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Language choice and internationalisation:

The roles of Swedish and English in research and higher education

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This report is a translatation of ***Språkval och internationalisering:***
Svenskans och engelskans roll inom forskning och högre utbildning

Rapporter från Språkrådet 19
(Reports from the Language Council of Sweden 19)

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Language choice and internationalisation:

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Foreword

How strong is the position of English at Swedish universities today?

The Swedish language has always been surrounded by other languages, and in recent decades the influence of English has been strong in Swedish society. In recent years, the dominance of English as a foreign language in Sweden has been such that it could rather be described as a second language.

The increased use of English was also the strongest driving force behind the passing of the Language Act (2009). One of the concerns was that English would completely displace Swedish in, for example, higher education and research. One of the main objectives of the Language Act is therefore to promote the Swedish language and ensure that Swedish remains complete and essential to society, including scholarly activity.

The report *Language choice and internationalisation* presents the results of a study of the language of instruction and publication at Swedish universities, and is a follow-up of a similar study done in 2010.

The results show that the use of English at Swedish universities has continued to increase since 2010, as a language of both teaching and publication. English has long been dominant in disciplines such as the natural sciences and engineering, while Swedish has been the more common language in the humanities. However, this new study shows that the use of English has continued to grow strongly in the social sciences and the humanities as well.

It is clear that the position of English as a language of teaching and publication is growing stronger. The results in this report provide an interesting basis for a continued discussion of how Swedish may remain a robust scholarly language in interplay with English in higher education and research.

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Introduction, summary and readers' guide

This report focuses on the development and use of Swedish and English as the languages of instruction and publication in higher education and research in Sweden. This can be considered a follow-up study to the report written by Linus Salö on behalf of the Language Council just over a decade ago: *English or Swedish? A survey of the language situation in higher education and research* (Salö, 2010). Salö's report was written in the context of the very heated debate at the time about the position of Swedish *vis à vis* the status of English as a growing global academic language (see Salö, 2016 for a detailed description of the context). Now, just over ten years after that report was published, there is once again reason to scrutinise the language situation, particularly in light of the continued internationalisation of research and higher education in Sweden. Based on (1) statistics from the Swedish Council for Higher Education (Universitets- och högskolerådet, UHR); (2) searches in the Swepub database (part of Libris, the national catalogue of Swedish libraries); and (3) information from the websites and course catalogues of ten selected universities, longitudinal and cross-sectional data on the choice of the languages of instruction and publication are presented and discussed. To generate our underlying data, we used the same approach as Salö (2010) to the greatest extent possible; our aim is to offer a much-needed description of the current situation and to enable comparisons with previously published data, thereby contributing to an updated picture of trends in the language situation in Swedish research and higher education.

The overall purpose of this study is to describe the position of English in relation to Swedish (and to some extent other languages) in the Swedish university context. The specific questions that have guided the study are:

1. To what extent do students encounter English in their studies? Two important domains taken up here are the language of instruction and the use of English texts in courses with Swedish as the language of instruction.

2. What language do Swedish researchers choose when they publish their results? The question of language of publication is examined for both doctoral theses and journal articles

English is widely and increasingly used as the language of instruction

The phenomenon of English-medium instruction continues its steady increase, as predicted by previous research (e.g., Salö, 2010; Salö & Josephson, 2014). The picture from a decade ago, of English more prominent as a language of instruction on the postgraduate level than on the undergraduate level, and more common in degree programmes than courses, is partly confirmed by this follow-up study; from all perspectives, the use of English has increased in the past decade.

In general terms (and disregarding level of study) the increase is greater for courses than for programmes, which means that in 2020, it was more common for courses than programmes to be conducted in English. For all subject areas, the scope of English as a language of instruction increased in the past decade, but the largest increase was in the humanities, where the percentage of courses in which English was used doubled.

A comparative study comprising five large, established universities and five smaller, newer ones shows, unsurprisingly, that the use of English as a language of instruction also increased for virtually all of the institutions studied. On average, 66 percent of the instruction in master's programmes took place in English in 2020 at these universities, which corresponds to an average increase of 15.7 percentage points over the last decade. A number of other differences are also seen across universities in the use of English as a language of instruction.

English is also present in courses in which it is not the language of instruction. A study of assigned reading in undergraduate courses taught in Swedish at ten Swedish universities shows that 65 percent had at least some assigned reading in English. Further, 24 percent of courses taught in Swedish entirely lack assigned reading in Swedish. Taking into account all assigned books, articles and book chapters, nearly half of the reading that students are expected to do, in courses where the language of instruction is Swedish, is in English. A difference can be noted between, on the one hand, the larger universities in the sample, where 50 percent or more of the assigned reading is in English and, on the other hand, the smaller ones, where the proportion of assigned reading in English is significantly lower. By contrast, the differences across subject areas are small: in the humanities, social sciences, and natural sciences, about half of all assigned reading is in English; in engineering, the percentage is marginally lower, and the lowest percentage of English-language reading is in medicine and health care.

English continues to dominate as language of publication

The results with regard to language of publication are clear; English is increasingly used in key research genres. Overall, English dominates at the expense of Swedish: in 2019, 93 percent of all doctoral theses and journal articles were written in English.

The use of English is also spreading in subject areas where Swedish had a relatively strong position earlier in the 21st century and in the second half of the 20th century. A case in point is the humanities: 34 percent of the research articles and 33 percent of doctoral theses were written in English in 2004; 15 years later (2019), the figures were 59 percent and 70 percent, respectively. The average rate of increase in the proportion of publications in English for all subject areas over the past decade was approximately 0.7 percentage points per year, for both articles and theses. However, this figure conceals a particularly rapid increase in subject areas where Swedish historically has held a stronger position as the language of publication; for example, the rate of increase is especially high for articles in

the social sciences, and for articles and theses in the humanities. Since the 1970s, the proportion of publications in languages other than Swedish and English has been very limited, but data from the past decade show that such publications are now virtually non-existent (apart from some individual subject areas).

Readers' guide

This report aims to give the reader both a picture of the current situation and a sense of the development that has occurred with regard to the roles of Swedish and English as languages of instruction and publication in Swedish research and higher education. It is particularly important to point out that this report does not claim to provide a comprehensive description of the language situation. Comprehensive and reliable data are not available; the findings are therefore limited to general, descriptive statistics. In line with earlier studies, we have chosen to focus attention on only two dimensions (language of instruction and publication language) in a complex landscape of research and higher education where myriad variables are likely to affect the language situation.

Like Salö (2010), we must also include a number of disclaimers; there are, for example, no guarantees that the language formally recorded as the language of instruction is actually the one used in the classroom. As Salö (2010, p. 391) notes, "to know for certain what language a course is taught in, studies of the teaching situation are required. It is simply a matter of being present in classrooms and lecture halls to observe the choice of language."[1] Such observations did not fall within the scope of this study (but see, for example, Söderlundh, 2012).

Although the ambition has been for this report to serve as a follow-up to previous research — in particular Salö (2010), but to some extent also Salö and Josephson (2014) — in some respects our approach diverges from theirs. For example, no data on the language of thesis summaries is included here, and we limit ourselves to doctoral theses and exclude sub-doctoral works. We focus instead on journal articles, a key genre for research publication, along with doctoral theses[2], but a genre which complements the "junior" research that doctoral theses represent, and which broadens the perspective to include the language situation of more senior research as well. Nor is a follow-up of university language policy (the third part of Salö's 2010 survey) presented here. Interested readers are instead referred to Susanna Karlsson's comprehensive report *Language policy at Swedish universities* (2017).

[1] This and all translations from sources originally in Swedish are ours, with the exception of the titles of a few regulatory documents which have official titles in English. For the sake of reader-friendliness, we do not identify translated quotations at each occurrence; the interested reader is referred to the reference list, which indicates the original language of each source.

[2] Swedish doctoral theses are typeset, bound, published and assigned an ISBN, typically by the university press of the degree-granting institution.

This report is divided into four main sections. The first provides context for the study. In it we highlight some of the factors which have led to English playing the role that it has come to do in Swedish research and higher education. A starting point for this is internationalisation, and the internationalisation agenda, which to a great extent drive, and are driven by, the use of English. Internationalisation is a broad umbrella term covering a number of activities which for various reasons are deemed desirable by actors at individual, institutional and governmental levels. The complex interaction between these actors, their motives and their initiatives creates a fertile ground for the growth of English at Swedish universities.

The second section presents the approach to data collection and discusses some methodological considerations. As noted above, the limitations in the data are of some significance to the interpretation of the results, and these limitations are reported in detail in the second section.

The third section presents the results of the study in two parts. First, the language situation is described with respect to language of instruction, comparing on the one hand courses versus degree programmes, and on the other the level of study (undergraduate versus master's). The use of English and Swedish as languages of instruction is also presented by subject area, and for a sample of larger and smaller universities. The section ends with a systematic review of assigned reading in Swedish versus English, again based on a sample of larger and smaller universities. The last part of the section presents the findings for language of publication of doctoral theses and journal articles, by genre and subject area.

The report's final section discusses the trends that can be seen in the data and highlights the two sides of the internationalisation coin.

Acknowledgements

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1. Internationalisation affects and is affected by the language situation

This report studies the use of Swedish and English in teaching and publishing in research and higher education in Sweden over the past decade. As a starting point, this opening section discusses some of the driving forces behind the role that English has come to assume.

The well documented increase in the use of English in higher education and research in Sweden (e.g., Gunnarson, 2001; Gunnarsson & Öhman, 1997; Melander, 2004; Salö, 2010; Salö & Josephson, 2014; Salö, 2016) follows a global trend (e.g., Wächter & Maiworm, 2014), a trend generally attributed to internationalisation. A widely accepted definition of internationalisation within academia is:

> the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society (de Wit et al., 2015, p. 29).

Notably, this definition says nothing explicit about the linguistic prerequisites for or effects of internationalisation. Even less does this definition, or other key definitions, indicate that English, or any other language, should be considered to have a special status in, or to be a precondition for, internationalisation. We will return to the status of English soon, but first we must situate internationalisation as it is defined here in the contemporary Swedish academic context.

1.1 Drivers of internationalisation

Internationalisation in the Swedish university context is of course not a new phenomenon. In an interim report from an "Inquiry on increased internationalisation of higher education institutions" produced by the Swedish government (Statens Offentliga Utredningar; SOU), the investigators note that Swedish universities

> have always been internationalised institutions to varying degrees. Knowledge production within the universities has occurred with influence and participation from institutions and individuals in other countries … The university is an institution which is significantly older than the idea of the nation and as such extends beyond borders. (2018a, p. 63)

Despite the idea of cross-border knowledge production, internationalisation has not always been universally well received. At the beginning of the 20th century, there was a clear dividing line between subject areas in their view of internationalisation of Swedish research. Stier describes, from one camp, an uncritical adoption of "impetus from outside"

(a position attributed to the natural sciences, engineering and medicine) and, from the other (the humanities and social sciences), a "self-righteousness, fear, disregard and discomfort in the face of international comparisons" (2002, p. 60).

An in-depth historical exposition of the steps taken in the 20th and early 21st centuries toward increasing internationalisation of Swedish higher education and research is outside the scope of this report (interested readers are referred to Salö, 2010, who provides a thorough description of the main features of internationalisation in Sweden up to 2010). However, more recent analysis of internationalisation is relevant to the objectives of this report, as it contributes to an understanding of the language situation in Swedish higher education and research.

The directive from the Ministry of Education (Utbildningsdepartamentet, 2017) which commissioned the inquiry into internationalisation cited above gave the inquiry this brief:

> to propose new objectives and a new national strategy for internationalisation of higher education institutions encompassing both teaching and research;
>
> to propose ways for more students to obtain an international perspective in their education through, for example, more students, teachers and researchers studying or working abroad and better internationalisation at home. (p. 1)

The inquiry's report was delivered in two parts: an interim report (SOU, 2018a, *Internationalisation of Swedish Higher Education and Research: A Strategic Agenda*) followed by a final report (SOU, 2018b, *Internationalisation of Swedish Higher Education Institutions*). In total, the two reports span over 900 pages, a scope that suggests the breadth of the activities that fall under the heading of internationalisation. The investigators begin with the works of de Wit (2002) and Knight (2004) and identify four types of reasons for internationalisation: academic, socio-cultural, political and economic. All four have links to the language situation in one way or another.

Academic reasons and the matter of academic quality are prominent in the reports: "for universities, there are a number of reasons to expand international cooperation and international elements in teaching and research. The main reason is to increase the quality of operations" (SOU, 2018a, p. 17). International recruitment makes it possible to select teachers and researchers from a pool which, due to its larger size, can be supposed to include a larger number of prominent researchers than if recruitment were purely local. Students who participate in exchanges are given the opportunity to take courses not offered at their home universities, in new, international settings, leading to cross-border knowledge exchange. Publishing in international rather than local outlets allows research findings to become part of the forefront of the field, beyond joining a larger body of

knowledge. These are just a few examples of the mechanisms associated with internationalisation that are considered by many to enhance scholarly excellence.

In many respects, the same mechanisms also serve the socio-cultural goals of internationalisation. Student and staff mobility, whether through exchanges or through international recruitment, creates contact between cultures and between people with different life experiences, providing new perspectives and promoting intercultural understanding. Co-authorship across national borders often leads to new intercultural networks. When individual actors in the university system (students, teachers, researchers, administrators) express a belief in the importance of internationalisation, it is probably academic and socio-cultural motives such as these that most readily come to mind.

The same individuals may think less of the political motives, but these receive attention at governmental level. The internationalisation of higher education can contribute significantly to enhancing the profile of a country and thereby to its international standing. The final report (SOU, 2018b, p. 85) links internationalisation with the notion of Sweden as a "nation of knowledge" and notes that "the preconditions for education, research and innovation neither begin nor end at the national border. At an overarching level, the complex global situation makes it increasingly important to strengthen Sweden's profile and relationships abroad."

Economic motives can be found at all levels, even if they may take on different appearances for different actors. At the governmental level, competitiveness is an important economic issue. The directive *Increased internationalisation of higher education institutions* (2017:19) stresses, for example, that "Sweden's economy builds to a great extent on access to highly qualified educational, research and innovation environments, on the presence of Swedish companies in other countries, and on knowledge abroad about Sweden as a nation of knowledge and innovation" (p. 3). International competitiveness is also a labor issue: "Furthermore, the increasingly international world of work and society requires greater international competence on the part of those entering the labour market" (p. 2).

International mobility for students, teachers and researchers, co-authorship with researchers in other countries, international relationship-building, intercultural points of contact, an inclusive and open academia and the development of international competence create a need for an academic *lingua franca* to enable internationalisation; without a common linguistic platform, the activities of the Swedish university, in all its forms, would be inaccessible to all but the 0.001 percent of the world's population who speak Swedish.

1.2 The privileged position of English

In Swedish academia, as in so many other sectors in modern, globalised society, English has become a dominant *lingua franca*; the precise relationship with Swedish (i.e., the extent to which Swedish is the main language, a parallel language, or plays a subordinate

role) varies across subject areas and types of academic activity. However, few would dispute that English has come to play an important role in academia. As Salö noted, "English has a special status in higher education and research" (2010, p. 10), and a study of language policy documents from Swedish universities found that "there are for all practical purposes two languages with operational relevance: Swedish and English" (Karlsson, 2017, p. 23). The extensive use of English is regarded by many as a natural consequence of internationalisation or (sometimes) as an unproblematic precondition for it, rather than a deliberate choice.

If the position of English is an undeniable fact, it is equally undeniable that it is a disputed and critical fact. The consequences of the status of English, particularly in relation to other languages, have been discussed and continue to be discussed (e.g., Hultgren, 2020; Phillipson, 2017; 2020). This and related issues are not only debated (see Salö, 2010; 2016 for a review of the debate), they are concretised in policy documents and indeed law: the 2009 Language Act.

In formal documentation related to internationalisation, such as universities' internationalisation strategies, internationalisation is frequently equated with English. For example, Stockholm University's internationalisation plan (Stockholm University, 2019, p. 4) includes the following: "The opportunity to study in English at the university should be better publicised." Karlstad University's action plan for internationalisation (Karlstad University, 2020, p. 2), notes that: "an extended range of courses offered in English is needed to encourage inbound exchange students to study at the university."

In the reports stemming from the inquiry cited above (SOU, 2018a; 2018b), English — reading between the lines — enjoys the same privileged position. This is not unimportant since the inquiry was intended to be a guide for national (and ultimately local and university-specific) measures that aim to increase internationalisation.

The reports from the inquiry alternate between references to "English" and to "other languages." For example, under the heading "Transparency and clarity in the use of English and Swedish" in the section on "Governance," the objectives and recommendations refer to "English" while the proposed legislative action refers to "other languages":

> Objective: In order to achieve [this] objective, it is necessary that the conditions for *the use of English as well as Swedish* at the universities … are clarified.
>
> The inquiry's proposed legislation: That the Government regulate the right to use *languages other than Swedish* in public universities' … activities.
>
> The inquiry's recommendations: That higher education institutions … develop guidelines for the choice of language that indicate *how Swedish and English should be used* within the university.
>
> (SOU, 2018a, p. 155, our italics)

In discussing their recommendations, the authors note that

> guidelines for the choice of language can provide transparency and clarity regarding how other languages should be used, but also clarity regarding Swedish. … It is also necessary to clarify when teaching, lectures and other discussions should take place in other languages. (p. 157)

After repeated references to "languages other than Swedish," though, the authors concede that that means "in practice most often English" (p. 156).

These reports should not be interpreted as a blessing to disregard the intentions of the Language Act. Manifestly, languages other than Swedish and English are used at Swedish universities; for example, some scholarly works are published in languages other than English, and other languages are naturally used in conversations between colleagues or students with another common language. However, in practice, apart from Swedish there is no language with greater functionality in the academic environment than English. As early as 2004, Melander noted that the "language choice triangle" (with the corners "English as the main language," "only Swedish," and "European language diversity,") with which Gunnarsson and Öhman (1997, pp. 69–73) described the language situation in Swedish academia had become more or less obsolete: "In 2004, the triangle must be said to have turned into a line with the two outer poles of Swedish and English" (p. 141). The reports should therefore probably be interpreted as meaning that "languages other than Swedish" actually refers, in virtually every instance, to English and only English.

The central *lingua franca* function of English appears elsewhere in the reports as well, for example in the section on internationalisation at home (which the authors define, following Beelen & Jones, 2015, p. 169, as "the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments"):

> One way to contribute to internationalisation at home is to offer instruction in languages other than Swedish … This gives students the opportunity to develop their language skills and access to teaching materials that are not available in Swedish. Teaching primarily in English also paves the way for students and teachers from other countries to be able to come to non-English-speaking countries for study and work, thereby enabling international contact at home. This in turn requires the university to be prepared to communicate with students and teachers in foreign languages. (SOU, 2018a, p. 269)

Even if the reports to some extent recognise the problems commonly associated with interaction in English in the learning environment (mainly a lack of language skills among teachers and students), throughout the report two things emerge clearly: on one hand, support for universities to make their own informed choices about language of instruction; and, on the other hand, a perception that a prominent role for English is inevitable.

1.3 International students, researchers and teachers in Sweden lead to the use of English

The high proportion of international students and foreign researchers and teachers in Sweden can be considered either a cause of, or an effect of, the use of English in higher education and research. Figure 1 shows the total number of inbound international students admitted to Swedish degree programmes and courses between 2000 and 2020. A particularly strong increase is evident in the first decade, but in connection with the introduction (in 2011) of registration and tuition fees for most foreign students from countries outside the EU/EEA region or Switzerland, the number of new inbound students decreased. A cautious but steady rebound has subsequently begun.

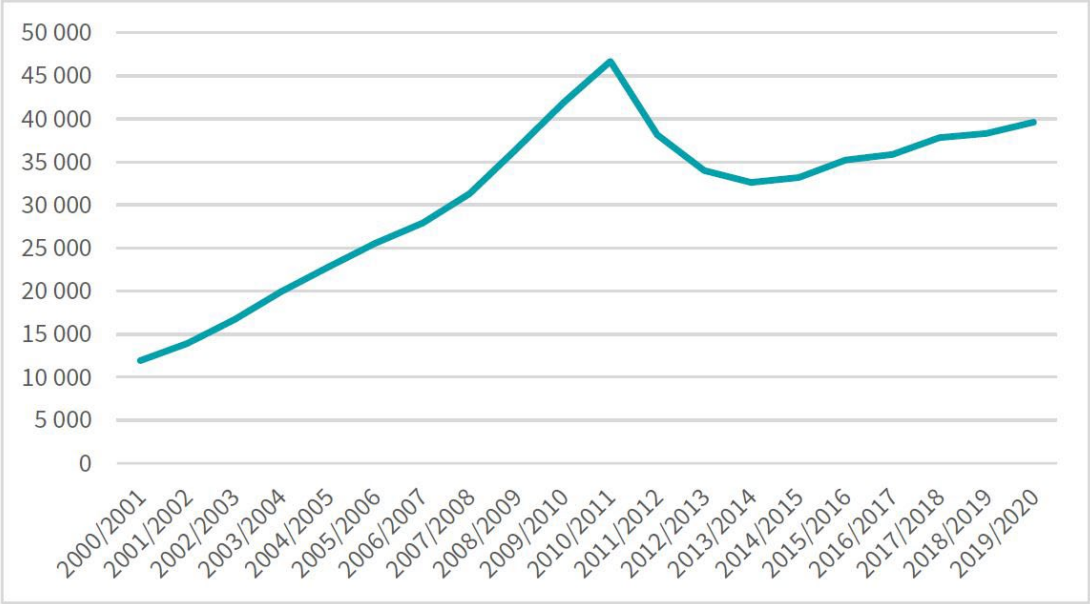

Figure 1. Total number of inbound international students at Swedish universities 2000–2020 (UKÄ, 2020a).

With nearly 40,000 international students (excluding doctoral students), or just over 10 percent of all students participating in Swedish higher education, a pronounced demand arises for a language of instruction other than Swedish, and the very fact that Sweden offers so much teaching in English is a very important contributing factor to international students choosing to study there (cf. Salö, 2010, who references a 2007 survey conducted by the Swedish National Agency for Higher Education and the Swedish Institute). The distribution of inbound students across various subject areas differs widely (Universitetskänslersambetet (UKÄ) & Statistiska centralbyrån (SCB), 2019a). Figure 2 shows, for the largest subject areas, that the majority (31 percent) of the international students are in programmes in the social sciences or business, followed by engineering & technology (23 percent). Next are the humanities (17 percent), the natural sciences (17 percent), medicine and health care (8 percent) and teacher training (3 percent).

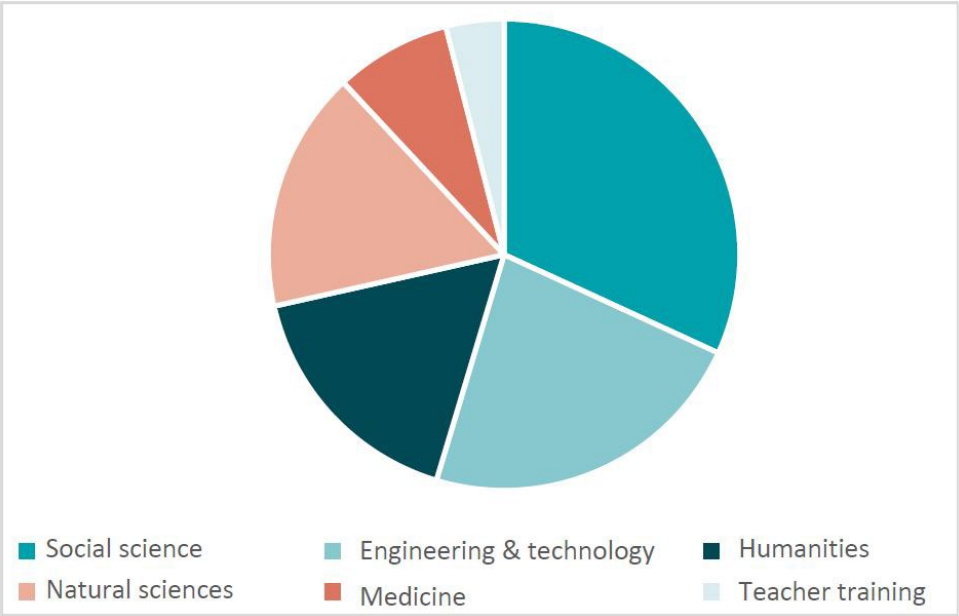

Figure 2. Proportion of inbound international students in 2018/2019 by subject area (courses and programmes) (UKÄ/SCB, 2019a).

However, it is not only inbound students who contribute to internationalisation. Reports from UKÄ and SCB (2018; 2019b, 2020b) show that the proportion of foreign researchers and teachers is steadily increasing; in 2018, this group accounted for 35 percent of all research and teaching staff (compared with 33 percent in 2017); in 2020, the figure was 36 percent. The proportion of research and teaching staff with a foreign background is highest (73 percent) among early-career scholars such as postdoctoral researchers (UKÄ, 2019; UKÄ & SCB, 2019b); see Figure 3. For these researchers and teachers with a non-Swedish background, the use of English, for teaching as well as publication, is a natural choice in the Swedish context, even if for many it is not their first language.

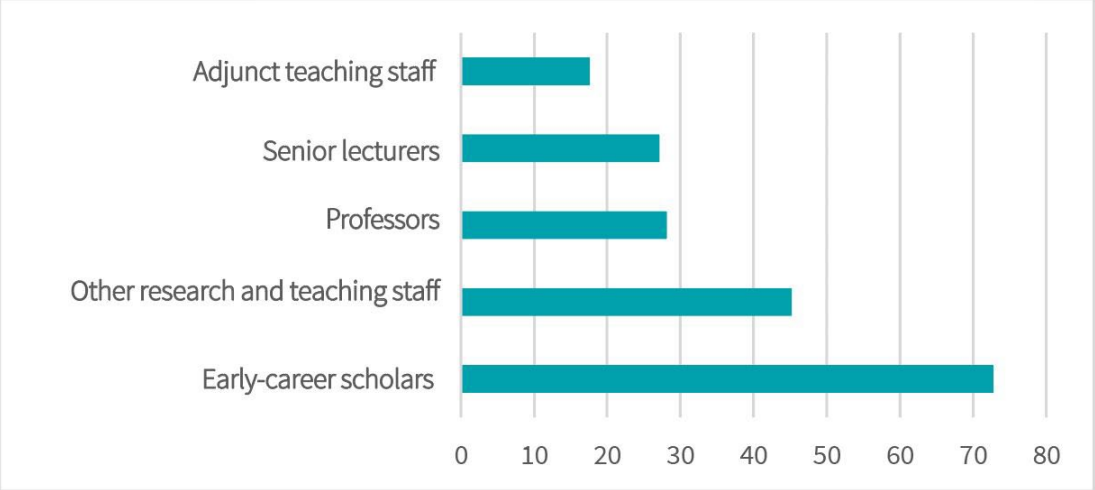

Figure 3. Proportion of research and teaching staff with a non-Swedish background in 2019 by rank (percentage of each rank) (UKÄ/SCB, 2019b).

The international academic staff are not distributed evenly over subject areas. Most non-Swedish researchers and teachers are found in the natural sciences, with as many as 50 percent born abroad. The distribution shown in Figure 4 broadly reflects the proportion of teaching in English in the subject areas examined in this study (see Section 3.1).

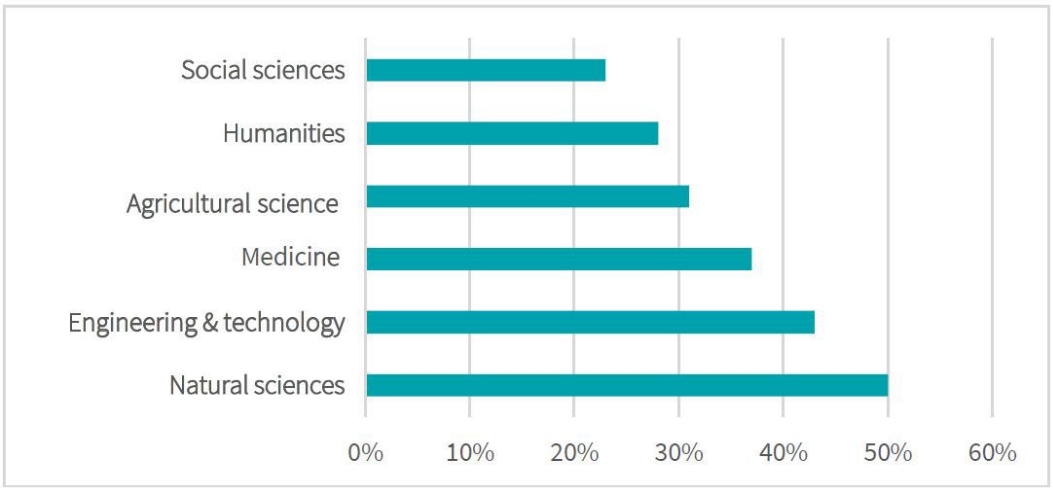

Figure 4. Proportion of research and teaching staff with a non-Swedish background by subject area (percentage of the total number of researchers and teachers in the area) (UKÄ/SCB, 2019b).

1.4 Publication in English is incentivised and is a natural choice

Despite the broad perspective taken by the inquiry on internationalisation ("the mission of the inquiry covers both higher education and research at higher education institutions," SOU, 2018a, p. 16), neither the interim nor the final report contains any recommendations regarding the language of research publications at Swedish universities. One reason may be that such recommendations could be perceived as restricting researchers' autonomy. Another could be that this is considered a non-issue by many involved (especially in certain subject areas).

Karlsson's report (2017) addresses the language of theses, but it is important to remember that her interest was specifically in university language policy documents, which do not necessarily reflect actual publication practices among researchers. Karlsson notes that "the regulations for the selection of the thesis language … reflect the tension between a desire to maintain the Swedish language as a scholarly language and the desire to make research results visible in an internationalised communication situation" (p. 29).

Even if a number of universities, through their language policies or equivalents, encourage researchers to make an active choice of language based on the publication traditions of their subject, it is clear that universities often believe that English should have a prominent position as a language of thesis publication (Karlsson, 2017). Karlsson further notes that "several institutions, such as the University of Gothenburg and Malmö University, have articulated an objective that the proportion of English-language dissertations should

increase" (2017, p. 28); "the importance of international publication is thus ascribed a particular value, while the preservation of a Swedish-language publishing tradition is not ascribed the same value" (p. 30).

The language choices that Swedish researchers make in other kinds of research publications (journal articles, book chapters, books, conference articles, etc.) have received less attention in the literature, although such publications (especially journal articles, which make up half of all publications) are important tools for internationalisation. Salö and Josephson (2014, p. 273) noted that "few researchers face a real choice about language for their publications." Even if researchers can in theory choose publication outlets freely (or guided by the traditions of the subject area), many are probably influenced by their universities' bibliometric mechanisms. Such mechanisms aim to reward excellent research (setting aside the contestable nature of this notion), which in many contexts is synonymous with publication in high-impact outlets, and in such outlets, English is usually the dominant language of publication.

1.5 English is both cause and effect in internationalisation

More internationalisation means more English and therefore in many ways less Swedish. In purely theoretical terms this need not be the case, but in practice it generally is. An important observation based on this fact is that the relationship between English and internationalisation is mutual: internationalisation not only drives the use of English at universities; the increased presence of English also drives internationalisation. As more courses are offered in English, more international students can participate in them, and internationally recruited teachers and researchers can teach on the courses and, at the same time, perhaps develop new courses — to be taught in English. As universities ensure that more new staff members can use English, greater numbers of them are able to participate in mobility activities. As research results are increasingly published in English, the international impact of the research increases, which opens up opportunities for international cooperation. If taking courses taught in English improves students' English language skills and/or their self-confidence (both of which are often assumed to be outcomes, although neither has been unambiguously demonstrated), they may become more likely to participate in mobility activities themselves.

In summary, internationalisation is a broad umbrella term that covers a number of activities which, for various reasons, are deemed desirable by actors at individual, institutional and governmental levels. The complex interactions between actors, motivations and initiatives create an effective driving force for the growth of English at Swedish universities.

2. Data and methodology

Before presenting the results of the study, in this section we provide a description of the data and methods.

2.1 Language of instruction

For language of instruction, no complete statistics are available, most notably prior to 2007, the first year for which central records were kept.

All data on language of instruction used in this study were provided by the Swedish Council for Higher Education, a government agency which provides support services for higher education institutions. The data included language of instruction for undergraduate and master's-level courses and programmes (with the data for spring and autumn semesters merged to provide a figure for the entire academic year). The figures could be filtered by subject area and university (information on the language of instructtion was available for 40 universities).

A few points on the data for language of instruction on which this report is based should be noted, since in a few respects they do not reflect all course offerings:

1. Only data from universities using the NyA admissions system are included; this means that the coverage of the underlying data is nearly but not entirely comprehensive, since a few smaller institutions in areas such as the creative subjects do not use NyA.
2. Some universities offer courses that students do not register for (generally courses offered exclusively within degree programmes), which are therefore not included in NyA and are therefore not visible in the data. For most universities, however, most courses are included.
3. NyA also contains courses with other languages of instruction than English or Swedish, for instance, language courses which are taught through the target language. These constitute a very small proportion of the total offerings and have not been included in the figures reported here. In a few cases, data about the language of instruction are missing (possibly because the university did not register that information in NyA); these have also been disregarded.

All raw data (as delivered from the Swedish Council for Higher Education) are freely available (contact the authors).

2.2 Assigned reading

The language of assigned reading is not centrally recorded by any public body, so a study was conducted for this report. It was not feasible to determine the language(s) used in assigned reading in all university courses in Sweden (there being more than 16,500 courses,

and the work being manual). To capture a cross-section of the assigned reading landscape, we sampled ten universities: the five largest (Stockholm, Gothenburg, Uppsala, Lund and Linnaeus) and five smaller ones (Dalarna, Gävle, Skövde, Jönköping and Södertörn). We limited the study to undergraduate courses, where Swedish has its strongest position as a language of instruction, and to courses with Swedish as the indicated language of instruction, as it can be assumed that in courses with English as the language of instruction, the assigned reading is also in English.

For each institution, reading lists were identified through partially varying approaches (because universities made the information available in different ways), with the objective of finding assigned reading for as many courses as possible. We searched the universities' websites, course catalogues and open databases for courses held in the 2020/21 academic year, and then searched for reading lists for those courses. The lists were found in various places, for example included in syllabi, on the website of the course-offering department, etc. For each course, the language of each assigned text was recorded.

Reading lists often distinguish between required reading and supplementary or recommended reading. Even if students may not read all texts that are assigned as required (Pecorari et al., 2012), it is reasonable to assume that compulsory texts form part of the core content of the course. For this reason, we focused on required reading, and texts indicated as "optional," "recommended," "reference," etc. were excluded.

In quantifying the amount of reading that students are expected to do in English or Swedish, the scope of a text is naturally relevant. However, it was not feasible to take into account factors such as the number of pages since such information was not consistently provided. In the presentation of the results of the study, a distinction is made between books on the one hand and book chapters and articles on the other. A small number of other genres, e.g., government reports and legislation, were also identified. A category "other" was created for these. However, there were relatively few texts in this category (they accounted for just under 7 percent of the total); for this reason, they are not included in this report. Also included on reading lists were course packs, or a remark that a number of other texts would be "announced at a later date." Since neither the language nor the volume of reading included in them were specified, they too are excluded from the findings.

A total of 13,273 texts assigned within 1,706 courses were identified. The majority of the data came from the five largest universities, with Linnaeus University supplying the most (378 courses), followed by Lund University (267 courses). The available data from the Universities of Gävle and Jönköping was significantly more limited (35 and 30 courses, respectively). Courses in the humanities and social sciences account for the majority of the data (559 and 514 courses, respectively) with somewhat less coming from the natural sciences, engineering & technology and medicine/health care (257, 242 and 134 courses); these differences in the data set should be taken into account in considering the general

trends in the data. The information on assigned reading presented here cannot be regarded as comprehensive, and so generalisations about the situation outside of the universities sampled must be made with caution. A large number of the courses initially identified (approximately two-thirds) lacked information on assigned reading which was publicly available at the time of the search. As a result, the data available varied from one subject area to another, and across universities. However, there is no obvious reason to believe that the courses lacking publicly available reading lists differ systematically from those for which they were available.

2.3 Research publications

No complete historical or contemporary statistics exist for all scholarly publications in Sweden. The closest is the Libris database (https://libris.kb.se), a catalogue of the collective holdings of Swedish libraries, which also includes a record of the research outputs of staff at Swedish universities (regardless of whether they are held in a library's collection). The database contains over seven million titles catagorised by genre and language. For this study, the Swepub search engine (http://swepub.kb.se) was used to search Libris for scholarly publications recorded by Swedish universities as having been published by their researchers. Swepub's public interface allows the user to search by genre; we searched for doctoral theses and journal articles and filtered by year of publication. To see trends in language of publication over time, a time frame of 40 years was chosen, i.e., from 1979 to 2019. It should be noted that the participating Swedish universities (approximately 30 of them) have different coverage rates over this time period, which means that the older data do not have the same reliability; generally, it can be said that the coverage rate for registered publications begins to improve around 2000–2005. Nonetheless, we have reported data from the entire period.

Once genre and year of publication have been selected, a number of other filters can be applied. At this point we filtered for subject area (according to categories used by the Swedish Higher Education Authority (Universitetskanslersämbetet, or UKÄ) and Statistics Sweden (Statistiska centralbyrån, or SCB), at their most general level), and for language. This resulted in the number of doctoral theses and journal articles published in Swedish, English or other languages for each year in question. No distinction was made between traditional monograph theses and article compilations. The language recorded in Swepub should (according to national guidelines) be the one used to communicate the main intellectual content of the publication.

In this report, we group the data in five-year periods from 1979 to 2019. It should be noted that the filtering based on subject areas that was done in this study in some respects differs from the principles that Salö (2010) used; for this reason, comparisons between Salö's data and this report's data should be made with some caution.

For journal articles, the decision was made to include data from all kinds of journals, i.e., those classified in Libris as peer reviewed, popularisation of research and "other." Regardless of the type, all communicate academic findings with a connection to a Swedish university and can therefore reasonably be considered to be publications which disseminate research of some sort.

As in all large databases of this kind, some double registration occurs. For example, we found a small number of articles and theses classified as belonging to more than one subject area (leading to them being counted twice); other anomalies also exist in the Libris data (see http://swepub.kb.se for further information). However, since the principle aim of this study is to identify overarching trends in the language situation, these anomalies can be disregarded, as once again there is no reason to believe that they impact publications in one language more significantly than another.

Finally, it should be noted that Libris is updated on a rolling basis; there can be delays in publications being recorded (sometimes by several years), and some publications are reclassified for various reasons after initially being input. For this reason, there may be minor differences between the data reported here and what may be found in Libris at a later date.

3. Language of instruction and language of publication

This section presents and discusses the findings relating to language of instruction, both in terms of the language used in the classroom on programmes and courses, and in terms of assigned reading. The language of research publication in doctoral theses and in journal articles is then presented. Throughout, this report considers variations between different subject areas, apart from degree programmes, for which neither the Swedish Council for Higher Education nor the Swedish Higher Education Authority maintain statistics. It should be noted that Swedish Council for Higher Education and Swepub/Libris do not use the same subject categorisations, and for this reason, slightly different subject divisions are used in reporting the findings[3].

3.1 Language of instruction

In this section we describe the findings for language of instruction in degree programmes and courses (based on the information provided by each university). In addition, findings for the language of instruction are presented by subject area and by university. The data reported cover the period up until 2020 and beginning with the first year for which reliable statistics are available; this varies from 2006 (for degree programmes) to 2010 (for courses). It is important to remember that formal language of instruction as identified by universities may not be the language actually used in practice; in offering programmes, courses, or in conducting individual teaching and learning activities, departures from the prescribed language of instruction may arise (as Söderlundh, 2012 shows). It is also important to remember that the number of students experiencing a given language of instruction varies to a great extent according to (i) the level of study (generally, there are more under-graduates than master's students), (ii) courses *versus* degree programmes) and (iii) subject area (some subject areas admit more students than others). All three of these variables together affect how many students are ultimately exposed to Swedish and English.

Language of instruction in degree programmes: English gains at the expense of Swedish

In degree programmes (regardless of the level of study), Swedish had a relatively strong position during the period from 2007 to 2010. However, it is evident (see Figure 5) that the position of English has strengthened since then. In 2007, 13 percent of all *degree*

[3] The course data provided by the Swedish Council for Higher Education is categorised as follows: the humanities (including theology); the social sciences (including law); creative subjects (e.g., fine arts, drama, etc.); medicine (including odontology); health care; natural sciences; and engineering & technology. For publications, the Libris/Swepub data uses the following categories: natural sciences; engineering & technology; medicine and allied health professions; the humanities; and the social sciences.

programmes were held in English and 87 percent in Swedish; 13 years later, the figure for English had increased to 28 percent.

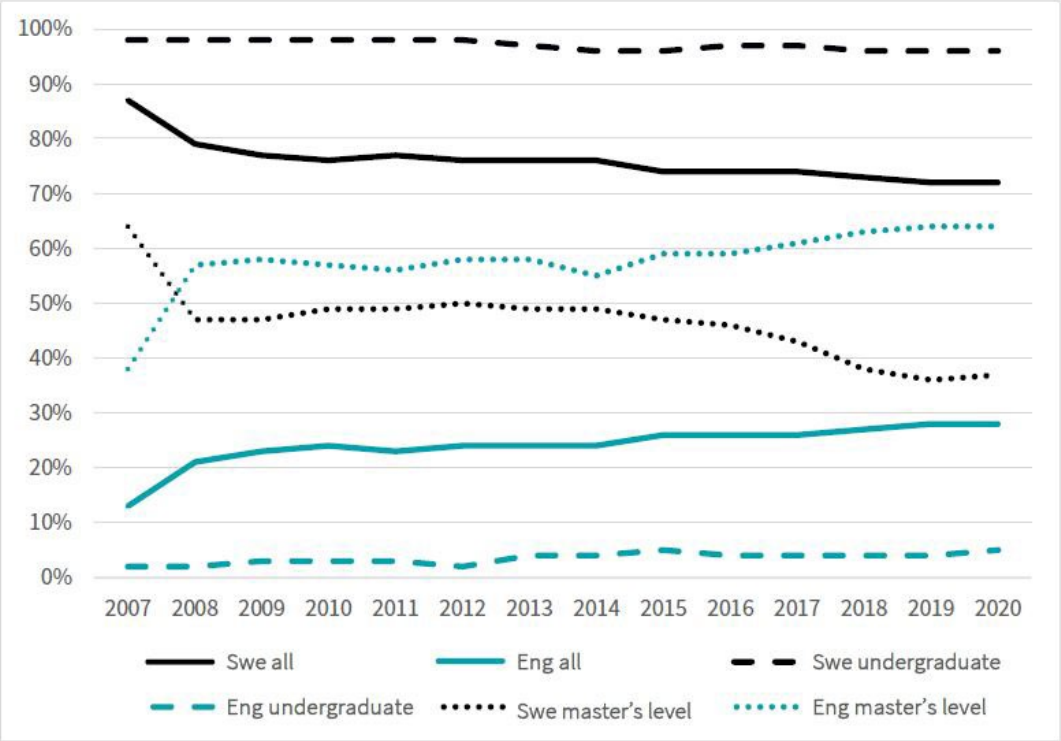

Figure 5. Use of Swedish and English. The distribution of Swedish vs. English (% of total number) for (i) all degree programmes, (ii) undergraduate programmes and (iii) master's-level programmes, 2007–2020.

The increase in English-taught degree programmes is attributable primarily to the very large increase at master's level. Figure 5 shows that Swedish was most common in master's programmes at the beginning of the period: in 2007, 64 percent of programmes used Swedish as a language of instruction, compared with English, at 38 percent (the total exceeds 100 percent due to some master's programmes being offered in more than one language in the same academic year). During the period considered here, the percentage of programmes taught in English increased by 26 percentage points. The largest increase took place between 2007 and 2008 (an increase of 19 percentage points) and can directly be attributed to the Bologna Process and the enthusiasm for internationalisation at the time; thereafter, the increase became significantly more modest, and it is interesting that the proportions of English and Swedish remained essentially constant during the five-year period between 2008 and 2013). In the most recent decade, there was an increase in the proportion of English-taught programmes from 57 percent (2010) to 64 percent (2020), corresponding to an average rate of increase of 0.7 percentage points per year. It is noteworthy that a late upswing in the rate of increase can be seen: between 2016 and 2020, there was an increase of 5 percentage points, equivalent to 1.25 percentage points per year.

In *undergraduate* degree programmes, the picture is dramatically different; Swedish continues to have a very strong position as language of instruction (see Figure 5). The change over time (2006–2020) is also minor: in 2006, 99 percent of all programmes were held in Swedish, and in 2020 it was still 96 percent. Since the majority of undergraduate students have Swedish as their first language, it is natural (cf. Norén, 2006) that Swedish is the dominant language of instruction at this level.

Language of instruction in courses: Swedish is most used on the undergraduate level, while English is somewhat more common at master's level

Across *all course offerings* (i.e., disregarding level of study), Swedish is the most common language of instruction, and has been throughout the entire period considered here (see Figure 6).

However, the proportion of courses in Swedish decreased by 11 percentage points from 81 percent to 70 percent in the most recent decade. During the same period, English made corresponding gains, up from around 19 percent to 30 percent.

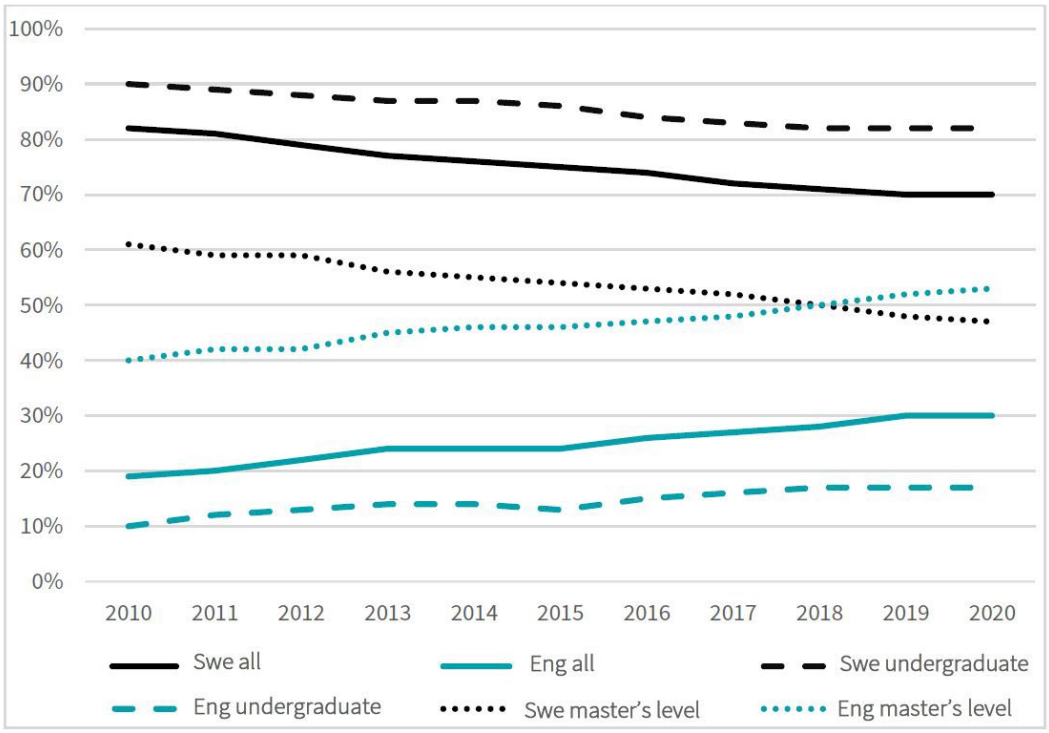

Figure 6. Use of Swedish and English in courses. The distribution of Swedish vs. English (percentage of the total number) for (i) all courses, (ii) undergraduate courses, and (iii) master's-level courses, 2010–2020.

At *master's*-level — just as is the case for master's programmes — the picture is very different (see Figure 6). In the autumn of 2020, English was the most common language of instruction (53 percent of all master's courses were taught in English), although the gap

between English and Swedish (47 percent) was not large. The figure also shows that English reached this position quickly: during this ten-year period, the percentage of English increased from 40 percent to 53 percent, an average rate of increase of 1.3 percentage points per year, although the rate of increase now seems to be slowing marginally. Just as with programmes, Swedish is more common as the language of instruction for *undergraduate courses* (Figure 6); this was true in 2010 (Swedish = 90 percent; English = 10 percent) as well as in 2020 (Swedish = 82 percent; English = 18 percent). However, a growth in the proportion of teaching in English on undergraduate courses can be discerned, and the rate of increase corresponds to the development of master's programmes, i.e., 0.7 percentage points per year. Salö's prediction (2010, p. 56), that "there is reason to believe that more and more teaching will be given in English" thus seems to also apply to undergraduate courses.

The relationship between courses and degree programmes in this time period with regard to the language of instruction can also be noted. Figure 7 shows that in 2010 English was used as the language of instruction in 19 percent of all courses and 24 percent of all programmes (regardless of level of study). The use of English has increased gradually in both courses and programmes in the past decade, but the increase is significantly larger for courses than for programmes; in 2020, 30 percent of courses (an increase of 11 percentage points) and 28 percent of programmes (an increase of 4 percentage points) were given in English. During the same time period, the relationship between English-taught courses and programmes also changed; at the beginning of the period, English-taught programmes were more common than courses, but in 2020 the opposite was the case.

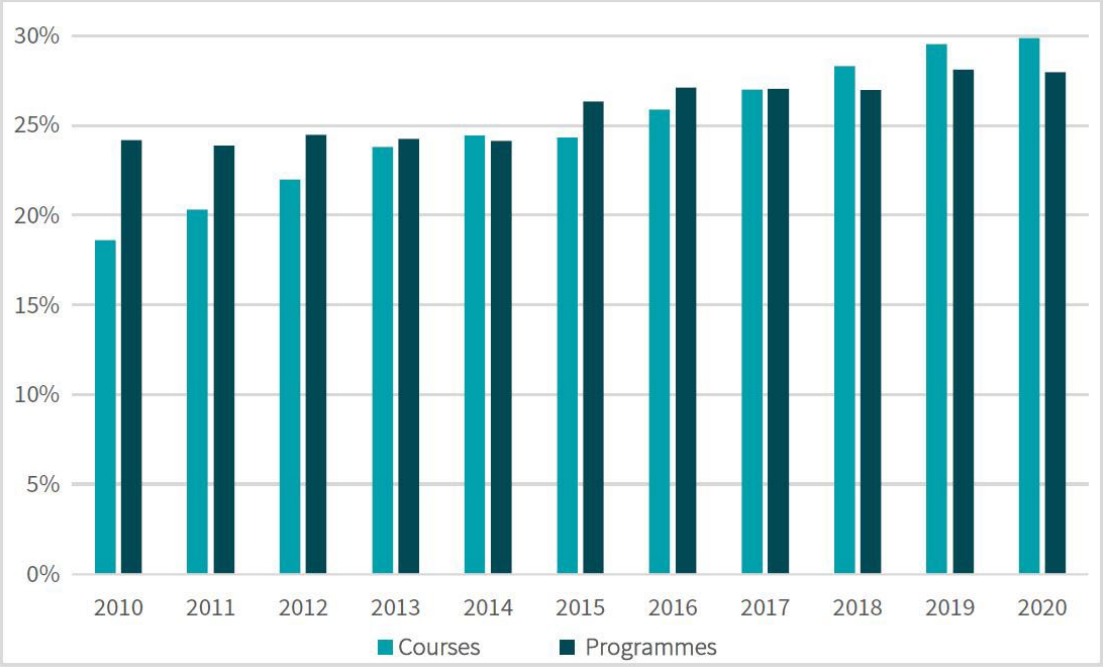

Figure 7. Use of English as the language of instruction in courses and programmes. Percentage of courses and programmes (undergraduate and master's) with English as the language of instruction.

Based on the data presented in this section, we can note that the use of English (in programmes and courses) is inverted on the two levels of study: at the master's level, English has developed faster in programmes than in courses, but at undergraduate level, the relationship is the opposite overall. A probable explanation for this difference is the Bologna Process: master's programmes became one-year programmes granting master's degrees that would be recognised throughout Europe. There was a significant incentive in Sweden to develop one-year master's programmes that would attract a new group of students to pursue these internationally recognised degrees. The 2007 higher education reform (cf. *New world — new university*), which was a direct result of the Bologna Process, probably drove the rapid development of programme offerings in English at master's level beginning in 2008. Those taking master's-level courses outside of a degree programme are more often local students, often pursuing professional development, and generally can study through the medium of Swedish. Consequently, the incentive to develop English-taught courses at master's level has historically not been as strong, but as this report shows, the proportion of such courses is growing. At undergraduate level, by contrast, one of the drivers for English is student mobility. Inbound international students (e.g., on Erasmus exchanges) choose individual courses on a semester-by-semester basis. Such students need English-taught courses at undergraduate level. Entire degree programmes aiming to attract both international and Swedish students are not yet prominent at undergraduate level.

Great disciplinary variation in language of instruction

The picture of language of instruction that emerges above can be further nuanced by considering variation among subject areas. Findings are presented here for all seven subject areas covered by the Swedish Council for Higher Education statistics. Master's courses are singled out for attention because the development there, generally speaking, has been particularly significant and is therefore worth studying in detail.

Figure 8 shows the trends in English-taught courses for all subject areas. The following observations can be made: (i) of seven subject areas, Swedish is still the most common language of instruction in four. In engineering & technology, natural sciences and, since 2018, the creative subjects, the language of instruction is more often English. In one of the other four, social sciences, Swedish is slightly more common than English (56 percent compared with 44 percent); (ii) the proportion of English-taught master's courses has increased over the past ten years in all subject areas; (iii) unsurprisingly, this growth started from higher levels for certain subject areas (e.g., natural sciences and engineering & technology) than for others (e.g., healthcare and medicine); (iv) the increase varies between 19 percent and 107 percent (on average, it is 41 percent); (v) in percentage points, the increase is the greatest in the humanities (up 16 percentage points over the period) and the least in the area of care and nursing (up 3 percentage points).

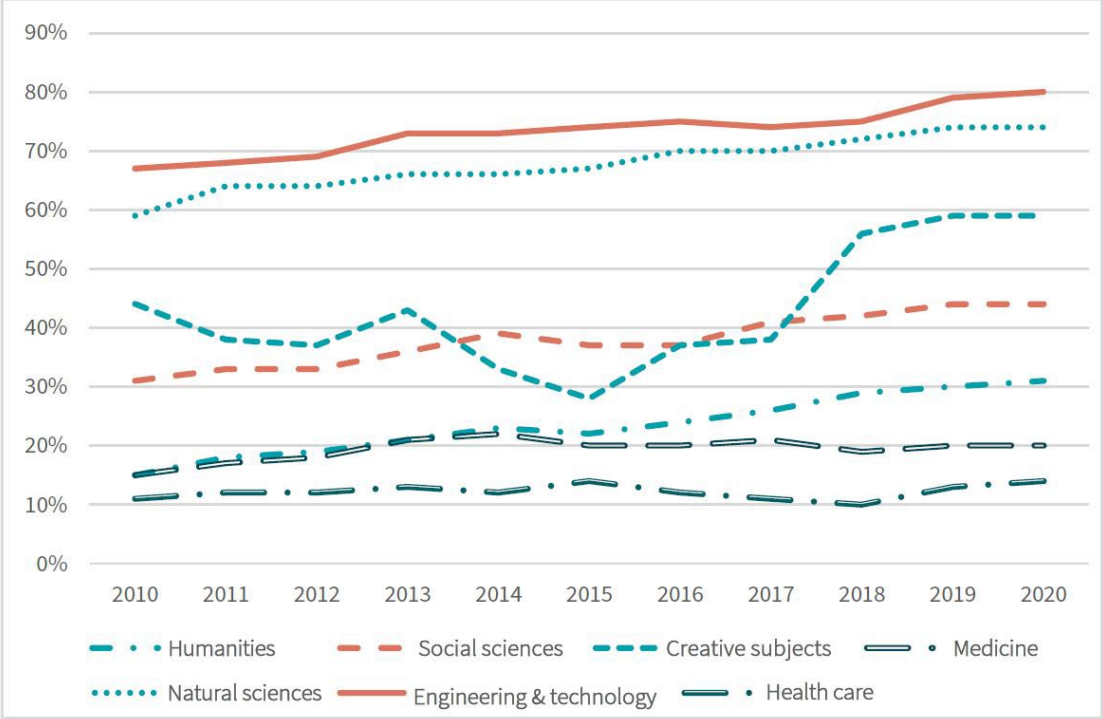

Figure 8. Use of English as the language of instruction in master's-level courses. Percentage of master's-level courses (percentage of the total number of courses) by subject area with English as the language of instruction, 2010–2020.

The trend towards more teaching in English in the humanities has been very clear in the past decade, although Swedish remains the most frequently used language of instruction. In ten years, the proportion of English-taught master's courses increased by 16 percentage points (from 15 percent to 31 percent, an increase of 107 percent) and the rate of increase was on average 1.6 percentage points per year (approximately 1.8 percentage points per year for the period 2015–2020). Extrapolating from the figures for 2020 — when 1,984 master's courses were offered in the humanities, of which 622 were taught in English — an additional 50 to 70 English-taught courses would be expected for 2021; some of these would involve a change in the language of instruction from Swedish to English, and others would be new courses developed to be taught in English.

In the social sciences, the increase for English and corresponding decrease for Swedish was also significant during this period (see Figure 8). Although the average rate of increase is marginally lower (1.3 percentage points per year) than for the humanities, a different starting point (with English used in 31 percent of the courses in 2010) meant that the gap between English and Swedish had nearly closed by 2020. If this trend continues, it is reasonable to assume that English, which was used in 44 percent of courses in 2020, will have overtaken Swedish as the most common language of instruction among master's courses within five years.

The relationship between Swedish and English as the language of instruction in medicine differs dramatically from that in the humanities and social sciences, both in terms of the scope of the use of English and with regard to the development over time. Figure 8 shows that English was used in only 20 percent of courses in 2020, and although this represented an increase on 2010 (when it was at 15 percent), the balance between Swedish and English has broadly been unchanged since 2013; it is therefore likely that Swedish will retain its strong position in medicine for some time to come.

The relationship between Swedish and English in the area of health care is very similar to that in medicine (see Figure 8): Swedish is the dominant language of instruction with 14 percent of courses using English in 2020, and the changes over time quite small (3 percent over the period under investigation). However, it is possible to see more recent change: in the most recent two-year period, the use of English increased by an average of 2 percentage points per year.

In the natural sciences, the relationship is reversed with respect to the subject areas discussed above; English is the clear leading language of instruction for master's courses, and was throughout the entire time period. Figure 8 shows that in 2010 English was used in 59 percent of courses; this figure had increased to 74 percent by 2020, an increase of 15 percentage points (or 26 percent) in one decade, in percentage points the second largest increase (after the humanities) and particularly striking since the baseline for this increase was already high. The average rate of increase is essentially the same throughout the ten-year period, approximately 1.4–1.5 percentage points per year.

The trend in the relationship between English and Swedish in engineering & technology is essentially the same as in the natural sciences: English is used most (in 80 percent of courses) and was more common than Swedish as early as 2010 (see Figure 8). The increase over the ten-year period was 13 percentage points and the rate of increase was therefore approximately 1.3 percentage points per year but has been higher (nearly 2 percentage points per year) since 2017.

The total number of courses in the creative subjects is quite small compared with the other subject areas, although it has increased greatly since 2010; in 2020, only 160 master's courses were offered, compared with 2,100 courses in engineering & technology and 2,300 courses in the natural sciences, and nearly 3,000 courses in the social sciences. The development with regard to the language of instruction in the creative subjects has some interesting features; Figure 8 shows that the use of Swedish and English fluctuated considerably between 2010 and 2020, and so there is reason to believe that it will continue to do so in the future. Taking into account only the starting (2010) and end (2020) points, English appears to have surpassed Swedish as the most common language of instruction in master's courses; the use of English increased from 44 percent to 59 percent, but the increase was even more dramatic in the last five-year period where an increase of a full 31 percentage points can be seen, a considerable rate of increase over a short period, and

corresponding to an average of 6.2 percentage points per year. It is of possible relevance that the overall number of courses during this period was relatively constant, which may indicate that many master's courses changed from Swedish to English as the language of instruction, but the data are not sufficiently granular to provide firm evidence for that conclusion.

Language of instruction at selected universities

In the research literature on English as a language of instruction, several authors have argued that there is a connection between the university's profile and choice of language of instruction (e.g., Hultgren, 2014; Hultgren et al., 2015; Wächter & Maiworm, 2014). Based on their research in higher education at a European level, Wächter and Maiworm assert that English as a language of instruction is more common in universities that:

- have larger rather than smaller student populations
- are research-intensive rather than focused on education
- award many doctorates in a large number of subjects
- have a large number of foreign students.

Within the framework of this mapping of the language of instruction, it is relevant to address these assertions. For this reason, a sample of ten institutions was selected consisting of the five largest Swedish universities (Stockholm, Gothenburg, Uppsala, Lund, and Linnaeus) and five smaller universities (Dalarna, Skövde, Jönköping, Gävle and Södertörn).

All institutions in the *large university group* have large student bodies (they are the five largest in Sweden in this respect) and large numbers of inbound international students (all had more than 2,000 inbound students in the 2019/2020 academic year); they can also be said to have clear research profiles, as indicated, for instance, by having many students enrolled on research postgraduate programmes and awarding large numbers of doctoral degrees every year. For the *small university group*, the situation is different; those included in the sample all have fewer than 10,000 students, a primary focus on teaching rather than research, relatively fewer inbound students and significantly fewer doctoral degrees awarded annually, when compared with the largest universities (UKÄ, 2020a; UKÄ & SCB, 2020).

For all institutions in the sample, we analysed the relationship between English and Swedish in *master's degree programmes* at two points in time, 2010 and 2020. A number of observations can be made based on the results shown in Figure 9.

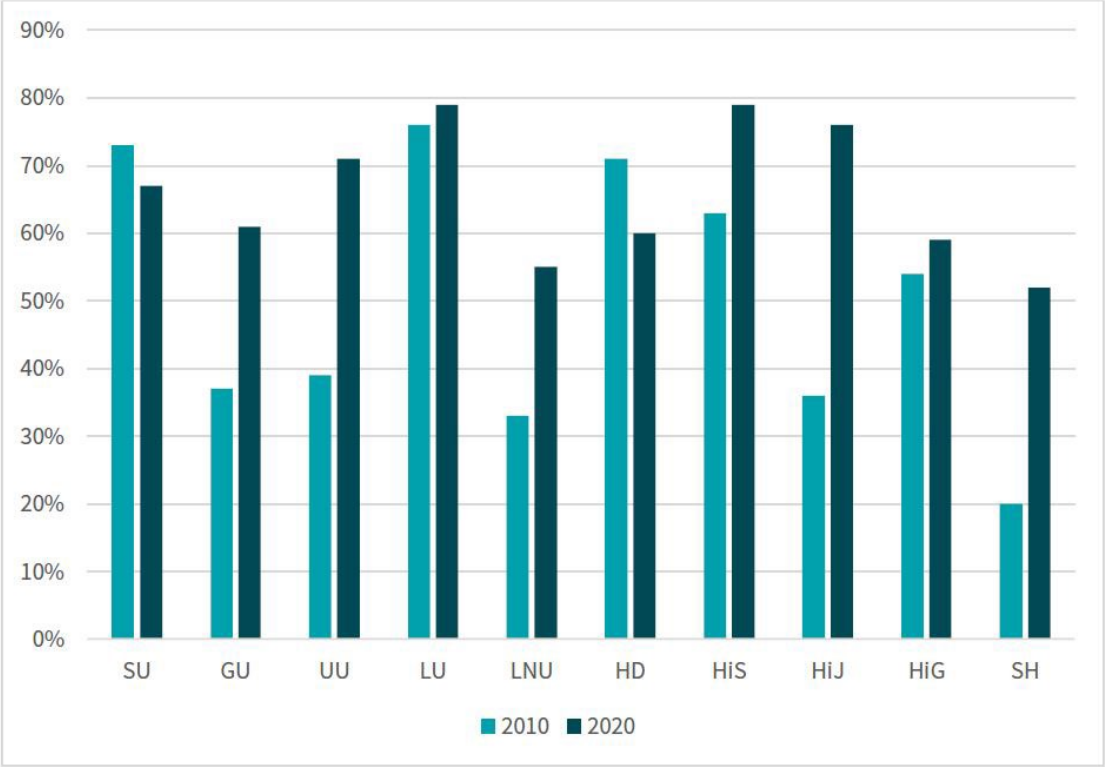

Figure 9. Use of English as the language of instruction in master's programmes at ten Swedish universities, 2010 and 2020. (SU: Stockholm University; GU: University of Gothenburg; UU: Uppsala University; LU: Lund University; LNU: Linnaeus University; HD: Dalarna University; HiS: University of Skövde; HiJ: Jönköping University; HiG: University of Gävle; SH: Södertörn University).

1. In 2020, on average, approximately 66 percent of master's programmes were taught in English, which corresponds quite closely with the proportion of English-taught master's programmes in Sweden as a whole. The average proportion of English-taught programmes was essentially the same for the larger and smaller universities (66.6 percent and 65.2 percent, respectively).
2. Of the universities studied, Södertörn had the smallest proportion of English-taught programmes (52 percent) while Lund and Skövde had the highest proportion (79 percent; the number of English-taught programmes was, however, nearly four times higher at Lund than Skövde).
3. The percentage of English-taught programmes increased during the ten-year period in question at most of the institutions in the sample, with two notable exceptions, Stockholm and Dalarna, which saw a decrease, from 73 percent to 67 percent and from 71 percent to 60 percent, respectively.
4. Jönköping University accounted for by far the largest increase in teaching in English during the period, proportionally, up from 36 percent to 76 percent (40 percentage points), closely followed by Södertörn and Uppsala (both up by 32 percentage

points). Five of the ten institutions increased their offerings in English by more than 50 percent over the decade; the largest increases in English-taught programmes amounted to 160 percent at Södertörn University and 111 percent at Jönköping University.

5. The average increase in English-taught programmes across the ten institutions was 15.7 percentage points over the decade (equivalent to a rate of increase of 1.57 percentage points per year). The average increase was only marginally higher among the smaller institutions (16.4 percentage points) compared with the larger ones (15 percentage points).

Based on these results, there is reason to question the contention that English is used as a language of instruction primarily at large, research-intensive universities with large numbers of inbound international students. Instead, there seem to be rather small differences between these groups. It should be acknowledged that Wächter and Maiworm's (2014) assertion was made in a broader European context; Sweden may not follow the general European trend; indeed, it (along with the other Nordic countries) has often been considered in the vanguard of English-medium instruction (Dimova et al., 2015). For this reason, it may well be the case that their claim applies to a greater extent in the broader European context.

Language of assigned reading: English strongly present

The figures presented above for the medium of instruction indicate the language that is expected to be used in the classroom. However, the instructional setting also includes the assigned reading used, inside and outside the classroom. It is reasonable to assume that assigned reading would be in the language of instruction; this should at least be the case on English-taught courses, as they often in include international students or teachers who for understandable reasons cannot read Swedish. But to what extent is such an assumption true for courses with Swedish as the language of instruction?

In mapping assigned reading, we chose to investigate only courses with Swedish as the language of instruction. It would be logical to believe that English plays a minor role in such courses (in many cases, the university's language policies indicate that Swedish is the language of instruction at undergraduate level; Karlsson, 2017). However, ample anecdotal accounts and empirical data show that assigned reading in English is common (e.g., Airey & Linder, 2008; Melander, 2004; Pecorari et al., 2012; Salö, 2010; Salö & Josephson, 2014). These studies have usually been limited to small samples; some investigated a single faculty or university. In this section, results are presented from a systematic review of assigned reading from a sample of Swedish universities, once again the five largest and five smaller ones. The courses studied were categorised based on the Swedish Higher Education Authority's highest-level subject classification: the humanities, social sciences, natural sciences, engineering & technology, and medicine. The analysis covers the assigned

reading in all undergraduate courses offered in autumn 2020 and spring 2021 (as far as such information was available).

In 65 percent of the (1,706) courses investigated, at least some reading was assigned in English. The presence of at least one text in English is highest in the humanities, at 84 percent. Engineering & technology had the lowest proportion of courses with any reading in English, at 46 percent (for other subject areas, see Figure 10). It is interesting to note that 76 percent of courses had at least one assigned text in Swedish, but that 24 percent entirely lacked required reading in Swedish; here too, there are differences among subject areas (e.g., 48 percent of the courses taught in Swedish in the natural sciences and 45 percent of those in engineering & technology had no required reading in Swedish at all).

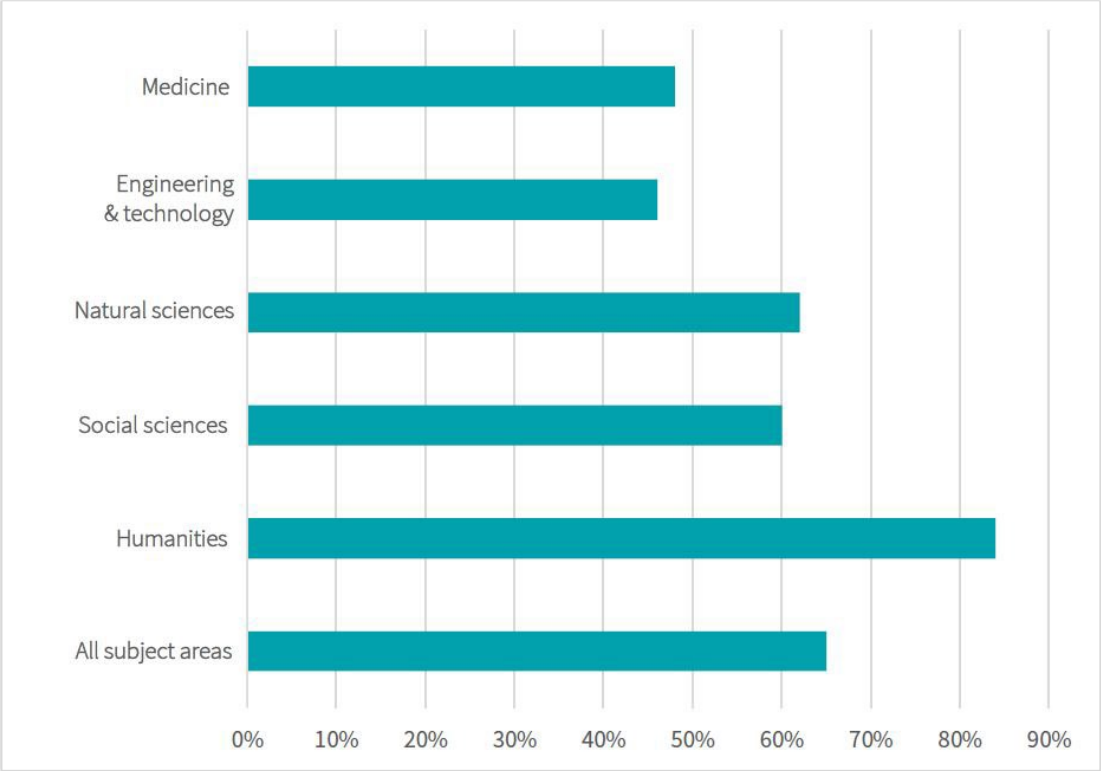

Figure 10. Proportion of Swedish-medium courses with assigned reading — at least one text — in English, by subject area.

Of all the assigned texts, 37 percent are books in Swedish, 14 percent are articles or book chapters in Swedish, 23 percent are books in English and 26 percent are articles or book chapters in English (see Figure 11). Disregarding genre, 51 percent of all assigned reading is in Swedish and 49 percent in English. Here, however, it is important to remember that the data are not normalised; the relatively larger amounts of data from the humanities and social sciences (both because there were more courses in these areas, and because they tended to assign more texts to be read) tend to skew the overall result.

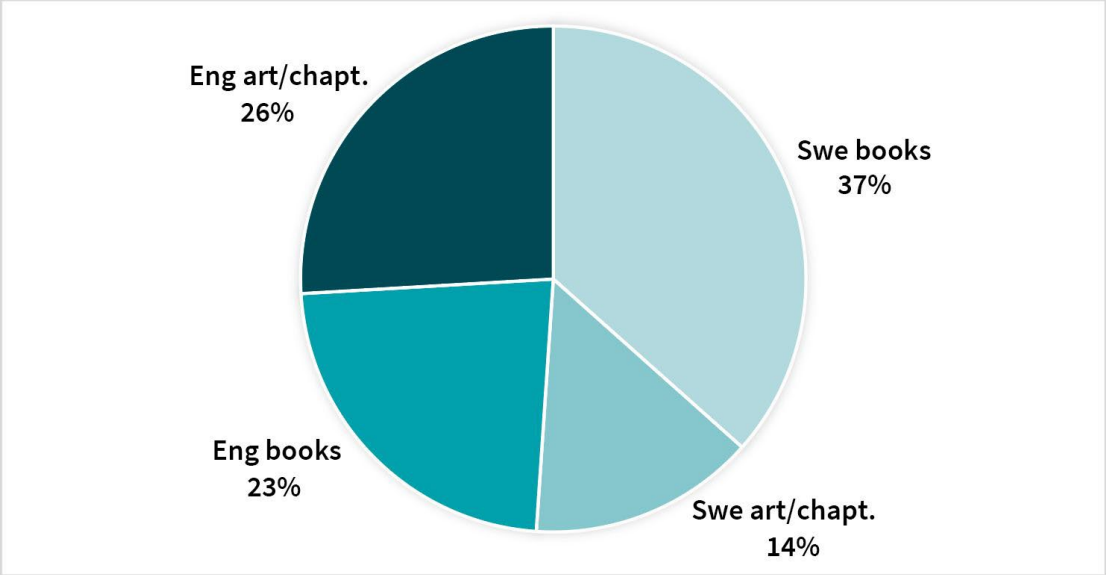

Figure 11. Assigned reading in Swedish *versus* English in Swedish-medium courses.

Books are the main form of assigned reading. Of all the assigned texts included in the data, 60 percent are books; of these, 61 percent are in Swedish and 39 percent are in English. Articles and book chapters account for 40 percent of the assigned reading; 64 percent of articles were in English and 36 percent in Swedish. However, these figures can be further nuanced through a detailed examination of the distribution of English-language and Swedish-language reading at different universities and in different subject areas.

Figure 12 shows assigned texts by genre and language at the ten universities in the sample. The large universities, with one exception, assign English-language reading to a significantly greater extent than the smaller ones. The extreme cases in this study are represented on one hand by Stockholm University, where only 35 percent of assigned reading was in Swedish and, on the other, Dalarna University, where 79 percent of assigned texts were in Swedish (for Skövde and Jönköping, the distribution was almost identical: 78 percent in Swedish). At Gothenburg, Uppsala and Lund, the distribution between Swedish and English is more even.

One university in each group stands out. Linnaeus University deviates from the other four large universities, with a significantly lower (33 percent) proportion of assigned reading in English, approximately the inverse compared with Stockholm University. Among the smaller universities, Södertörn stands out: 58 percent of assigned reading is in Swedish. Some of the differences between the larger and smaller institutions in the sample can be attributed to the more frequent use of articles and book chapters at three of the universities: between 35 percent and 40 percent of the assigned reading at Stockholm, Gothenburg and Lund Universities consists of articles or book chapters in English; apart from Södertörn University, English articles and book chapters are very limited at the smaller universities. Uppsala differs in an interesting way from this trend in the data,

assigning (as in the case of the smaller universities) mostly books: 92 percent of assigned texts were books, 45 percent in Swedish and 47 percent in English; as elsewhere, it is possible that the books are supplemented with articles without that being stated in the reading lists.

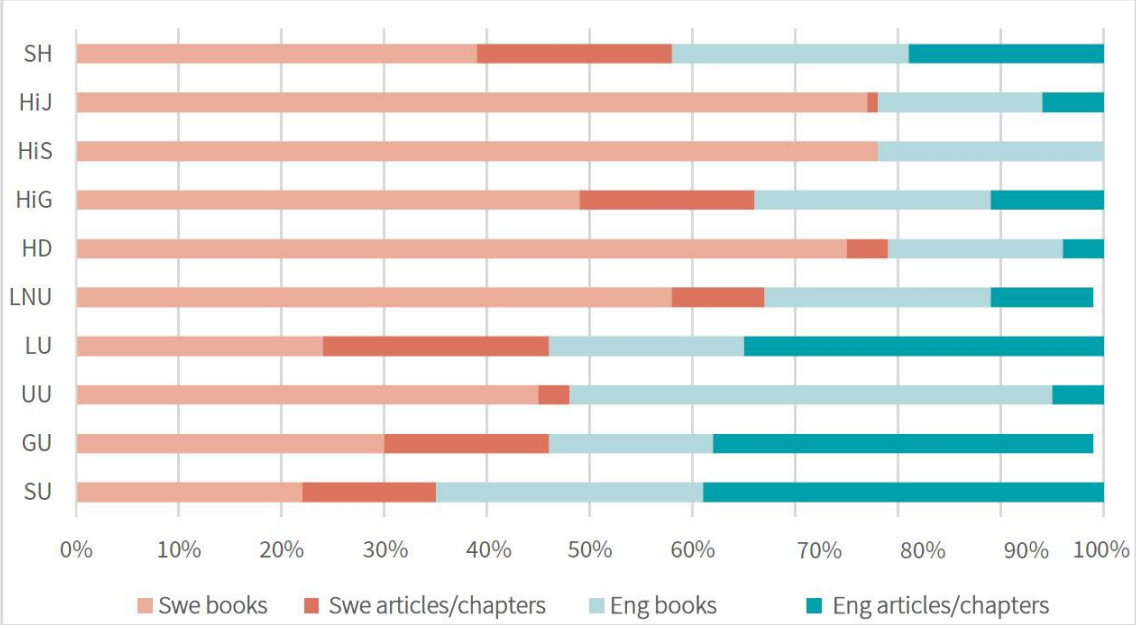

Figure 12. Percentage of assigned reading in Swedish *versus* English in Swedish-medium courses. (SH: Södertörn University; HiJ: Jönköping University; HiS: University of Skövde; HiG: University of Gävle; HD: Dalarna University; LNU: Linnaeus University; LU: Lund University; UU: Uppsala University; GU: University of Gothenburg; SU: Stockholm University).

The differences in the language of assigned reading across subject areas are relatively minor (see Figure 13). In the humanities, social sciences and natural sciences, about half of all reading is in Swedish; in engineering & technology, the proportion of Swedish is marginally higher (58 percent in Swedish); the highest proportion of reading in Swedish is in medicine (67 percent). However, it is interesting to note that the use of articles and book chapters in Swedish is significantly more widespread in the humanities compared with the other subject areas, such as engineering & technology and the natural sciences, where articles and book chapters in Swedish have a negligible presence. Engineering & technology and the natural sciences distinguish themselves with a high overall incidence of books; in both areas, assigned reading is almost exclusively (97 percent) made up of books; the proportion of English-language books is slightly larger in the natural sciences compared with engineering & technology (47 percent versus 39 percent). Within the other three subject areas, the distribution between different genres is more even.

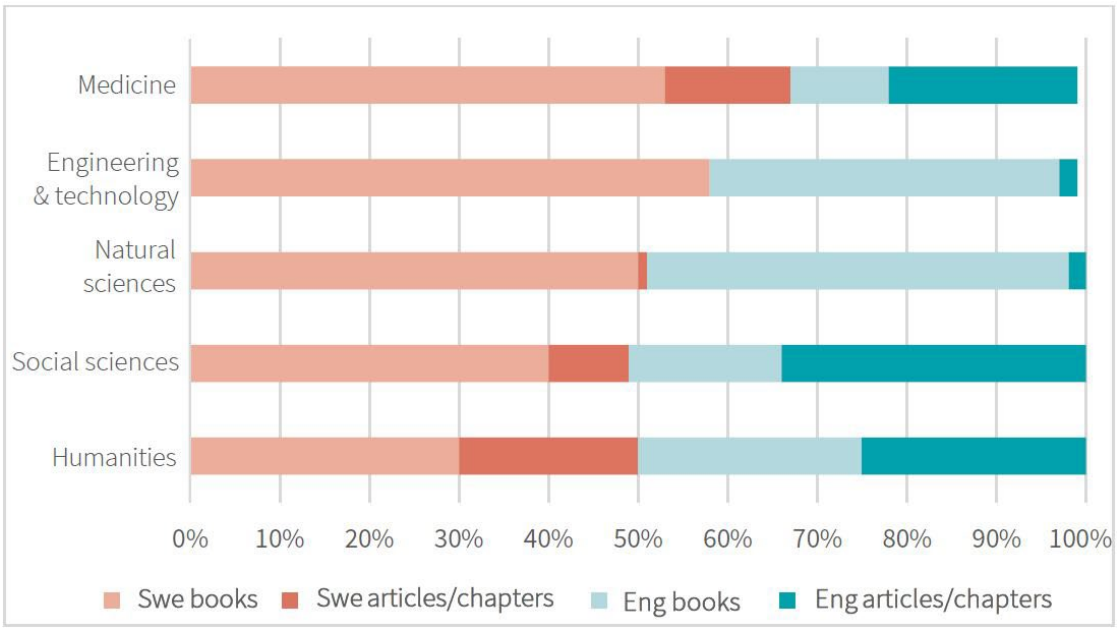

Figure 13. Assigned reading in Swedish versus English in Swedish-medium courses, by subject area.

Assigned reading in languages other than Swedish and English is not presented in detail in this report, but such texts were noted during the data gathering. A few texts in languages other than Swedish and English were listed as assigned reading in a small number of courses (a total of 77 texts, or approximately 0.5 percent of the total). Almost all were books or articles in Norwegian or Danish, and in most cases were assigned in courses in the humanities. Although this may not be surprising, the manifest lack of linguistic diversity may be thought problematic.

3.2 Language of publication

The results with regard to language of publication are clear: when Swedish researchers publish their findings, English is increasingly used, where an increase is possible. The shift to English is at the expense of Swedish and other languages, even though other languages, such as German and French, have not been in widespread use as languages of publication since the first half of the 20th century.

English is dominant in doctoral theses, but disciplinary differences exist

For doctoral theses, the use of English has increased steadily over time. As can be seen in Figure 14, 70 percent of doctoral theses were written in English in 1979, 25 percent in Swedish and 5 percent in other languages (mainly German and French); 40 years later (2019), 93 percent of theses were written in English while the proportion written in Swedish had decreased to nearly 7 percent. Six were written in other languages in 2019 — French, Spanish, Norwegian and Portuguese — but the proportion is so small as to be imperceptible in relation to Swedish and English. The average rate of increase for English-language

theses since 1979 is roughly the same as the rate of increase over the most recent 15-year period, that is, just over half a percentage point per year.

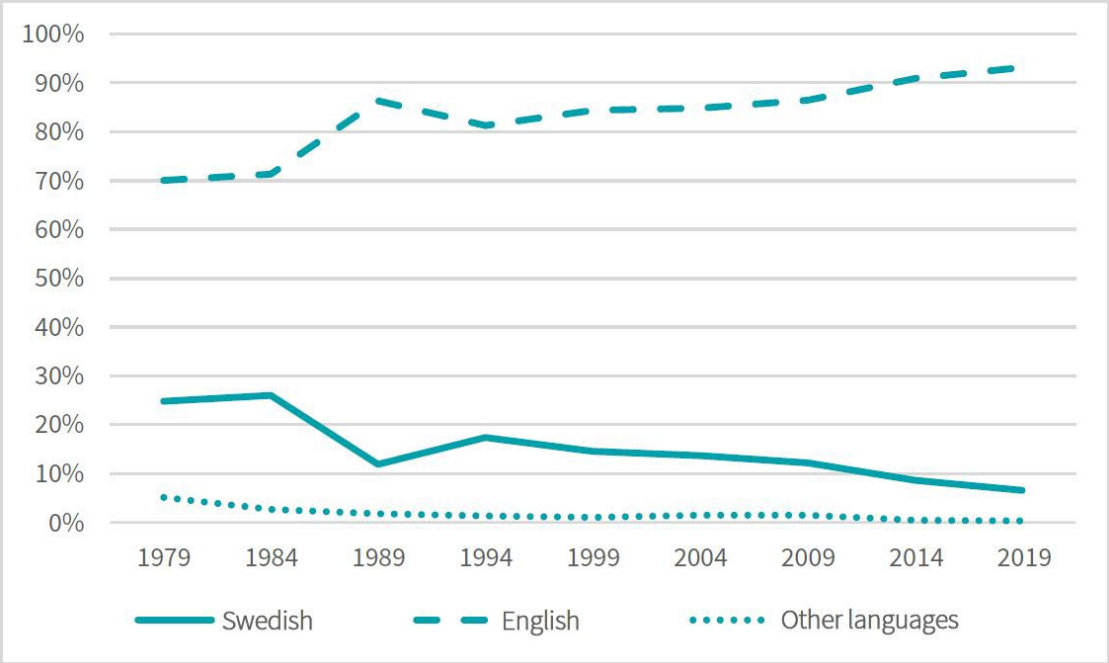

Figure 14. Doctoral theses written in Swedish, English and other languages (percentage of all theses).

An important observation must be made in connection with Figure 14. Salö (2010, p. 23) argued based on his data that "English has a very strong position as a thesis language in Sweden, but the development has stalled since the mid-1990s." Our data indicate that the trend towards more English-language theses has taken off again. Between 2009 and 2019 an increase is seen from 86 percent to 93 percent.

The trend shown in Figure 14 conceals three important considerations. First, the figures are based on the percentage of the *total number* of theses, taken together for all subject areas, and therefore conceal the fact that the number of theses in *different subject areas* varies greatly. For example, in 2019, 586 theses were published in the natural sciences, 479 in medicine and health sciences, 473 in engineering & technology, 357 in social sciences and 131 in the humanities. As we will soon see, there are differences in the pattern of language use for theses (Swedish *versus* English *versus* other languages) among these subject areas, but these differences are not reflected in Figure 14 because the data are not normalised. The high proportion of theses in English in the three subject areas which produce the most theses (natural sciences, engineering & technology and medicine and health science) thus tends to skew the overall results.

Secondly, the trend for certain subject areas has not been as dramatic; this primarily concerns the natural sciences, engineering & technology and medicine. For these areas, the proportion of theses in English was already high in the 1970s and 1980s, and although it

has also risen, the increase is more limited. Between 1979 and 2019, the percentage of theses in English in engineering & technology increased from 85 percent to 99 percent, in medicine from 88 percent to 96 percent and in the natural sciences from 93 percent to nearly 100 percent (see Figure 15). In every case, the number of theses in Swedish defended in 2019 is very limited; in the natural sciences, only two were written, and both appear to relate to teacher training in the natural sciences; the area with the greatest number of Swedish-language theses (23) was medicine.

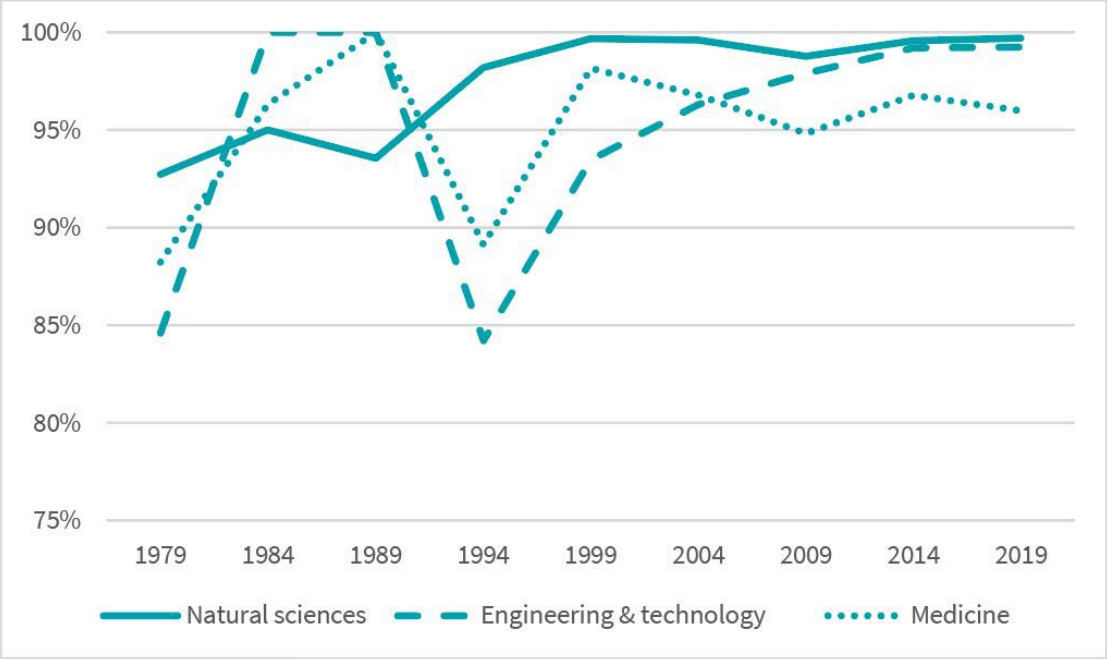

Figure 15. English-language doctoral theses in the Natural sciences, Engineering & technology and Medicine theses (percentage of the total number of theses per subject area).

The third trend to some extent is not apparent in Figure 14 is a particularly large and rapid increase in subject areas where Swedish has historically held a stronger position as a language of publication, namely the humanities and social sciences. We will turn our attention to this next.

A large increase in the proportion of English theses in the humanities and social sciences

The trend in the humanities is particularly conspicuous (see Figure 16). In the 1970s, 1980s and early 1990s, Swedish had a prominent position as a thesis language, but subsequently a clear shift occurred towards English and, indeed for a period, languages other than Swedish and English. Although Swedish maintained its leading position until the early 2010s, the gap between Swedish and English then increased at the expense of Swedish. In 1979, just over 50 percent of all doctoral theses in the humanities were written in Swedish. In 2019, this figure was 27 percent. During the same period, English gained equal footing,

and then surpassed Swedish, going from 27 percent in 1979 to 70 percent in 2019. The average rate of increase for theses published in English is particularly high in the humanities in more recent times: an annual average of nearly 2.5 percentage points since 2004 and nearly 4 percentage points since 2014.

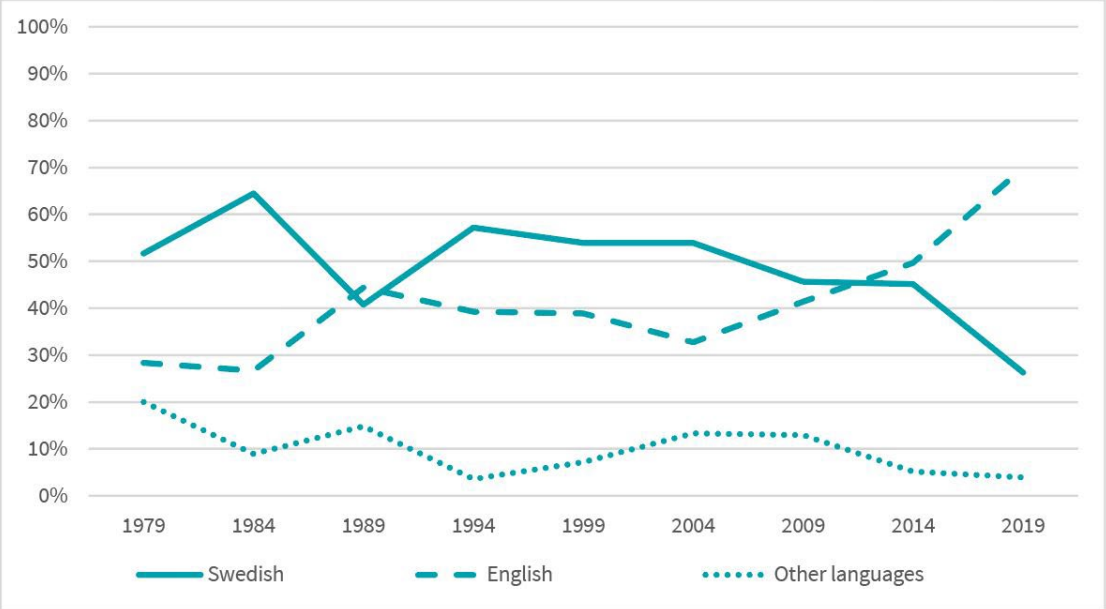

Figure 16. Doctoral theses in Swedish, English and other languages in the Humanities (percentage of the total number of theses in the subject area).

These figures do not hint at the decline in the proportion of English-language theses in the humanities that Salö (2010) saw in his data from 1998 to 2008, but it should be noted that Salö investigated the humanities based on a sample of four subjects: linguistics, history, the fine and performing arts, and literature. The data in Figure 16 reflect the whole of the large and diverse area of the humanities. Within individual humanities subjects, the trends vary. An example of this is ethnology; in this subject, no theses were published in English in 2019 or 2018. However, in history (part of Salö's sample), the trend follows that of the humanities as a whole, i.e., with an increased share of theses in English over time, especially in recent years: in 2016, 38 percent in English; in 2017, 27 percent in English; in 2018, 48 percent in English; and 2019, 58 percent in English.

The gains that English has made have also come at the expense of other languages; at the time when English surpassed Swedish, in the early 2010s, the proportion of doctoral theses in other languages began to decrease; over the period since 1979, the proportion of theses in the humanities in other languages has dropped from 20 percent to less than 5 percent.

A trend similar to that in the humanities is evident in the social sciences as well (see Figure 17). Here, however, the shift from Swedish dominance to a majority of theses in English took place almost 20 years earlier than in the humanities. In 1979, Swedish was the

dominant language with 63 percent of theses in Swedish, but in the early 1980s a rapid change took place and just over a decade later, in the mid-1990s, English took over this leading position, and then increased over a twenty-year period (1999–2019). The percentage of theses in English increased from 52 percent to 75 percent, corresponding to an average rate of increase of approximately 1 percentage point per year. Notably, the rate of increase nearly doubled in the most recent decade (1.7 percentage points per year between 2009 and 2019). This trend toward an increase in English-language theses in the social sciences that Salö (2010) identified is thus confirmed here, and it appears to continue unabated.

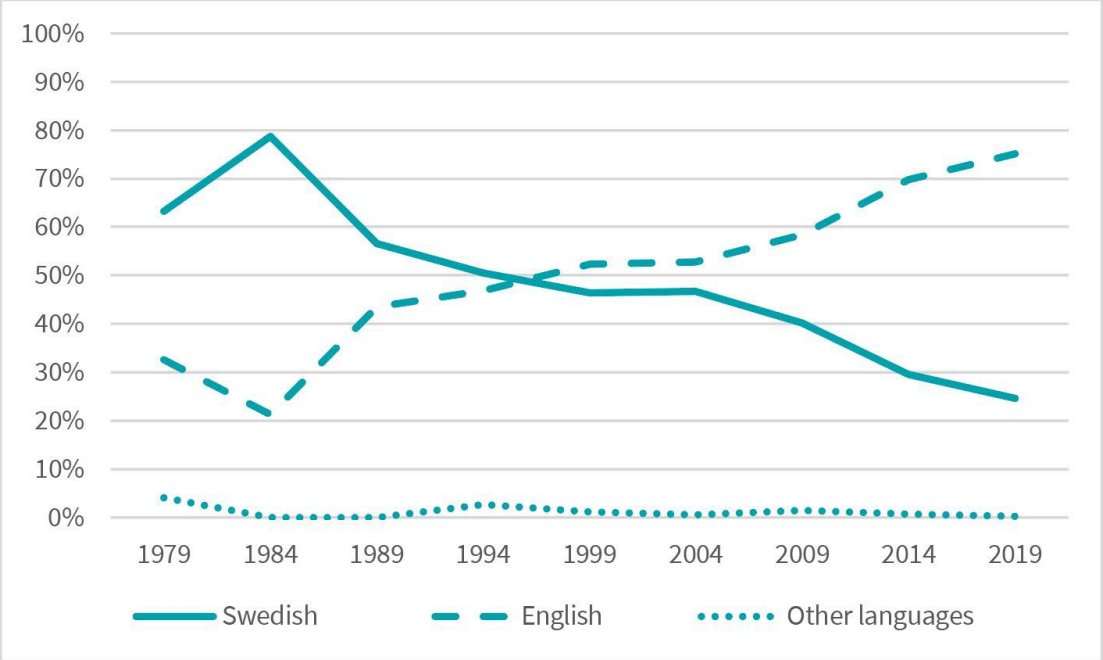

Figure 17. Doctoral theses in Swedish, English and other languages in the Social sciences (percentage of the total number of theses in the subject area).

The percentage of theses in languages other than Swedish and English in the social sciences has always been negligible; between 2017 and 2019, only five theses in the social sciences were published in other languages (two in Norwegian, two in Danish and one in Italian).

English remains the primary language of journal articles

The trend in the language of publication in scholarly journals closely shadows that for theses. English is dominant and has been with few exceptions throughout the entire period under consideration (1979–2019); the increase in the proportion of English over time began from high levels (very high in some subject areas). Figure 18 shows the distribution between Swedish, English, and other languages for that period (note that the same caveats in Figure 14, above, apply; for example, that the trend for English in Figure 18 conceals the important fact that some subject areas publish many more articles in numerical terms).

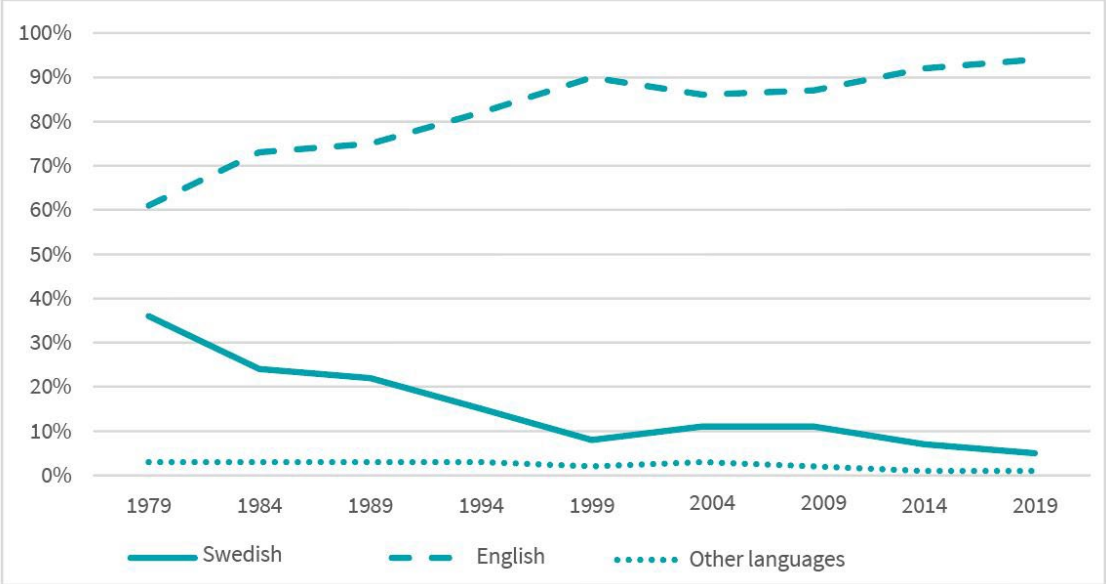

Figure 18. Journal articles published in Swedish, English and other languages (percentage of the total number of journal articles).

In 1979, the majority (61 percent) of all journal articles were written in English, while just over a third (36 percent) were written in Swedish. The proportion of articles in other languages (primarily French, German, Spanish, Danish and Norwegian) was very small over the entire period, dropping from 3 percent to around 1 percent. In 2019, the figures were 93 percent in English and 6 percent in Swedish. (Most of the Swedish articles are in the social sciences and the humanities; see below.) The average rate of increase is approximately 1 percentage point per year.

Certain subject areas have a long tradition of articles in English

For certain subject areas (the same ones that stood out in connection with doctoral theses) the proportion of journal articles in English over the past 40 years has consistently been very high. Figure 19 presents the trend for articles in English in the natural sciences, engineering & technology and medicine.

The language of publication was roughly the same in engineering & technology and medicine at the end of the 1970s; approximately 80 percent of articles were written in English, and with the exception of a period in the late 1980s, the curves for these two areas track each other throughout the 40-year period; by the end of the period, there was an increase to 99 percent (engineering & technology) and 98 percent (medicine). The proportion of articles in Swedish decreased from around 20 percent (+/-2 percent) for both engineering & technology and medicine to around 1–2 percent in 2019. For journal articles in the natural sciences, the trend is different: as early as the 1970, 97 percent of articles were written in English. Consequently, the scope for increase was extremely limited.

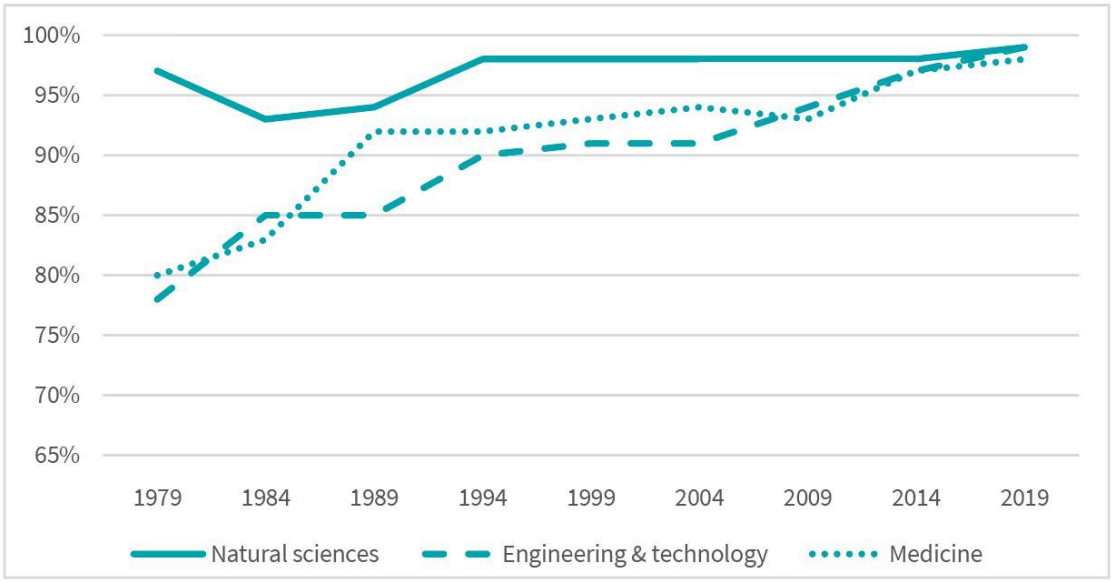

Figure 19. English-language journal articles published in the Natural sciences, Engineering & technology, and Medicine (percentage of the total number of articles per subject area).

It should be remembered that even if the proportion of journal articles written in Swedish in these subject areas is vanishingly small in relation to those written in English, some articles are still published in Swedish. In 2019, for example, 118 natural science journal articles were published in Swedish (e.g., *in Svensk Botanisk Tidskrift* [The Journal of Swedish Botany]), 51 articles in the area of engineering & technology (e.g. in *Energi och Miljö* [Energy and Environment]), and as many as 177 articles in medicine (e.g., in *Barnläkaren* [Pediatric Doctor]).

English for article publication gains ground in the humanities and social sciences

In other subject areas, Swedish has historically had a stronger position as language of publication for journal articles. Articles in the humanities and social sciences are an example of this (see Figures 20 and 21). While 97 percent of all natural science articles were published in English in 1979, 81 percent of articles in the humanities and 57 percent in social sciences were written in Swedish. In the humanities, Swedish retained its position as the primary language of article publication until the end of the 2000s, at which point English became more common. In 2019, 59 percent of humanities articles were written in English, while Swedish was used in about one-third of them. The trend toward English as language of publication has been rapid in the humanities: in the past decade alone, the proportion of articles in English increased by 19 percentage points (approximately 1.9 percentage points per year).

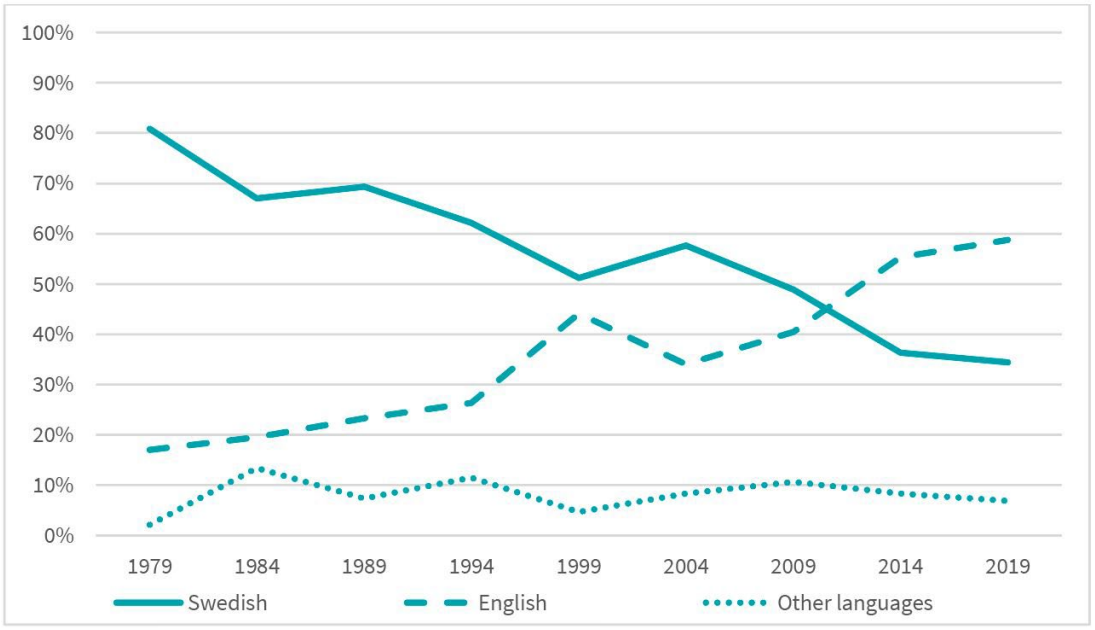

Figure 20. Journal articles in Swedish, English and other languages in the Humanities (percentage of the total number of articles in the subject area).

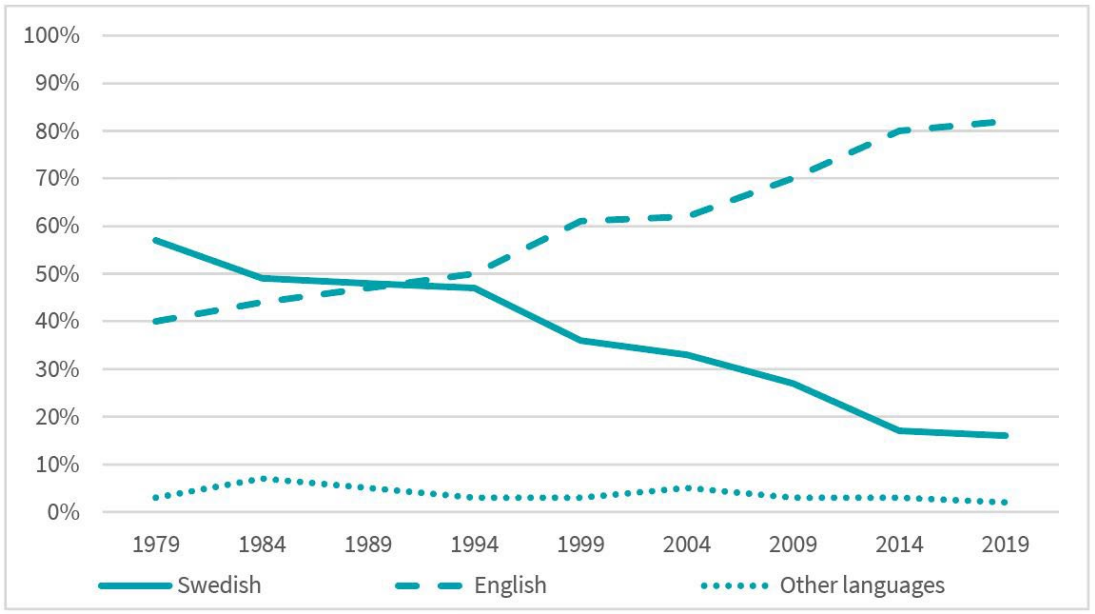

Figure 21. Percentage of journal articles in Swedish, English and other languages in the Social sciences (percentage of the total number of articles in the subject area).

In the social sciences, English became the most common language of publication even earlier. Figure 21 shows that English took the lead in the late 1980s and early 1990s. Thereafter, English rose rapidly from 50 percent in 1994 to 83 percent in 2019 (an average rate of increase of approximately 1.3 percentage points per year). The rate of increase does not seem to be slowing: between 2009 and 2019, the proportion of journal articles in English grew by 12 percentage points (or approximately 1.2 percentage points per year).

In the social sciences, and especially in the humanities, article publication in languages other than Swedish and English has been more prominent than in some other areas. The line in Figure 20 indicates that the proportion of articles in other languages in the humanities has varied over time, but the average is 8 percent, higher than in any other subject area. In 2019, for example, over 10 journal articles were written in each of French, German, Spanish, Danish and Russian, and not only in language subjects, as might be supposed. For example, German has had a relatively strong position as language of publication in theology. It is therefore important to note that languages other than Swedish and English actually have a publication tradition, albeit a limited one, of disseminating Swedish research (including in peer-reviewed journals).

Is Swedish favoured for popularisation of research?

Notably, of the articles published in Swedish in 2019 (n=2,459), 641 (26 percent) were published in peer-reviewed journals while 1,179 (48 percent) were classified as popularisations of research or opinion pieces and 639 (26 percent) as articles in journals categorised as "other" (e.g., industry organs) (see Figure 22). Most are in the social sciences, closely followed by the humanities. The distribution with regard to outlets could be interpreted as evidence of a tendency to use Swedish to a greater extent for the purpose of popularisation of research, and less so in scholarly contexts (e.g., peer-reviewed journals) which are impactful primarily in research terms. However, there are differences here too, e.g., Swedish-language publication occurs more often in peer-reviewed journals in medicine than in other subject areas (in this respect, for example, *Läkartidningen* [The Doctor's Magazine], published by the Swedish Medical Association, stands out as an important outlet for publication in Swedish).

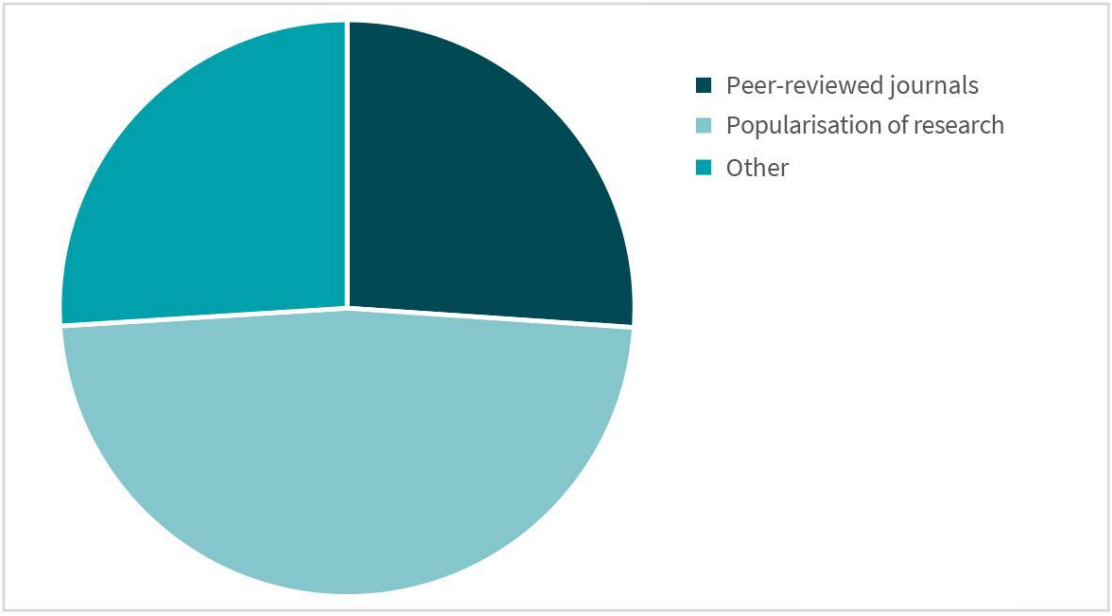

Figure 22. Articles published in Swedish in 2019, by publication type.

4. Crossover points, English (non-)dominance, and the two sides of the internationalisation coin

The results presented in this report show that the use of English at Swedish universities has increased in almost all respects since Salö's (2010) mapping, but the prevalence of English varies quite notably, and in some domains and subject areas Swedish still has a prominent position. In summary, it can therefore be noted that Swedish research and higher education — unsurprisingly — are characterised by a kind of parallel language use where both Swedish and English play an important role, albeit often at the expense of each other. The future development of the language situation is difficult to predict, but this closing section ventures some possibilities based on trends identified in the data.

The discussion is based on two notional points of reference to describe the relationship between Swedish and English in the domains of language use and the subject areas investigated. The first point of reference is when English becomes more common than Swedish in a certain domain or subject area; we call this the "crossover point." The second reference point is when English is not only used to a greater extent than Swedish, but has almost entirely replaced Swedish within a domain or subject area; this threshold (which we have set, somewhat arbitrarily, at 90 percent) we term "English dominance." Based on these reference points (which are not intrinsically significant; they simply help paint a picture of the language situation), two patterns can now be identified.

4.1 English is more common in certain domains

The data presented in earlier sections of this report show that English is more common in some domains than others; the difference is particularly clear when looking at the data for academic level: the higher the academic level, the more English and the less Swedish. This pattern is clearly illustrated in Figure 23. At what could be considered the highest level of publication (articles in scholarly journals), i.e., the publications of established researchers, English dominates absolutely and has done so since 1999. The language shift in favour of English took place for scholarly journal articles before 1979, the first year for which figures are available. The situation is not markedly different for doctoral theses, which is perhaps understandable considering that their authors are both students and researchers (and sometimes part of research teams): English dominates as a thesis language and most doctoral theses have been written in English as far back as 1979, the earliest year for which data are available.

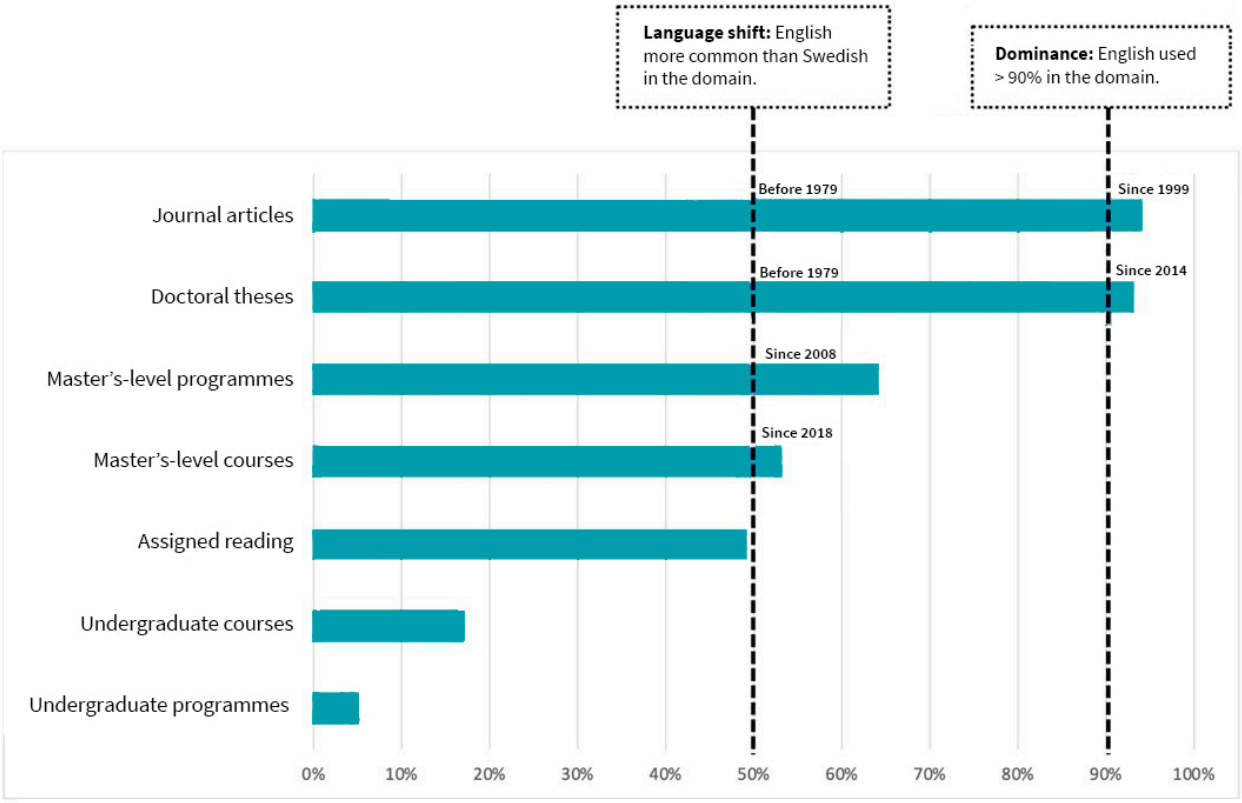

Figure 23. Proportion of English at key points, by domain. Language shift and English (non-)dominance.

At less advanced academic levels (i.e., sub-doctoral), English is used proportionally less, but as reported above, even in these domains, the prevalence of English has increased from the earliest year for which statistics are available. However, at sub-doctoral level, English has not reached the point of dominance, even if it is the most common language of instruction in some contexts. This is particularly true for master's degree programmes and courses, where language shift took place in 2008 and 2018, respectively.

A language shift has in all likelihood already taken place with regard to assigned reading at undergraduate level. English texts currently make up 49 percent of all assigned reading in undergraduate courses taught in Swedish (see Figure 23), but since 19 percent of the course offerings at undergraduate level are taught in English, and since it can be assumed that these courses have required reading in English (and roughly the same number of required texts), it seems all but inevitable that the proportion of assigned reading in English exceeds 50 percent; if so, the language shift in this domain has already occurred.

However, a language shift appears to be remote when it comes to the language of instruction at undergraduate level: Swedish is clearly the most common language in both undergraduate programmes and courses.

Another pattern that emerges from the data is that the role of English varies markedly across subject areas. Differences in the role of English in different subject areas are hardly

surprising considering the many disciplinary differences that have been documented in academic practices (e.g., Becher & Trowler, 2001; Salö, 2016). Figure 24 illustrates the differences between the humanities and the natural sciences (the two extreme cases) in the various domains covered by this report. In the natural sciences, only undergraduate courses have not experienced a language shift. In undergraduate natural science courses taught in Swedish, English texts make up 49 percent of the assigned reading, and following the reasoning presented above, when English-taught courses are taken into account, it is likely that most of the assigned reading in undergraduate natural science courses is already in English.

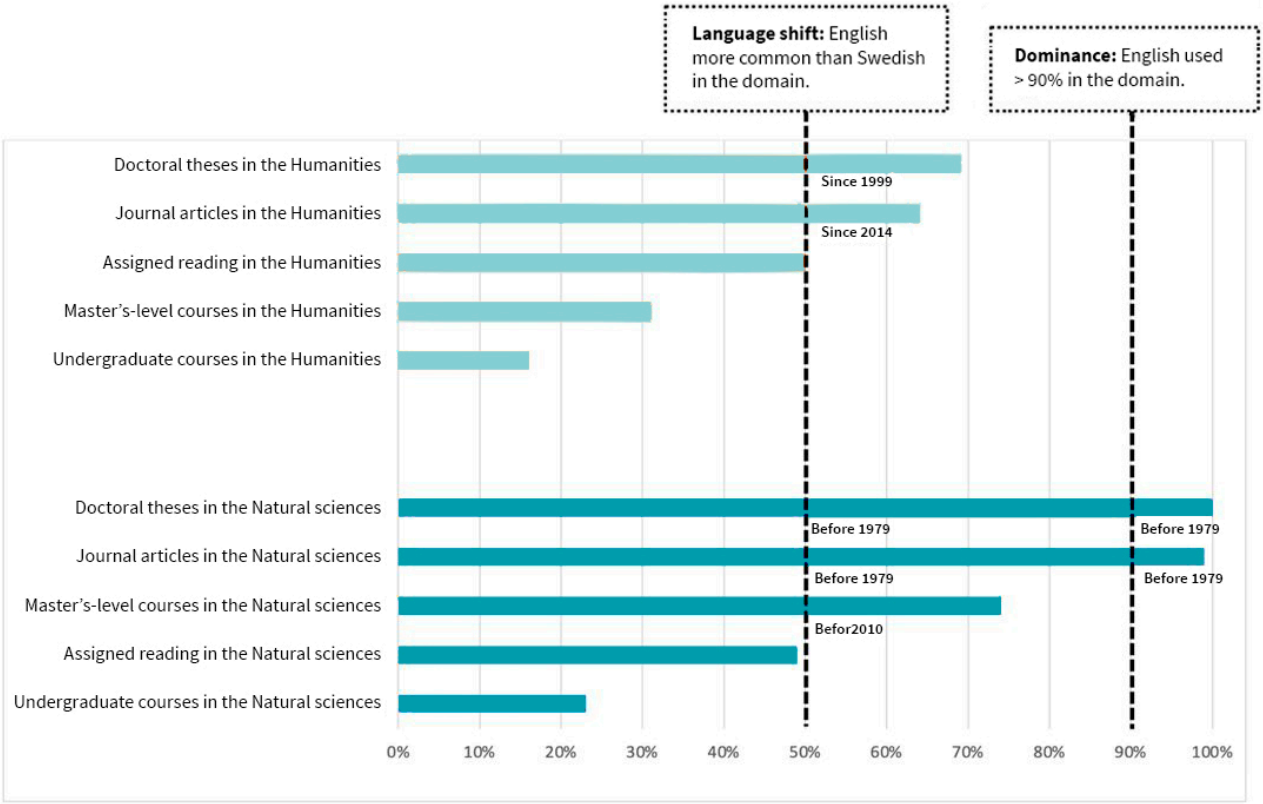

Figure 24. Proportion of English by domain; key points for two subject areas (the Humanities and Natural sciences).

English is entirely dominant in terms of scholarly articles and doctoral theses. In the humanities, the language shift did not take place for doctoral theses and articles until around the mid-2010s, nearly 40 years after it happened in the natural sciences. However, there are significant similarities between the natural sciences and the humanities in terms of the use of English for assigned reading at undergraduate level; as in the natural sciences, the humanities are in the middle of an ongoing language shift. Notably, though, the point of dominance has not been reached for any of the domains in the humanities.

A comparison of subject areas can also be made based on a single domain. Figure 25 illustrates the situation for English as a language of instruction in master's courses. English

is not entirely dominant in any of the subject areas, but in engineering & technology, natural sciences and the artistic area, a language shift has occurred. The other four subject areas are at varying distances from that point.

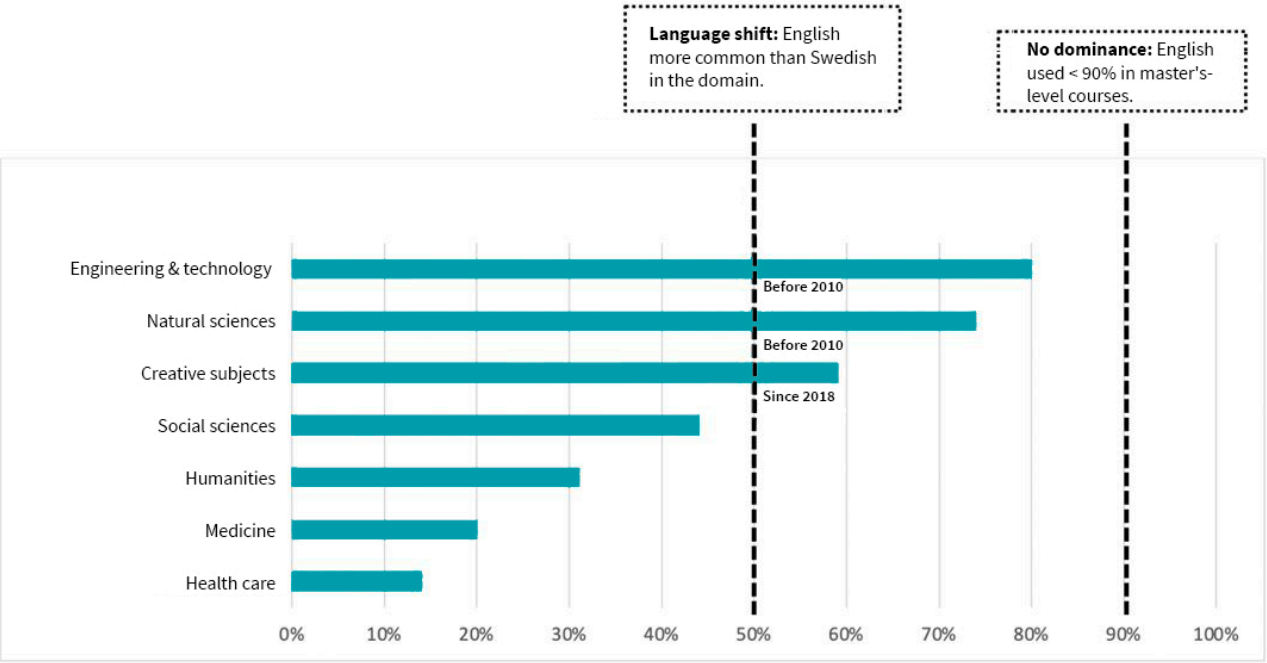

Figure 25. Percentage of English as the language of instruction in master's-level courses by discipline at key points.

Figures 23–25 demonstrate both variation and a clear overall trend (and the same variation and trend are visible in the data as a whole; see the previous section): there is virtually no subject area, domain, or combination of subject area and domain where an increase in the presence of English has *not* occurred over time.

At least two interpretations of the variations are possible. One is that some parts of academia are more resistant to Anglicisation than others. This interpretation is supported by the figures for individual points in time. On one hand, more senior academics (established researchers as well as students at various levels) are expected to use English to a greater extent, while Swedish can be used by the more junior. At the same time, the traditions in certain subject areas give Swedish a strong position. This interpretation presupposes linguistic interaction which is dependent on different (cooperating and opposing) factors. By this interpretation, Swedish research and higher education have in many respects achieved the parallel language use that has been sought by many stake-holders: both English and Swedish have their roles.

Another interpretation is that the use of English is following a consistent trajectory across the academy; it simply began earlier and has progressed further in certain domains and subject areas than others. This interpretation is supported by the results presented in earlier sections and are summarised in the figures above where two reference points

— language shift and English dominance — illustrate a trend towards increased use of English over time. With one exception (the Bologna Process, mentioned earlier in this report), there does not appear to have been any single specific event that caused these thresholds to be reached, or the trend toward greater use of English to take off.

4.2 A tentative look forward

The language usage pattern that is presented here — along with the fact that during the time period studied, the use of English increased (with very few exceptions) within each domain and within each subject area — provides some basis for speculation, however guarded, about the future development of this linguistic landscape. Such speculation is best done in the light of a brief language policy retrospective.

When the use of English is juxtaposed against the use of Swedish in research and higher education, it is sometimes perceived that two important political priorities conflict with each other: the internationalisation agenda is set against the expectation that Swedish should have a privileged role, or at least some role, in research and higher education. In this respect, we wish to emphasize, just as Salö (2010) did, that the legislative history[4] for the Language Act (*Language for All,* 2008) establishes some important principles.

Swedish is the primary language of Sweden and must therefore be considered to have a special status; this special status applies to universities, which (in the vast majority of cases) are public bodies and are therefore supposed to have Swedish as their working language (Section 10 of the Language Act). However, the comments on this section of the statute say that "this provision is not intended to constitute a restriction of the possibility of, for example, conducting activities in languages other than Swedish in research and education" *(Language for All,* p. 48); that "using languages other than Swedish is in many cases necessary to strengthen the internationalisation of research"; and that "it is self-evident that the English language will continue to play a major role in the Swedish university system" (p. 20). However, this does not constitute *carte blanche* to use English in whatever way and to whatever extent: "the special responsibility of the public sector for Swedish being used and developed means, however, that one should consider how this responsibility is fulfilled in the most suitable way" (p. 20).

As regards the conflict between internationalisation and the use of Swedish, the bill seemingly provides reassurance: "as we have emphasized earlier, however, there is no contradiction between internationalisation and the protection of Swedish as the main language" (p. 30). However, whether these two objectives are compatible in practice can

[4] The research documents created as a foundation for a new law to be proposed; in Sweden these are understood to clarify the intentions of the lawmakers, and therefore to have the effect of creating a kind of *a priori* precedent for the law's interpretation.

be questioned. For example, Hult and Källkvist (2016) studied language policy documents at three universities and concluded that

> although the institutional policies all include positive pronouncements about plurilingualism, the widely circulating ideology of English as the most meaningful language for international scholarship is reified rather than meaningfully resisted, and discourses that index English with market competition and global engagement are conspicuous. (p. 67)

This report cannot determine whether the use of English in research and higher education is still within the scope of the intentions of the legislative history for the Language Act. However, it is certainly questionable whether there is still "an awareness in the areas of education and research of how the use of English can in the long term affect the position of the national languages" (*Language for All*, p. 20). It would be interesting to know what insights that awareness has led to in light of the increase in the use of English that has nonetheless occurred in Sweden in the 13 years since the document was written. The recent debate on domain loss for Swedish (see Salö, 2016) suggests that this awareness has not always resulted in "the special responsibility of the public sector for Swedish being used and developed" being fulfilled in accordance with the intentions in the legislative history.

The position of Swedish in research and higher education cannot be discussed without also taking into account the use of English. The language situation of Swedish research and higher education has arisen not as a result of a deliberate decision, but rather as a side effect. Sweden has actively worked to achieve internationalisation in research and higher education, but it develops that internationalisation is a coin with two sides. On the other side of the internationalisation coin, there is an increased presence of English. When Sweden decided to internationalise research and higher education, the consequence was an almost inevitable increase in the use of English, with immediate consequences for Swedish. It may be that this does not mean a direct "contradiction between internationalisation and the protection of Swedish as the main language," in the sense of the Language Act, but it certainly means that the use of Swedish as a language of publication and instruction is curbed.

Stated in a blunt (and possibly oversimplified) manner, it can be said that there are three possible ways forward. One is to implement measures to stop the progress of English and the continued Anglicisation of Swedish research and higher education. Considering the current language situation and the trend of increased use of English, they would need to be decisive and forceful (or at least systematic and deliberate) measures, and an inevitable and probably undesirable consequence would be to limit the opportunities for continued internationalisation of Swedish higher education. An alternative would be to capitulate and accept that Swedish universities are not, and cannot be, places in which the spirit of

the Language Act can be honoured; that is, to let the linguistic market entirely take care of itself (which could be seen as the existing situation).

A middle course between these two options would be to map out a way forward which does not make language a zero-sum game, as it currently is; to find practical ways forward to what has thus far been an aspiration rather than a reality, parallel language use (see Bolton & Kuteeva, 2012; Gregersen, 2014; Kuteeva, 2011; Melander, 2004). It is not within the scope of this report to describe what these approaches may be, beyond observing that they must be anchored and implemented at every level, from the highest administrative level to chalk face pedagogical strategies. Productive and effective parallel language use does not happen of its own accord. Salö and Josephson (2014, p. 309) note that "parallel language use is nowhere systematically implemented or the results of long-term considerations." In this respect, Sweden is no different from much of the rest of the world, where the expansion of English-medium instruction has this far failed to produce an abundance of functional multilingual pedagogies. Yet being in good and numerous company does not make the choice less stark. Either a way can be found to prevent language choice being a zero-sum game, or Sweden must choose whether internationalisation or language policy lies closest to its heart.

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Language choice and internationalisation:
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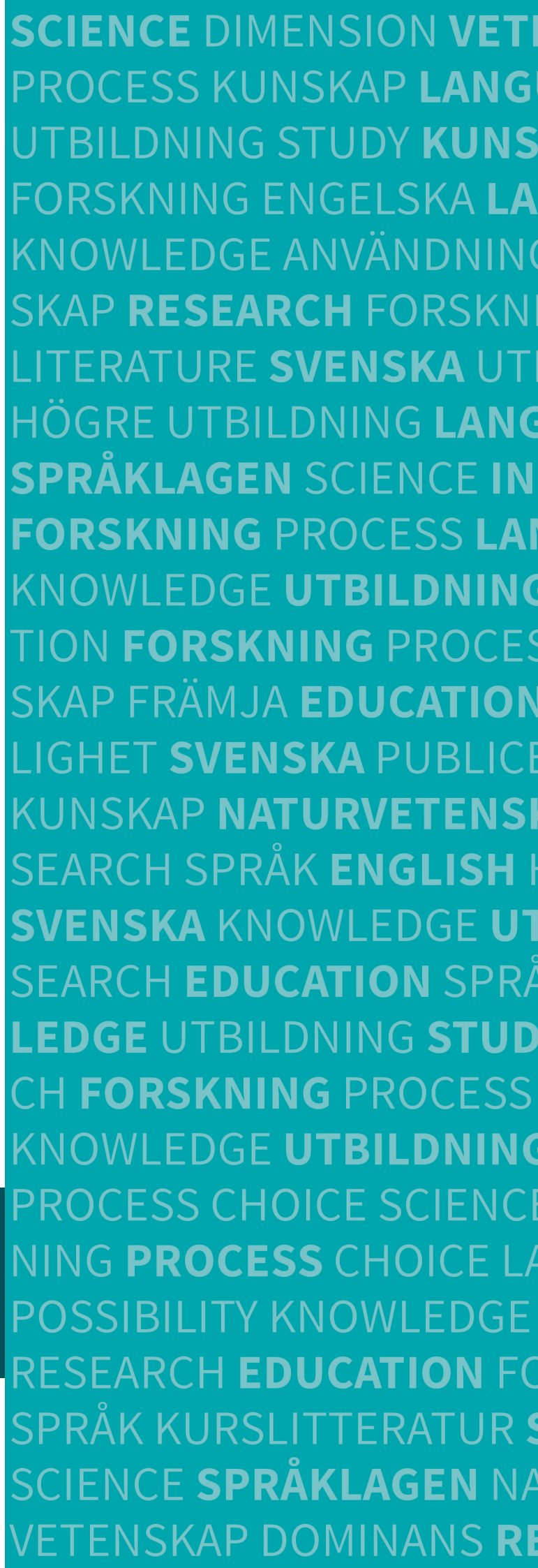
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