 'I will ask the neighbor if I can park my car in his drive way today.'	5.14
(5.) Der Gipfel geht sich in einer Stunde aus. 'The summit can be reached in one hour.'	7.31
(6.) Vielleicht geht es sich aus, dass ich die Stelle bekomme, für die ich mich beworben habe. 'Maybe I will get the position I have applied for.'	5.27
(7.) 1 Liter Wasser geht sich in einem 1/4-Liter Glas nicht aus. '1 liter of water doesn't fit into a 1/4-liter glas.'	7.60
(8.) Wenn es sich ausgeht, machen wir ein Feuerwerk bei der Eröffnungsfeier. 'We might have fireworks for the opening ceremony.'	8.24
(9.) Wir haben ein Urlaubsbudget von 500 Euro. Geht sich da eine dritte Woche aus? 'Our budget for the vacation is 500 Euro. Can we stay for a third week?'	8.89
(10.) Geht es sich aus, dass ich meine Sachen bei dir lasse, bis ich mit meinem Termin fertig bin? 'Can I leave my stuff with you until I'm done with my appointment.'	5.42

Table 5: Sentences and acceptability ratings

(‘appointment’) in the sentence makes a temporal scale highly salient. The second highest overall rating at 8.89 was received by another sentence which made a scale explicitly salient, viz. sentence number 9 with a monetary scale regarding the budget available for holidays.

Conversely, the lowest average rating was received by the second sentence ("Es geht sich aus, dass in meinem Garten Olivenbäume wachsen.") with a score of 3.96 out of 10 maximal points. The sentence is then clearly odd. We suspect the major reason is that it does not make any type of scale salient (even if circumstances such as climate, soil etc. could easily come to mind). Interestingly enough, however, when responding to the second task (i.e. of assigning a meaning to the sentence), the majority of speakers seemed to interpret a degree-based reading into the sentence nonetheless. Thus, the most frequent reading reported by subjects was a spatial reading (‘enough space in the yard’) with 57 such responses, out of which 38 were exclusively spatial. A possible interpretation, then, is that – on average – the sentence produces a clash between what would be expected for a SAG and what is directly provided by the extension of the predicate and its arguments. Having recognized this, the preferred interpretation is still one in which a scale would be interpreted in the context.

We are aware that the elicitation task can be improved in many respects. In fact, in the course of a historical study, we did not originally even plan to conduct it. But given the relative newness and diachronic scarcity of the construction (for all we can tell – cf. section 3), and the lack of even synchronic systematic descriptions (to our knowledge), the reason to include it here was to go beyond the informal intuitions we had already received from many consultants and which seemed to converge with our own intuitions (i.e. primarily of course the native introspection of the second author).

9 Appendix D - Frequencies and numbers for diagrams

decade	<i>passt!</i> freq.	(N)
1700s	0.0000000000	(0)
1710s	0.0000358288	(1)
1720s	0.0000000000	(0)
1730s	0.0000000000	(0)
1740s	0.0000112100	(1)
1750s	0.0000000000	(0)
1760s	0.0000000000	(0)
1770s	0.0000000000	(0)
1780s	0.0000070552	(2)
1790s	0.0000028894	(1)
1800s	0.0000019357	(1)
1810s	0.0000017401	(3)
1820s	0.0000029650	(10)
1830s	0.0000021360	(9)
1840s	0.0000041034	(24)
1850s	0.0000017858	(13)
1860s	0.0000044446	(54)
1870s	0.0000049982	(80)
1880s	0.0000053038	(88)
1890s	0.0000068983	(169)
1900s	0.0000063367	(229)
1910s	0.0000065784	(227)
1920s	0.0000072118	(176)
1930s	0.0000104855	(227)
1940s	0.0000094962	(52)
total:		(1367)

Table 6: *passt!*; freq. & (hits)

decade	<i>ja, das geht schon</i> – freq.	(N)
1700s	0.0000000000	(0)
1710s	0.0000358288	(0)
1720s	0.0000000000	(0)
1730s	0.0000000000	(0)
1740s	0.0000112100	(0)
1750s	0.0000000000	(0)
1760s	0.0000000000	(0)
1770s	0.0000000000	(0)
1780s	0.0000070552	(0)
1790s	0.0000028894	(0)
1800s	0.0000019357	(0)
1810s	0.0000005800	(1)
1820s	0.0000011860	(4)
1830s	0.0000011867	(5)
1840s	0.0000022226	(13)
1850s	0.0000017858	(13)
1860s	0.0000055970	(68)
1870s	0.0000051857	(83)
1880s	0.0000074133	(123)
1890s	0.0000103271	(253)
1900s	0.0000129778	(469)
1910s	0.0000107514	(371)
1920s	0.0000139729	(341)
1930s	0.0000119636	(259)
1940s	0.0000140616	(77)
total:		(2080)

Table 7: *ja, das geht schon*; freq. & (hits)

decade	<i>gut aussehen</i>		<i>gut</i>		<i>gehen</i>		<i>ausgehen</i>	
	freq.	(N)	freq.	(N)	freq.	(N)	freq.	(N)
1700s	0.0000000	(0)	0.085	(1585)	0.303	(5660)	0.00075	(14)
1710s	0.0000000	(0)	0.065	(1816)	0.214	(5974)	0.00365	(102)
1720s	0.0000000	(0)	0.072	(5165)	0.219	(15832)	0.00676	(488)
1730s	0.0000159	(1)	0.076	(4761)	0.180	(11368)	0.00492	(310)
1740s	0.0000000	(0)	0.073	(6496)	0.188	(16766)	0.00361	(322)
1750s	0.0000111	(1)	0.062	(5527)	0.156	(13997)	0.00222	(199)
1760s	0.0000071	(1)	0.065	(9247)	0.123	(17385)	0.00199	(282)
1770s	0.0000045	(1)	0.095	(21138)	0.159	(35169)	0.00247	(547)
1780s	0.0000035	(1)	0.122	(34726)	0.150	(42486)	0.00243	(689)
1790s	0.0000029	(1)	0.102	(35244)	0.137	(47417)	0.00198	(686)
1800s	0.0000000	(0)	0.116	(59984)	0.146	(75428)	0.00308	(1592)
1810s	0.0000046	(8)	0.109	(188038)	0.133	(229829)	0.00311	(5370)
1820s	0.0000024	(8)	0.097	(327149)	0.118	(398838)	0.00315	(10620)
1830s	0.0000043	(18)	0.079	(332872)	0.125	(526987)	0.00404	(17013)
1840s	0.0000063	(37)	0.090	(524732)	0.157	(920782)	0.00571	(33417)
1850s	0.0000037	(27)	0.102	(741835)	0.161	(1170144)	0.00545	(39654)
1860s	0.0000044	(54)	0.098	(1194710)	0.171	(2080888)	0.00570	(69205)
1870s	0.0000073	(117)	0.099	(1580545)	0.166	(2653588)	0.00498	(79645)
1880s	0.0000108	(180)	0.110	(1824277)	0.157	(2601390)	0.00446	(73967)
1890s	0.0000153	(374)	0.115	(2822601)	0.162	(3959361)	0.00450	(110150)
1900s	0.0000157	(567)	0.111	(4021885)	0.160	(5767374)	0.00425	(153632)
1910s	0.0000186	(643)	0.111	(3841010)	0.162	(5577560)	0.00430	(148502)
1920s	0.0000344	(840)	0.116	(2831252)	0.184	(4485298)	0.00512	(124856)
1930s	0.0000443	(960)	0.123	(2671751)	0.205	(4442859)	0.00444	(96173)
1940s	0.0000460	(252)	0.139	(762695)	0.213	(1167009)	0.00485	(26572)

Table 8: SAG-relatives; freq. & (hits)