

Pulmonic ingressive speech: a neglected universal?

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Abstract

This paper summarizes major review work on pulmonic ingressive speech (Eklund, under revision), e.g., words like ja (yes) and nej (no) that are commonly produced on inhalation airstream in Swedish.

Contrary to what is generally believed, ingressive speech is not limited to Scandinavia or present-day Nordic languages. Instead, it is shown that ingressive speech is found on all continents, in languages that are genetically unrelated. Moreover, whenever ingressive speech occurs it serves more or less the same paralinguistic functions, e.g., being predominantly a feedback marker in dialog.

Since pulmonic ingressive phonation is also common in the calls of monkeys and apes, thus exhibiting a biological basis, it is argued that ingressive speech might constitute a neglected universal phenomenon, rather than being highly marked, which is how it is commonly described in the literature.

Introduction

Pulmonic ingressive speech is the technical term for a phenomenon that is very frequent in Swedish speech: words produced on inhalation airstream. Most often this happens in dialog and occurs on short feedback words like *ja* (yes) or *nej* (no), but other words, like *jarå* (oh yes), *jadå* (indeed) and *bra* (good) have been reported (Eklund, 2002).

The popular view holds that ingressive speech is a typical Swedish, or Scandinavian, phenomenon, and more specifically a typical characteristic of female speech, or something that is typical of speakers from Norrland (the northernmost part of Sweden). However, as is often the case, popular views are not necessarily true, and Eklund (under revision) shows that both the aforementioned notions are erroneous, in most respects.

This paper is based on major review work on pulmonic ingressive speech (Eklund, under revision) and assumes a speculative view—more or less perpendicular to general opinion: that ingressive speech might reflect an hitherto neglected *universal* process in human speech production, based on the fact that not only is ingressive speech far more common than is generally believed, its frequency, distribution, linguistic function and biological underpinning seems to support such an interpretation.

Ingressive phonation: overview

This section summarizes the general occurrence, frequency, distribution, and linguistic function of ingressive phonation in animal and human sound production, and in human speech.

Ingressive phonation in animals

At least since Darwin (1872) it has been pointed out that several species of animals exploit an ingressive airstream to vocalize, e.g., dogs, cats and big cats (that purr), cows, horses, asses, foxes, frogs, and several species of birds.

What is of special interest here, however, is that several species of monkeys and all greater apes—except the gorilla—produce calls (hoots) that are produced ingressively.

Ingressive phonation in humans

Infant cry is replete with ingressive sounds, e.g., in displeasure cries and sobbing, the latter of which is also found in adults. Adult sounds that are produced on ingressive airstream include laughter, crying, pain cries, hiccoughs, emotional speech and rapid counting, etc.

Engastromyths, quakers etc

Ingressive speech has very likely been used by engastromyths (ventriloquists) and shamans since the dawn of civilisation, since not only

was ventriloquism used to make listeners believe that effigies were speaking, the use of ingressive voice made the speech sound “other-worldly”, which enhanced the effect. Along the same line, Voltaire (1734) mentions that George Fox, the founder of the Quaker movement, used ingressive speech to sound inspired, and that this was something that he taught his disciples.

Ingressive phonemes?

There are two claims that ingressive phonemes occur: one in the Taiwanese language Tsou, the other in the Australian ritual language Damin. The former claim has been more or less disproved, and the latter was an invented language (which is no longer spoken). Thus, it would seem that no known language has ever made use of ingressive phonemes.

Ingressive phonation in speech

The possibly oldest source that mentions normal ingressive speech is Cranz (1765), who points out that Eskimo women in Greenland often affirm something ingressively, in a way that seems perfectly in line with the way ingressive speech is used in present-day Scandinavia. Only slightly later, von Kempelen (1791) mentions ingressive speech in female gossip and Catholic prayer (in German), as well as own attempts.

Ingressive speech: distribution

Besides the use of ingressive speech to hide the speaker’s identity (“voice disguise”), which is reported from several different locations in the world—Cyprus, Switzerland, Newfoundland and The Philippines—it has been observed in the following countries.

Europe, Canada, New England

Ingressive speech occurs in an unbroken chain from Lithuania and Estonia, through the Nordic countries, northern Europe (with a lower border in Austria, Switzerland and France), the British Isles, Shetland/Orkney/Faroe Islands, Iceland, Greenland to Newfoundland (and several other parts of Canada), into Maine and Massachusetts. While most ingressive speech occurs on single, paralinguistic feedback words, entire phrases or sentences are reported in Finnish, Faroese and Icelandic.

North America

Besides ingressive speech in New England, a striking example is observed in the language

Tohono O’odham (Arizona), where females sometimes produce *all* speech ingressively.

Central America

Ingressive speech has been observed in Mexico.

South America

While the occurrence of ingressive *sí* (yes) is reported in Colombia and Chile, entire phrases are observed in Argentina. Since no sources mention ingressive speech in European Spanish, Nardi (1960) suggests that the substrate Indian language Mapuche—where ingressive speech is also observed—might be the source.

Africa

Ingressive paralinguistic particles occur in Chichewa (Malawi), in the speech of the Wazanaki (present-day Tanzania), and in Afrikaans (South Africa). Ingressive speech is also reported among the Fang, Ewondo and Bulu (Cameroon, Gabon and Congo).

Oceania, South Pacific, Australia, and New Zealand

Ingressive paralinguistic particles have been observed in Kuot (Papua New Guinea) and South Efate (Vanuatu). Ingressive *yeah* occurs in New Zealand English, and while this has not been confirmed in Australian English, other uses of ingressive speech are reported in the languages Warlpiri, Youlŋu and Anangu.

Asia

A (non-lexical) “hiss” is commonly used in Japanese, and a similar sound is reported in “Chinese”. Ingressive pain phonation is mentioned in India.

Other

Several other regions and languages are found in the literature, but neither the languages nor the regions are clearly specified.

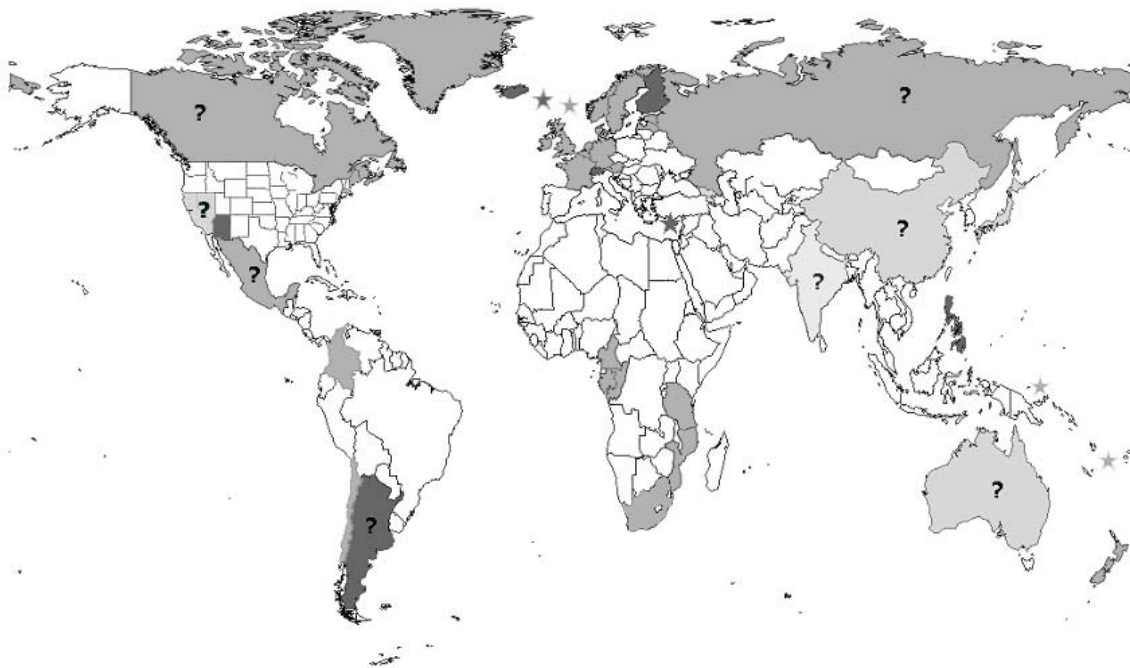
Summary

As is obvious from the listing above—however synoptic its character—is that ingressive phonation in general, and speech in particular, is far more widespread than is frequently believed. Moreover, although some occurrences are obviously related, it is also clear that many must be independent. A map of ingressive speech distribution is shown in *Plate 1*.

Plate 1. Approximate geographic distribution of ingressive phonation and speech in the world. Legend:

- Ingressive phonation mentioned, for e.g., pain or surprise.
- Paralinguistic sounds used, e.g., Japanese hiss.
- Single words are pronounced ingressively, e.g., Swedish “ja”, “jadå”.
- Entire phrases are produced ingressively, e.g. Argentine Spanish “un trabajo matador”.
- ★ Star symbol used for areas too small to be filled in.
- ? Sources unclear/not explicit whether entire country/region is implied.

Note that not all sources are entirely clear as to exact geographic distribution. Unless the sources are exactly pointing out very limited areas, as well as contrasting these with the rest of the country/region in a clear way, the entire country/region has been filled in. Moreover, several sources are not exact enough to be used at all, and are consequently not included.



Discussion

The picture that emerges from the map in *Plate 1* is clearly not so much that of a very rare or exotic phenomenon, but rather something that seems to occur everywhere in the world, irrespective of genetic type. Admittedly, while it is clear that the ingressive speech found in the Baltic–Northern Europe–Newfoundland–New England zone is “the same”, it seems likely that its occurrence in several other parts of the world—Tohono O’odham, Mapuche and South American Spanish, Mexican Spanish, Wazanaki, South Efate, etc.—are independent instances of ingressive speech, with remarkably similar function(s). That the aforementioned Spanish instances are likely not related is based on Nardi’s (1960) conclusion (if tentative) that the Spanish spoken in Argentina owes the use of ingressives to the substrate language Mapuche.

Thus, summing up our observations so far, ingressive speech seems to exhibit the following characteristics:

1. It is found on all continents;
2. It seems to serve similar (para)linguistic functions whenever and wherever it occurs;
3. It often seems to occur independently in various languages and genetic groups—although beyond doubt not always, with the North Atlantic zone as a striking example;
4. It has a biological(–communicative) basis in the calls of monkeys and apes (and other animals);
5. There is reason to believe that there is a hidden number—perhaps even substantial—of languages with ingressive speech;

Considering the points above, the question presents itself whether ingressive speech—rather than being “highly marked” or a “quaint peculiarity” etc., which is frequently the way it is described in the literature—might constitute some kind of *universal* linguistic phenomenon?

There are, of course, several ways something can be “rare” or “common”. For example, something might be very common within a specific genetic group or on a specific continent, or within a specific geographic area, but not occurring elsewhere. Alternatively, something could be found more or less everywhere, typologically and geographically, but be rare whenever and wherever it occurs.

Croft (2003, p. 236) identifies four different cases of linguistic universals:

- a. “Linguistic phenomena that are areally widespread, and common in genetically closely related languages may be frequent and stable. Examples include front unrounded vowels.”
- b. “Phenomena that are widespread but relatively sporadic within genetic groups may be frequent but unstable; examples include nasal vowels and definite articles.”
- c. “Phenomena that are relatively scarce in the world’s languages, but common in genetic groups in which they occur, may be stable and infrequent. Examples include vowel harmony and verb-initial word order /.../”
- d. “Finally, phenomena that are both scarce and sporadic may be unstable and infrequent; examples include velar implosives and object-initial word orders /.../”

So, juxtaposing the 1–5 and *a–b* lists above, it would seem that ingressive speech best matches the universal *b*: “widespread but relatively sporadic”. However, although there is reason to assume that there is a large hidden number of languages with ingressive speech—for example, most field linguists (often Bible translators) probably have not paid attention to phonological detail, and paralinguistic feedback markers are easy to miss in the first place, unless one is expecting, and looking for, them—not knowing this number makes it hard to draw any far-reaching conclusions with regard to the status of ingressive speech from a “highly marked or universal” perspective.

Suffice it to say that ingressive speech *might* have been looked at from the wrong angle, and that it *might* reflect a universal process—with a

clear biological foundation—rather than being a mere “odddity”.

Admittedly, some objections could be raised against the story outlined in this paper.

First, the accuracy of the map presented in *Plate 1* is difficult to judge, since it is based on sources that sometimes are far less than clear.

Moreover, although *Plate 1* may have some value diachronically, it might not be true synchronically. For example, informal polling of Argentinians seems to indicate that ingressives might be somewhat less frequent in present-day speech. Similar examples could be given for other languages. This, however, does not necessarily constitute an argument against the claim that ingressive speech might be a universal, since “unstable” is one of the criteria by listed by Croft, i.e. that a given linguistic phenomenon might appear, and disappear, relatively fast.

Summary

This paper argues that ingressive speech might reflect a linguistically universal process, rather than constituting an exotic or highly marked phenomenon.

Website

See also: <http://ingressivespeech.info>

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