

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

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Abstract

The goal of this article is to diagnose a verbal construction 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. This construction is based on the verb *gehen* (‘go’) conjoined by a particle and the reflexive. An argument for its analysis as a degree-based sufficiency construction is developed, which is constructed by extending existing approaches in the literature on *enough* constructions and suggesting a meaning of the construction at hand, which is presuppositional in multiple respects. The results of diachronic corpus searches as well as the significance of the results of this work for the space of possibilities of the semantic change of motion verbs are discussed.

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Keywords: ‘go’ constructions, sufficiency, modality, Austrian German

Résumé

Le but de cet article est de diagnostiquer une construction verbale basée sur le verbe *gehen* (‘aller’) liée par une particule et le réflexif. Cet usage très courant en allemand d’Autriche est généralement inconnu des locuteurs d’Allemagne n’ayant pas été exposés à l’allemand autrichien. Un argument en faveur d’une construction de suffisance par degrés sera présenté ci-après, construit en élargissant les approches existantes dans la littérature sur les constructions avec *enough* (fr. *assez*) et en suggérant une signification de la construction en question qui est présupposée à de multiples égards. Les résultats de recherche diachronique de corpus ainsi que la signification des résultats de ce travail dans l’espace des possibilités du changement sémantique des verbes de mouvement seront discutés.

Mots-clés: constructions avec *aller*, suffisance, modaux, allemand autrichien

1. INTRODUCTION

The goal of this article is to diagnose a construction based on the verb *gehen* (‘go’), a particle, and the reflexive, which has made it into 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 this construction in the 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 (classical implicative is a predicate the complement of which holds true not only in possible worlds but in the actual world, e.g., *manage*). However, recent studies have 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 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 also shows a potential connection to measuring entities out, even if, as we will argue, the diachronic trajectory it underwent is quite distinct. Similarly, in view of modal

analyses (e.g., Kratzer 2012), a relevant issue is 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.¹ 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, continuing in 2.2 with a further contextualized description of the modal flavours 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 (see Dürscheid et al. 2018).² 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; see 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 a basis that is neither political nor dialectal (e.g., Alemannic and Bavarian dialects are lumped together). As to the overall frequency of SAG in Austrian German: a 1%

¹Abbreviations used: ANNO: AustriaN Newspapers Online; DeReKo: Deutsches Referenzkorpus; EC: enough constructions; OCR: optical character recognition; SAG: sich ausgehen constructions; SMC: sufficiency modal constructions.

²A distinct picture obtains from the Atlas of German Daily Language (www.atlas-alltags-sprache.de/pilotprojekt/). Our purpose is not to determine a dialectal map; we have had opportunity to observe the "contagious" character of the construction: a number of speakers of Federal German in our research 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 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.

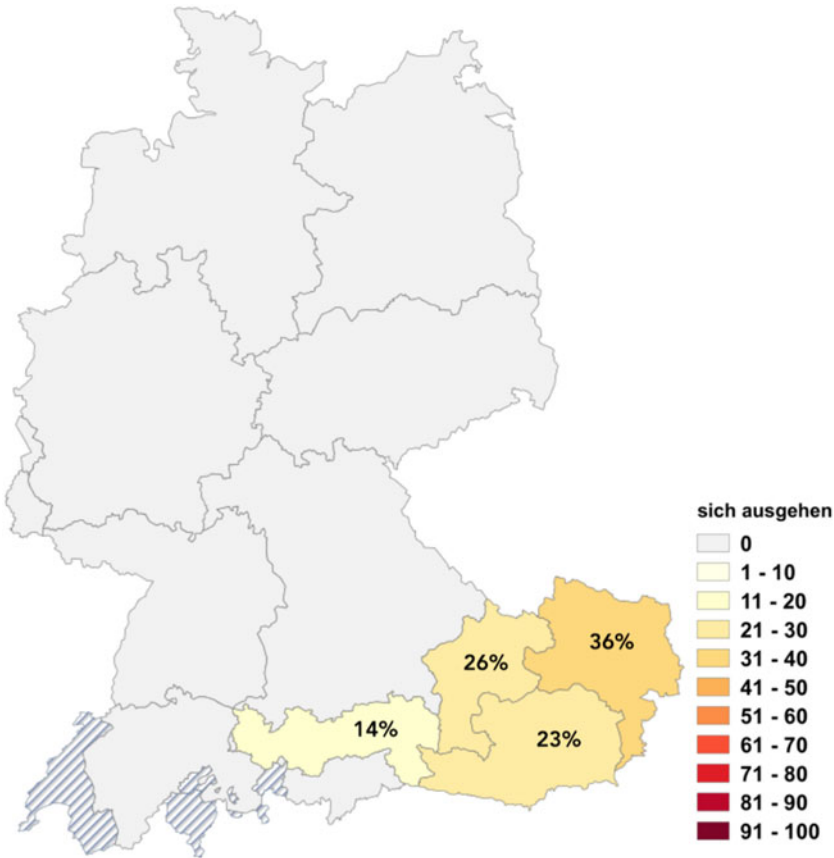


Figure 1: Areas of occurrence of SAG in Present-Day German (Dürscheid et al., 2018)). Austria is divided into four ‘regions’ which have neither a political nor a dialectal basis. For instance, 36% for the Northeast, which includes Vienna, means that 36% of all SAG examples in the sample are from that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

randomized sample of the Austrian Newspaper Corpus (*Österreichisches Zeitungskorpus*, a subpart of the DeReKo spanning the years 1991–2018), yielded 126 SAGs, a frequency of 0.00107%.

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 refer to this type as 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
 it goes itself out that we before the appointment one cup coffee
 trinken.
 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.’

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

- (3) a. Subject nominal + SAG (example (1))
 b. Dummy-pronoun-subject + SAG + *that*-clause-CP (example (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*; we will 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 judgements for sentences such as (1) and (2) (see also the local, i.e., sentential context set up, including an appointment and the preposition *vor*, ‘before’ – but neither is obligatory). By temporal judgements, we mean temporal sufficiency judgements (i.e., ‘there is enough time’), and not temporal in the sense of shifting or quantifying (as in 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.³

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

We will focus on the two typical patterns of the construction, 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 in SAG constructions. These feature an

³Our focus was on the context-based investigation of the relevant meanings. The attested diachronic 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 (see 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 expletive *es*, ‘it’, in the matrix clause (i.e., control structures are excluded; see issues in the literature related to raising vs. control status of *can* and other modals in Hackl 1998, Reis 2001, Wurmbrand 2001, Gergel and Hartmann 2009, among others).⁴

- (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, for example 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** $\frac{1}{4}$ -Liter Glas nicht **aus**.
 1 liter water goes itself in $\frac{1}{4}$ -liter glass not out
 ‘1 liter of water does not fit into a $\frac{1}{4}$ -liter glass.’

While the range of morphosyntactic possibilities in SAGs is large, there are also syntactic restrictions. 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
 I will the neighbor ask whether it itself out goes that I my
 Auto heute bei ihm parke.
 car today with him park
 ‘I will ask my neighbor if I can park my car at his place today.’

⁴Dialects can bring in their morphosyntactic intricacies. We take this variation to be orthogonal and modular, but briefly offer a few Upper Austrian examples:

- (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 woaß 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
 I will the neighbor ask whether my car itself out goes that I
 (es) heute bei ihm parke.
 it today with him 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 (see Ebert's 2000 overview of Germanic), but for our purposes the very existence of a form from the imperfective family should suffice to make the descriptive point, see (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 restriction on the progressive cannot be blamed on incompatibility of SAGs with tempo-aspectual inflectional morphology (as, for example, 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 this restriction on 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, far more restricted than the nuances expressed by other types of possibility core modals such as those familiar from English or German. First, neither laws, regularities, permissions, 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, cannot be interpreted deontically. Rather, the statement is interpreted as asking for information regarding 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 region. 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 our parking example in (7) repeated here as (18):

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

The interpretations available for (18) are all related to scales. For instance, are our schedules compatible (time), are space and shape issues solved, etc.? This means that, although there is room for ambiguity in this construction, it usually

involves the type of scale, and not, for instance, the modal flavour (say, epistemic vs. deontic).

Further scales can appear in SAGs; here are just a few 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%9Ffen-seiten-des-lebens>

- (20) Context: Participation in 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 a 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 sufficient. 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, 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 (see the results of a (relatively) informal elicitation experiment in appendix C).⁵

Having noted the restrictions with regards to modal flavours and scales, we conclude this section with an additional generalization regarding SAG subjects. In the clausal pattern, the subject is an expletive and the complement proposition is

⁵An interesting example we met in our synchronic searches:

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

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

(2015.02.04; diepresse.com)

Example (i) confronts two seemingly irreconcilable perspectives, and claims they are compatible, without any obvious or contextually available scale (see 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 is possible to accommodate them in the family of *enough* constructions. The idea is that there is enough space in the speaker’s moral domain to accommodate the apparent opposites.

expressed in the embedded clause, from which there is not much possibility of relocating material into the superordinate SAG clause. However, something particular can be said about the apparently more fragmentary nominal pattern. The generalization we suggest for it is as follows. The nominal argument (*ein Kaffee*, ‘a coffee’ in (1)), that is to say, the key, is an entity that is causally affected by an event which must usually be reconstructed contextually – for instance the drinking event, in the case of 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 as 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 for an elevator. After the elevator has come and as many of them as possible entered, an observer might utter:

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

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

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); see section 4 for the relevance of causation in the current context.⁶

3. DIACHRONIC ATTESTATIONS

Section 3.1 describes our methods and sources, and subsequently illustrates the main types of examples detected. We make a distinction between genuine or prototypical SAGs, presented in section 3.2, and candidates for being proto- or pre-SAGs in section 3.3.

3.1 Methods, sources, and searches

The overall goal of our research was 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

⁶While several apparent quirks of elliptical constructions across languages are known (McCloskey 1991; Cyrino and Matos 2002; Dvořák and Gergel 2004, Merchant 2005; Gergel 2006, 2010, to name a few), they are usually explained as 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. SAGs, as we see it, do not rely on such a retrieval: there are no characteristic phonological or structural hallmarks which lead to such conclusions.

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 a SAG or (ii) with what we define as a pre-SAG, that is, 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 predating sense and without any teleological implication that (any of) the precursors had to yield SAGs. From earlier corpus studies (e.g., of those 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 determined in a productive way on the basis of context. In fact, the identification of meaning on the basis of context was, comparatively speaking, a rather easier task than normal in the present case, and we describe the two major groups of meanings found in the next two subsections. The key difference between the present study and the studies just cited, however, was that no appropriate corpus that was large enough to produce hits was available, much less a parsed one. For single items such as *again*, *noch*, ‘still’, or *motan*, ‘can/must’ (see Beck et al. 2009, Kopf-Giammanco (to appear), and Yanovich 2013, respectively), the issue of whether a parsed corpus is used or not is secondary (unless one is specifically interested in testing correlations with structure; see Gergel 2017). But given that we are dealing with a construction, and not a single lexical item, the task of SAG-identification faced difficulties. There is, for instance, no lemma or corpus notation that would identify a 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; we describe the most prominent ones in the remainder of this subsection.

First, our main focus was to trace the construction in time. Hence we did not concentrate on a corpus study of present-day language, but rather on data from the past. Our main sources primarily contained data from prior to WW2.

Within the German Reference Corpus *Deutsches Referenzkorpus* (IDS, 2018), via the COSMAS II web application (IDS, 1991ff), the HIST Archive, which covers the period from 1700 to ca. 1918, and contains 66.58M word forms, was used to gather this diachronic data. This 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 W Archive, another subcorpus of the DeReKo, which contains 9.89M word forms and includes literary fiction from the 20th and the 21st centuries. Our search yielded 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*, cf. Korpora.org) covers the period from 1350–1700, contains 300,000 word forms, and includes Viennese-based texts. Yet no SAGs were found in that corpus. Other attempts at finding historical SAGs included text searches in Project Gutenberg⁷, the Internet Archive⁸, Google Books, and in various Google searches. Additionally, we targeted historical magazines and journals such as *Die Fackel*,

⁷<https://www.gutenberg.org/>

⁸<https://archive.org/index.php>

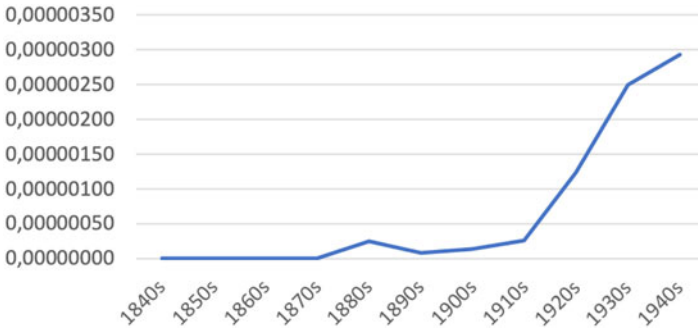


Figure 2: Frequencies relative to the overall number of wordforms per decade in the ANNO corpus; SAGs (pre-SAGs excl.) (%); detailed numbers in Table 3

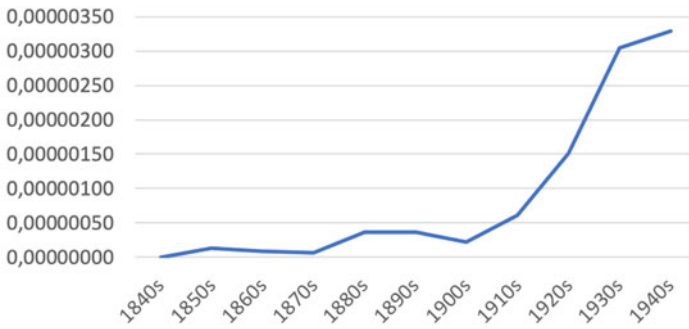


Figure 3: Frequencies relative to the overall number of wordforms per decade in the ANNO corpus; SAG and pre-SAG constructions (%); detailed numbers in Table 3

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* cf. [Austrian National Library](#)) corpus published and continuously updated by the Austrian National Library. A number of methodological issues arose. The interested reader can consult Appendix A for details in our various searches in the ANNO Corpus. The most telling data are presented in the next two subsections. Before setting out examples, let us note that we found a total of 120 strict SAG examples, and a superset of 168 examples which included pre-SAG constructions, the specifics of which we discuss in section 3.3. The diachronic development in the frequencies of the examples we have observed is rendered in [Figures 2 and 3](#).

From a diatopic point of view, the SAG examples have been identified in the regions of Austria given in [Figure 4](#). We use the current map of Austria for simplicity. We did not find SAG examples in territories outside the current state (although there was one pre-SAG construction from Bohemia).

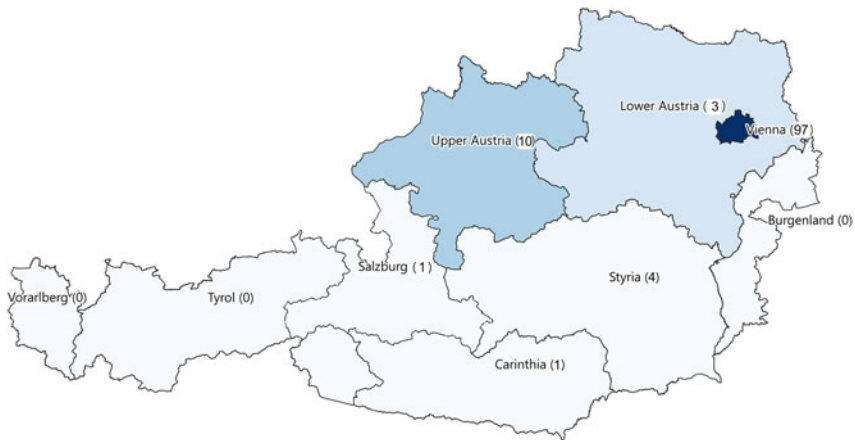


Figure 4: Diachronic SAG occurrences in Austria based on current ANNO findings; for map data cf. Perlot (2017) and compilation cf. QGIS Developer Team - Open Source Geospatial Foundation Project.

Figure 4, which includes only the genuine SAGs and not its precursors (see the two following sub-sections for more information on 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 in the corpus originate in Vienna (see Table 4, in Appendix A).

3.2 Diachronic SAG examples

The present subsection offers an overview of the patterns of genuine SAG examples, based on the searches described above and in appendix A. An interesting use of SAG, that is, one which already shows properties available in current Austrian German, is rendered in (23):

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

“Ich möchte was trinken!” sagte Hedy plötzlich und der Kavalier
 I want something drink said Hedy suddenly and the gentleman
 griff verlegen nach der Weinkarte, denn er wußte nicht, ob es
 reached awkwardly for the wine menu since he knew not whether it
 sich noch **ausging**. Aber es **ging sich aus** und er bestellte eine Flasche.
 itself still out went but it went itself out and he ordered a bottle

‘I want to drink something!’ said Hedy suddenly and the gentleman nervously
 reached for the wine list 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 these twenty eight Crowns that he just earned had or in the nächsten halben Stunde ausgeben sollte, mußten **sich** auf next half hour spend should had themselves on irgendeine Rechnung „ausgehen”. Sie **gingen sich aus**, das some calculation/bill ‘out-go’ they went themselves out that sah ich an seinen befriedigten Mienen. 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 concerns 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, determines the severity of an illness and, consequentially, the chances of survival.

Fällt das Ende der letzten Spanne mit dem des Mittelfingers falls the end of the last span with that of the middle finger zusammen, so verkündet der Wender: “Es **geht sich aus!**” Fällt aber together so announces the healer it goes itself out falls however die letzte Spanne mit dem Mittelfingerende nicht zusammen, so erklärt the last span with the middle finger end not together so explains der Wender: “Es **geht sich nicht aus!**” Der erstere Orakelspruch bedeutet, the healer it goes itself not out The first oracle means daß die Krankheit mit Genesung, der letztere, daß sie mit dem Tode that die sickness with recovery the last that it with the death enden werde. Je häufiger indes sich der Kranke auf end will the more frequently however themselves the sick in diese Weise wenden läßt, desto günstiger endet die letzte Spanne, this manner heal let the more favourable ends the last span und desto besser “**geht es sich aus**”. and the better goes it itself out

‘If the very last width of the healer’s hand ends precisely with the end of the middle finger, the healer announces, ‘It will be okay!’ But if 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**
 well in God-**gen** name keep me now here it goes itself just out
 bis zum anderen Sunntig.
 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 before next Sunday.'

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

The examples in (23)–(26) can be understood and recognized as SAGs by current speakers. Moreover, they introduce degrees and a sense of sufficiency measured in various scales. The scales are unspecified monetary units, crowns, hand widths, or days. Interestingly, some of the examples also appear in contexts in which dialogues are reproduced or with the relevant motion verb in quotation marks. We cannot (and do not wish to) claim that this is theoretically or numerically sufficient, given the scarcity of the examples. But since the examples seem to appear in orally-flavoured contexts, this may offer a hint as to why they have been harder to find in written sources.

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
 the little boy took his finger to aid but it went itself not
aus, [...]
 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
 in order to however the story a different purpose receives so bet
 von mir aus um zehn Seitel Bier – halt aus, das **geht sich** net **aus**,
 from me out for 10 pints beer hold off that goes itself not out
 denn i will a mittrinken – also sagen wir um 15 Seitel Bier, das
 because I want also with drink therefore say we for 15 pints beer that
 tut keinem weh'!
 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 pints, that won't hurt anybody.'

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
 narrowly is it itself outgone entirely narrowly because hardly
 wird es finster, beginnt der Film aus dem Städtischen Opernhaus
 becomes it dark begins the film from the municipal opera house
 abzurollen.
 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, that is, 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 (he being 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 or turn off. While such a use of *ausgehen* 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 a 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 the SAGs described in section 2, but which – after inspection of all contextual factors available – do not have either (i) a literal and compositional meaning of

gehen ('go'), *aus* ('out'), and *sich* ('itself'/refl.), 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 temporally precede all occurrences of genuine SAGs. This should not be too surprising for historical linguists, but is 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 Kondukteur, der diese Bemerkung überhört hat, trotzdem die vier Heller auf zwanzig zurückgeben, so mennt sich die Dame vom Stand drein und brüllt mit Stentorstimme: „Lassen S es, es **geht sich aus**, hat die Freiln gsagt!“

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>

Example (31), like the previous ones, mimics direct speech; it can also be viewed as degree-based, since 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.⁹

Another example which shows a (more general) sense of compatibility, and which 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.

⁹As a reviewer points out, it cannot be ruled out that the existing actions are sufficient, i.e. the conductor need not do anything else, implying 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.

..., die Fußballer sagen wieder „Hipp, hipp, hurra!“ den mit „Sieg
the football players say again hip hip hooray because with Sieg
Heil!“ **ging** es **sich** nicht **aus**.
Heil went it itself 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 SAG examples in 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.

Additional examples, attested in the historical records, are also unacceptable as 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 favour of the reform; the following passes judgement on the old, soon-to-be-abolished status quo:

Das ist etwas ganz und gar Unnatürliches, es **geht sich** ja an den
that is something downright unnatural it goes itself indeed at the
anderen ehrlichen Steuerzahlern **aus!**
other honest 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 refers to the steam mill in Debrecen and its cost-effectiveness and appears in a footnote of the article:

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

‘[The Debrecen steam mill] is annually listed at 49000 fl. which amount is already reduced to almost 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 need to open a new hospital in Pfarrkirchen (Upper Austria). The following token is in reference to an analogy between the human body and 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
 the best clockwork goes itself out and comesthrough the clotting
 des Oeles, durch angesammelten Staub um den sicheren Gang; ...
 of the oil through accumulated dust for the save run

‘the best of clockworks will stop working smoothly due to oil hardening and dust accumulating; ...’

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

In example (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 examine 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 (see also subsection 5.2):

- (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!
 but Mrs Zapplberger exclaims Ms Nelli but Mrs Zapplberger
 es is ja schon **ausg’gang’n!** Hab’n Sie net g’sagt, daß Ihna künftiger
 it is yes already out gone have you not said that your future
 Hausherr gar a kaiserlicher Rath is?” – „Ja, das is er.” – „No also, is
 landlord truly a imperial councilor is yes that is he well so is
 das Mieth’n von der Wohnung ka G’schäft?” – „Meiner Seel’, Sie hab’n
 the renting of the apartment no business of my soul you have
 recht!” – „Na also, da hab’n S’ ja den groß’n Herr’n! na, und Ihna
 right well so there have you yes the great man well and your
 Ruh’ und Ihna Fried’n, is Ihna der net verlorn’ ganga? Is des vielleicht
 quiet and your peace is you that not lost gone is that maybe
 nix? Na, und seg’n S’, Frau Zapplberger, weil die Mitschke g’sagt
 nothing well and see you Mrs. Zapplberger since the Mitschke said
 hat, daß **sich** wieder Alles guat **ausgeht**, können S’ ganz beruhigt
 has that itself again all good outgoes can you totally reassured
 sein, Alles wird sich wieder mach’n!.”
 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 the relevant sentences contain 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 # 4:

Viertens daß sie **sich** **ausgehen**, und auf den Füßen härter
fourth that they themselves out go and on the feet harder
werden.
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 get their feet in shape. (Notice that we found the example in (38) outside of ANNO, and that it is simply based on a dictionary entry from an author who was born and died in Saxony, which is to say he was clearly a speaker of a non-Bavarian variety of German.¹⁰ As we will discuss in section 5, this shows once more that the initial ground for the construction was (unsurprisingly) available in what appears to be all varieties of German, but it must have taken something more for it to develop the modal meanings of the modern 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 presume both to be true and repeat the caveat about the oral character of the construction at early stages; and yet newspapers at the time incorporate a fair deal of oral discourse. At this point, we take the construction to be relatively recent, arising in the 19th century. The

¹⁰Thanks to Winnie Lechner (p.c.) for help with the translation and for confirming to us that the Greek version is the literal meaning and unrelated to the modern Austrian SAG meaning.

earliest example we could find which provided evidence for a SAG in the current sense was from 1865. The potential precursors came, naturally, earlier. A particularly relevant meaning within this class of constructions seems to be a general notion of compatibility or suitability.

4. SAGS IN THE LANDSCAPE OF *enough* CONSTRUCTIONS

In this section, we situate the SAG construction semantically, by offering additional descriptive generalizations. On the basis of the observations made, we propose a semantics that slightly modifies current suggestions available for sufficiency constructions and enriches them with a further meaning component of desirability.

4.1 A note on more general issues of modality and scale

The empirical generalization from the discussion so far is that SAGs have developed from motion indicators to intensional markers which involve both a restricted sense of modality and, crucially, a scale. SAGs thus represent constructions in which degrees and modality come together, although neither needs to be explicitly mentioned. While several theoretical options are available to connect modals and degrees (see Lassiter 2011, Lassiter 2017, Kratzer 2012, Hegarty 2016, Herburger and Rubinstein 2018), the meaning of SAGs lends itself to an analysis in terms of a rather standard approach, namely one couched in terms of sufficiency, that is, *enough* constructions (ECs) which is orthogonal to the way one normally sees modality. This is not the place to settle the issue of whether modality itself is to be viewed probabilistically, as gradable per se, and related issues.¹¹ What we 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 the main similarities and differences between SAGs and ECs. We then make 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 on more recent

¹¹A 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 they do not license epistemic readings. A similar qualification must be made with respect to connecting deontic modality to degrees and the domain of extreme vs. non-extreme adjectives (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.

endeavors that connect such intensional constructions with causality (Schwarzschild 2008; Nadathur 2017, 2019, among others). In a nutshell, then, we propose that SAGs are roughly speaking ECs, but with two main differences: (i) they presuppose desirability and (ii) their meaning is computed from the available and implicit building blocks differently.¹²

A first reason to view SAGs and ECs on a par is that both combine degrees and modality. A second, intuitive, reason is that the most natural paraphrases available for SAGs contain expressions of the type ‘the available time/money/space/volume etc. suffices’. Third, just as is the case with *enough* constructions, a goal appears obvious and necessary 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 behaviour (Karttunen 1971, Meier 2003, Hacquard 2005, Nadathur 2017). Consider (39):

- (39) #Es ist **sich ausgegangen**, dass sie eine Tasse Kaffee getrunken haben –
 it is itself out went that they a cup coffee drunk have
 sie haben aber keinen Kaffee getrunken.
 they have but no coffee drun
 ‘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) implies that they did drink a cup of coffee (in the actual world). The actualistic behaviour 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. (See Gergel 2020 for a quantitative assessment on the implicativity of SAGs compared to modals and entailments.)

When translating a SAG structure into an EC, a number of differences from the original interpretive effects of SAGs hold. We will translate the SAG, as we thereby hope to illuminate the parallels as well as the differences between these constructions. 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 ECs.¹³ First, the gradable scalar adjective (*long* in (40)) is not visible in SAGs. Second, the

¹²As the panorama of sufficiency is larger than that, we refer to the sufficiency modal construction (SMC) analyzed in von Stechow and Iatridou (2007). We compare SAGs and SMCs in Appendix B, where the (non-)implicativity of SMCs is tested for the first time. We also direct the typologically-interested reader to Fortuin (2013), which does, however, not cover SMCs or SAGs.

¹³We face the crucial 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, (see Fortuin 2013, and references cited therein). We will not go into the typological discussion for space reasons and because, while interesting in its own right, it does not throw light on the analysis of SAGs. But there are two points we

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. We have already noted two things which are strongly available as meaning components. First, the scale is necessary; modalized SAGs of a variety of modal flavours that lack a scale are either infelicitous, or coerced into scalar readings. Second, we have illustrated empirically that the subject in the nominal pattern has a requirement that it be the entity causally affected in an event.¹⁴ 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, and (ii) because the way the computation is achieved is different 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 the discussion of whether gradable adjectives are functions or relations (see 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 on that of (Nadathur 2017, 2019) and then 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 a 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 :

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

- b. S presupposes that Q is desirable

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.

¹⁴If 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 (of the coffee being drunk, of the car being fit into the space available, of the milk being poured, etc.).

- 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 (41a) 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 (41b), requiring desirability, is tailored for SAGs only and we will motivate it further. A third presuppositional component is introduced through the condition (41d), 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); see Nadathur (2019) for ample discussion in the context of ECs. A simplified way to think about instantiating (gradable) properties is by delimiting them from latent capacities. For instance, it is easy to imagine that a property such as speed (i.e., *fast*, when expressed with 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 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 this case) is not reached. For (41b), S , (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 between the analysis of SAGs and that of ECs 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.

Unlike in the EC-based paraphrase, however, SAGs actuality entail:

- (43) #Ein Kaffee vor dem Termin ist **sich ausgegangen**, sie haben aber
 a coffee before the appointment is itself outgone they have but
 keinen Kaffee getrunken.
 no coffee 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 our approach builds on. For ECs, the issue of how the realization of the event is cancelled in the imperfective is classically addressed based on technologies reaching back to Bhatt (1999). While the same mechanisms could theoretically be applied to SAGs, we will not go into the discussion, because SAGs cannot be conjugated in the imperfective 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, there is some evidence that causation is relevant on a descriptive level (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 relations can also be observed in SAGs. 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 in SAGs needs to target precisely the same scale. 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 to drink hot tea. But what is needed, in the SAG, is a causal relation that targets exactly the same scale (in the case of (44), the temporal scale).

We end this subsection by raising 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 the following exclamatives. (In a context here 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). In such a context, ECs are licensed (47), but SAGs are not (48):

(47) Das ist genug!
 that is enough
 Intended: ‘There has been enough of that!’

(48) #Es geht sich aus!
 it goes itself out
 Intended: ‘There has been enough of that!’

Presupposing a desirable goal offers a way to explain such types of clashes. For example, in (48), the speaker cannot felicitously utter such a sentence. This follows if a presupposition such as the one we suggested is incorporated. It would be infelicitous to presuppose that the event being 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: ‘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: ‘I was able to get (seriously) sick.’

As suggested by Igor Yanovich (p.c.), to test further for the desirability presupposition, we consulted with native speakers of Austrian German on (49) and (50) – both of which feature SAGs paired with normally undesirable outcomes (one with a nominal key, one in the clausal pattern). With regards to (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 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 discussion presented so far, to identify the key conditions that have favoured the rise of the construction, and to offer further thoughts about its significance. The first subsection will offer a brief comparative study, which – despite, but also because of, its negative outcome — strengthens the dating suggested in section 3. Constructions available in German that may have primed speakers in subtle ways and thus promoted the

evolution of SAGs 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 to the 19th century (see section 3). This picture is complicated by the fact that this modal construction has a very low frequency. The fact that SAGs are found primarily in spoken language, and may have been in the past as well, is not entirely problematic, as Austrian and other writers at the time were quite receptive to spoken forms, and to depicting them in their prose. To find supporting evidence for our timeline, we conducted a small comparison with relevant related varieties. What we wanted to see is whether they also possess SAGs.

A relevant comparison can be drawn to the Landler variety of German. This variety constitutes a conservative linguistic island – itself situated within another conservative linguistic island. A current estimate is that approximately 200 elderly speakers speak Landler.¹⁵ It is spoken in Transylvania; 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 contain no SAGs (i.e., all SAG structures we tested with native speakers were not only marked but ungrammatical, regardless of context). The main surrounding languages of this island are Hungarian and Romanian, neither of which have SAGs.

The Landler variety emerged far more recently than Transylvanian Saxon, among the successive waves of religious refugees during the Counter-Reformation, beginning in the 1730s and continuing through that century (see Capesius 1990). Most of the banished refugees were originally from Upper Austria and the region around Salzburg (and 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 centre, both in sheer distance and in intervening mountains, for the banished families to be considered less of a threat. Linguistically this ensures its isolated character, as we have no reason to assume that close contact with the Viennese centre 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 well documented as having

¹⁵See <https://de.wikipedia.org/wiki/Landlerisch>. Bottesch (2002) 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), in a reprint of an article from 1959, offers an estimate of 4500 speakers at the time of his writing.

preserved its Austro-Bavarian features both phonologically and lexically (see Obernberger 1964, Capesius 1990, Bottesch 2006 and references therein.) The speakers settled in a concentrated manner around the area of Sibiu (Hermannstadt in German), essentially in three villages. The important thing for our purposes is that Landler contains neither SAGs nor direct precursors of the construction, so that all SAG constructions available to Austrian speakers today are ungrammatical in this variety. Lexical descriptions are rather sensitive to Austriacisms and typically note them (see Bottesch 2002, 2006 on the basis of several types of data collections and elicitation); they do not contain SAGs. We further interviewed 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.¹⁶

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

Additional factors may have played a role; but the simplest explanation 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 least not in a manner robust enough to be transmitted, in communities where linguistic transmission was, until recent times, key to identity preservation. This may constitute indirect (negative) evidence in support of the 19th century dating suggested in section 3. We now move towards discussing some of the positive clues that might have motivated speakers to come up with the right constructional scaffolding to allow the emergence of SAGs.

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, appearing 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 find the construction in more varieties, or at earlier times? For example, while Austrian German is established as a Bavarian variety, we are not aware of SAGs appearing in the records in autonomous fashion in Federal German Bavarian (despite the fact that some Bavarian speakers

¹⁶The 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.

nowadays are aware of it as an Austriacism through exposure to the Bavarian variety across the border).¹⁷

Consider the examples in (52)–(54).

- (52) Doch nein, über dem Rande der höchsten Wolke zeigt sich eine lange
but no over the rim of the highest cloud shows itself a long
schwarze Linie, die zu fest und unbeweglich ist, um ein
black line that too firm and unmovable is in order to an
Luftgebilde sein zu können, und vier scharfe Nadeln von sich **ausgehen**
air structure be to can and four sharp needle from itself out go
läßt.
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
it comes certainly very frequently PRT that marriages that not out
Liebe geschlossen wurden, sehr gut **ausgehen** und sich überaus
love locked became very well out go and themselves indeed
glücklich gestalten.
happily form

‘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 behaviour.

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

¹⁷While neither our corpus searches and elicitation nor, for example, the IDS Grammar (Dürscheid et al., 2018) find the construction as genuinely extant in varieties other than Austrian, we did find cases of German speakers (including linguists) who were not native speakers 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 part of their native speech and that cases of contact – whether direct or indirect – were most likely at issue. 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.

The examples in (52)–(54) are samples of Austrian German at the approximate time SAGs arose, but they are perfectly acceptable in terms of the constructions used in all varieties of German. They involve different degrees of literal meanings of ‘go + particle’, ranging from ‘going out from a particular centre’ to ‘go out’ conveying something like ‘take a particular type of ending’ (which can still be said of marriages, stories, etc.), and ‘go up’ in the sense that a calculation can ‘work out’. In particular, the latter type of example could, for instance, be a good candidate for 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
 how one the field out go and measure also to triangle or square
 machen sol / werden die blinden Linn / durch das Feld dich
 make should become the blind lines(?) through the field you
 allenthalben in nachstehender Demonstration oder Figur sechs
 everywhere in following demonstration or figure six
 Triangelfelder berichten / ...
 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/>)

Example (55) features the meaning of ‘going out’ in the sense of ‘measuring out’ a field (note 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, then, is a middle construction realized through a reflexive, which is attested with many verbs in German. While we find this scenario theoretically attractive, it has two major drawbacks. The first one is shared with the constructions we introduced above in (52)–(54): 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: if the construction were 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, at the time preceding the rise of SAG constructions. To verify this, we conducted multiple collocational searches in the Austrian corpus ANNO (including other objects that, according to the Grimm dictionary, could co-occur with *ausgehen* having this meaning), but we found virtually no bona-fide hits. In fact, unlike the other constructions discussed, (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 is as follows: while apparently related constructions may have offered propitious ground for 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 possible in Austrian German in the next subsection, we will end this section with a slightly more associative view, which we hope may help the reader to grasp some of the main developments and key meanings available en route to SAGs. Consider [Figure 5](#).

One intuitive feature that sets genuine SAGs apart 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.

It is possible that such bridges towards positive completions have brought a ‘desirable’ character into the picture.¹⁸ Similar facts can be observed with the cognate particle *out* in English: *work out*, *pan out*, *play out* etc, where the result state is usually contextualized as desirable.

5.3 Contact

We now turn to a different perspective on language change, i.e. we move from internal towards external factors and specifically to 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; see 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 potential role of Slavic, and in particular Czech, in the rise of SAGs.

In doing so, we essentially follow a hint from Glettlér (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. Glettlér (1985: 105) in fact claims that SAGs are a loan construction from Czech in the negative past tense.

¹⁸Given 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; see, for instance Evans and Wilkins (2000), Beck and Gergel (2015) and references therein.

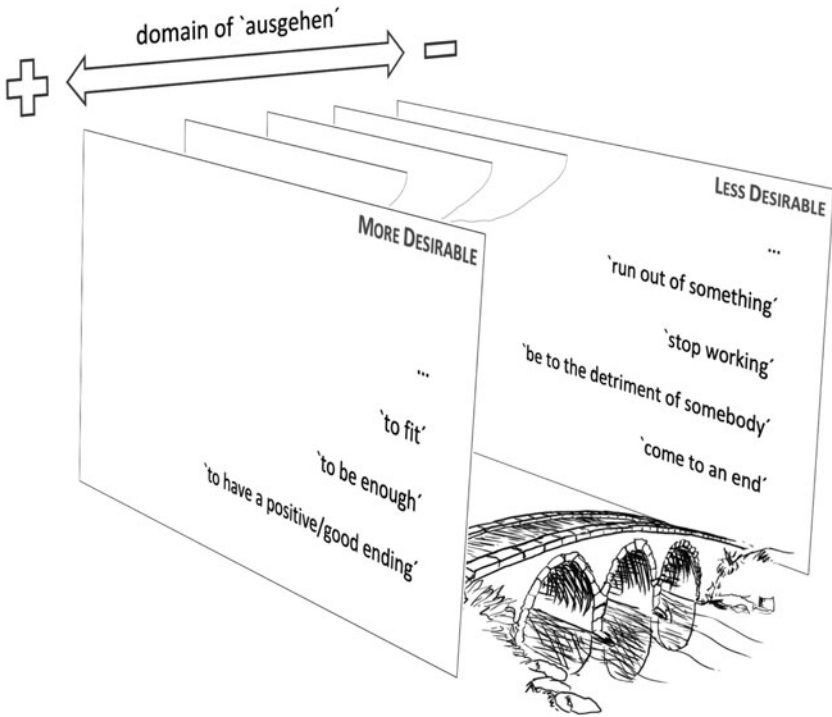


Figure 5: Conceptualization diachronic change, domain of *aus + gehen*

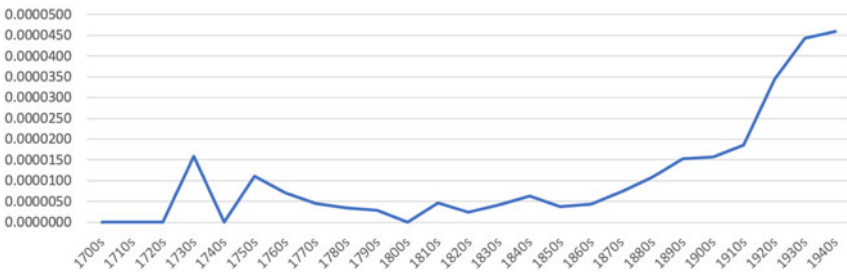


Figure 6: frequencies: *gut ausgehen* (%); detailed numbers in table 8

Unfortunately, while Gletler 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 to some extent as a calque from Slavic seems to us very likely in the sociolinguistic context. German and Slavic varieties certainly had a history of contact in many other contexts, too, but as Gletler

(1985) points out, it is crucial that many expressions from Czech make it to fashionable and respectable Viennese items in all registers. Newerkla (2013) claims a particularly intensive contact situation starting in the last third of the 19th century, noting, for instance, that 25,186 citizens were registered in Vienna in 1880 as having a Czech/Slovak/Bohemian linguistic background. While Newerkla's views on language contact are refined, when it comes to SAGs, we could find no systematic discussion of actual attestations.¹⁹

While we think that an analysis (or even a description) of related Slavic constructions might deserve a serious study in its own right, we will simply point out some of the main coordinates 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.DIMINUTIV coffee
'I guess it will be possible for me to drink a cup of coffee.'
- (57) Ja sprošu u sosedu, vyjdet li postavitj
I ask.PERF.FUT.1SG from neighbour go.out.PERF.FUT.3SG Q to.put

moju mašinu na egoparkovočnoe mesto.
my car onto his parking place.
'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, they do not, as Yanovich points out, require a notion of scale. Furthermore, the example about the possibility of growing olive trees – which is not felicitous in Austrian German – is also not acceptable in Russian, as the two following examples 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.'

Here again we follow Igor Yanovich (p.c.) 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 *vyxoditj* 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 languages.

¹⁹Newerkla's translation of SAG with the Federal German *es klappt nicht*, 'it doesn't work (out)' is also too imprecise for a SAG, which was not at the centre of that study.

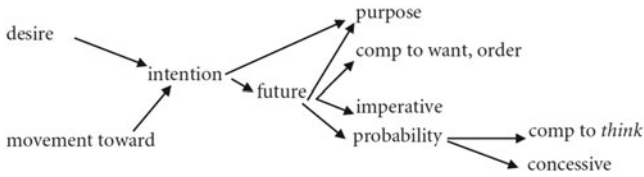


Figure 7: Paths of Motion Verbs (Originally after Bybee et al. 1994: 240, reproduced in Narrog 2012: 83 and Rubinstein and Tzuberi 2018: 2)

We finally turn to Czech, following Glettl's (1985) hint. Czech has 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 path to follow 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 however, is how constructions based on the past negative motion verb *nevyšlo*, as pointed out by Glettl (1985) (and reverberated, unfortunately also without examples, by Hofmannová 2007 and others) behaved. 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 here.'
- (62) *Nevyšlo mi vysadit tu olivy.*
 it-didn't-work-out me plant.PERF 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', which shows that we are indeed dealing with the relevant motion verb. A further point, however (in this case, one of divergence), is that all the examples are felicitous in the first place, in particular the example (62). However, an example like (62) is not felicitous for its 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, of course, identity at an earlier historical time. 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.²⁰

²⁰Clearly, a historical investigation of 19th century Czech will be 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 our investigation. We show that this pattern is in fact more general than what 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.

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

Our plot is not directly comparable in its details to these paths, but we present the following two observations in connection with ‘go’. 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 are not aware of many studies on emerging presuppositions, and believe this deserves more attention in future research (see Schwenter and Walterit 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; see Eckardt 2006), but in a broad range of languages, as we know from the typological literature (see 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; Copley (2009) and certainly also 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 like the following are common in varieties of German.

- (63) Student: Ist es möglich die Hausarbeit einen Tag früher abzugeben?
 student is it possible the homework one day sooner to submit
 Lehrer: Ja, das geht.
 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’.²¹ 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 in our specific SAG plot, diachronically, as well as more generally, two more detailed questions arise. First, why is it so easy, in some cases, for compatibility and sufficiency to be conflated? Part of the answer is that, in numerous cases, the sufficiency reading entails the compatibility reading. If there is enough time to have a cup of coffee, then it is possible to have a cup of coffee. In this case, the reversed entailment also 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., 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 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, and in propositional contexts an expletive, etc.). Other expressions in Austrian German in the 19th 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 see Zimmermann (2018) for an analysis). In fact, both of them were on the rise, as Figures 8 and 9 indicate.²²

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

To summarize: in the course of this article we have offered a description of Austrian SAGs, the core of which we have suggested can be analyzed in line with *enough* constructions. We have provided initial diachronic attestations, as well, but

²¹See <https://de.pons.com> The dictionary we used did not have contexts, but one was provided by a native speaker.

²²The two early maxima in Figure 8 are due to the fact that there is less data in these periods and one hit can produce a peak; see the figures in Table 6, Appendix D.

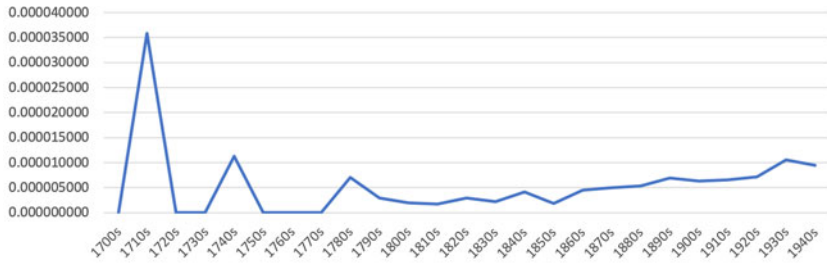


Figure 8: frequencies: *passt!* (%); detailed numbers in Table 6

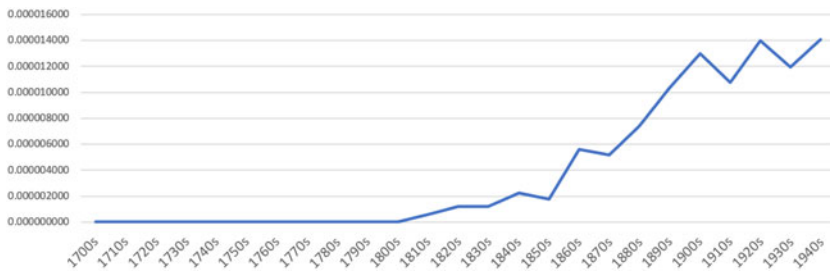


Figure 9: frequencies: *ja das geht schon* (%); detailed numbers in Table 6

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 by 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 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 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.

CORPORA

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APPENDIX A: 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

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; Jan. 20, 2019

available as txt-files, starting in 1700. For the last phase of our 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. While the ANNO corpus is quite extensive, it is also diachronically imbalanced. Table 1 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.

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 this weakness, every list of hits had to be manually reviewed. Occurrences of SAG had to be extracted from the pool of non-relevant uses of *sich*, *aus*, *ausgehen*, and *gehen*; see, for instance, (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.’

We pursued two major strategies in finding SAGs in the ANNO Corpus website. The first 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 hits that could be sorted 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 ten SAGs with such targeted searches.

The second strategy was a wider search. A distance parameter was added to four search terms (“~4”, i.e., distance of four intervening words and in arbitrary succession). For each of these four diachronically ordered searches, we manually went through the first 1,000 hits (among a total of 4,000), to identify SAGs. The search hits that were reviewed manually contained no SAGs at all, but only other, non-relevant uses of the above-mentioned building blocks. See details on the corpus search below, in Table 2.

search term	hits	manual checks	last date covered by manual 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; number of hits from Feb. 5th, 2018

OFFLINE SEARCHES IN ANNO CORPUS

General strategy

For our in-depth search of the corpus, we applied the following strategy. We downloaded the txt files in the ANNO corpus. 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.

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 was creating a list of common OCR errors for *sich*, *aus*, forms of *gehen* – the buildings blocks of SAG – and *nicht* (a German negative). This was done by human visual detection of those items in the scanned pdf files of the newspapers 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 (see below). This tracking of OCR errors was not done for the web-based searches of ANNO described above.

Regular Expressions

The following is a breakdown of how we proceeded in making sure we caught as many SAGs as possible and at the same time limited the number of false hits. As mentioned above, 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 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) building blocks 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 of excluding 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 building block.

For ease of handling regexes based on the three items making up SAGs (four when 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|'gangan|ginge?st|ginge?n?|geht|gehst|gehe|
      gehen|geh|gehn|geh\n)(?='
      G = '(?<=)(Gegangen|'Gangan|Ginge?st|Ginge?n?|Geht|Gehst|Gehe|
```

Gehen | Geh | Gehn | Geh\`n)(?=)'
 g2 = '(?<=s)(gegangen | \gangan | 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 obtained 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 serve as examples (in the form of regexes) as to what potential errors we tried to account for:

- (72) variants of *sich*:
 S = '([sc]?[sfssil\]|[ceä][hkylyz] | [fsfi][it]\.) | 7\ (1\) | \[WskFe\.]'
- (73) variants of *aus*:
 A = '(a[un][sßce]? | 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?) | (((n)?[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 | mccc)'

The regex variables in (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 probable candidate for OCR errors based on the ‘descending s’). With these

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	0.00000008	(2)	0.00000037	(9)
1900s	0.00000014	(5)	0.00000022	(8)
1910s	0.00000026	(9)	0.00000061	(21)
1920s	0.00000123	(30)	0.00000152	(37)
1930s	0.00000249	(54)	0.00000305	(66)
1940s	0.00000292	(16)	0.00000329	(18)

Table 3: SAG; frequencies and number 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

additional probing strategies, we were able to increase the number of unambiguously identified (pre-)SAGs to 168. The frequencies and numbers, per decade, appear in [Table \(3\)](#).

[Table 4](#) shows the geographic distribution of the papers in the ANNO corpus whose main place of publication is within present-day Austria.

APPENDIX B: THE SUFFICIENCY MODAL CONSTRUCTION

Consider (76), 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 appear to share, in counterdistinction from ECs. The latter have an acknowledged intensional dual in the *too* constructions in English (and similarly in other languages). For instance, 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 the SMC and SAGs apart, so that the two analyses must also be distinct. First, as von Fintel and Iatridou (2007) point out, the SMC is cross-linguistically stable, with variation ranging largely alongside two types of patterns. As far as we have been able to determine, SAG does not in any way have 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 (see (76); while 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. We take it to be analytic parsimony, therefore, that a first description should not appeal to it in this case (no matter how convincing the case for *only* in SMCs appears to be).

A third point on which SMCs and SAGs part ways (not investigated in von Fintel and Iatridou's contribution), has to do with actuality entailments. We note here that SMCs do not show implicative behaviour 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 behaviour. This is in contrast with SAGs.²³

APPENDIX C: ACCEPTABILITY RATINGS AND READINGS OBTAINED

We designed a questionnaire and recruited Austrian German speaker subjects via social media platforms. The questionnaire consisted of ten sentences (see Table 5). For each of the sentences presented, the subjects were asked to (i) rate its acceptability on a scale ranging from 0 ("not good"/"sounds wrong") to 10 ("good"/"sounds right") and (ii) provide a paraphrase giving

²³In German, there is an additional factor: 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
 you had.SUBJ only there go must/need you have it but not
 geschafft!
 made

'You only would have had to go there, but you failed.'

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

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 ¼-Liter Glas nicht aus. '1 liter of water doesn't fit into a ¼-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

their reading/interpretation of the sentence. The experiment yielded 84×10 responses (the judgements of 84 speakers). We invite the reader to consult Table 5 before we move on to 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* ('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 (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. 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, however, when responding to the second task (i.e., assigning a meaning to the sentence), the majority of speakers interpreted it as having a degree-based reading 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 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 could be improved upon. 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, and the lack of synchronic systematic descriptions, the reason we included 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.

APPENDIX D: FREQUENCIES AND NUMBERS FOR DIAGRAMS

decade	<i>passt!</i> freq.	(N)
1700s	0.000000000	(0)
1710s	0.0000358288	(1)
1720s	0.000000000	(0)
1730s	0.000000000	(0)
1740s	0.0000112100	(1)
1750s	0.000000000	(0)
1760s	0.000000000	(0)
1770s	0.000000000	(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. and (hits)

decade	<i>ja, das geht schon</i> – freq. and (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. and (hits)

decade	<i>gut ausgehen</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; frequencies and (hits)