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Improving objectivity, balance and forensic fitness in LAAP: a response to Matras

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1. Introduction

Yaron Matras's article 'Duly verified? Language analysis in UK asylum applications of Syrian refugees' (*International Journal of Speech, Language and the Law*, volume 25(1), June 2018) is a welcome contribution to the literature on Language Analysis in the Asylum Procedure (LAAP; also commonly known as LADO, i.e. Language Analysis for the Determination of Origin).

Matras presents a critique of LAAP as performed by the Stockholm-based agency Verified AB. His evaluation is based on 50 cases that were submitted for counter-expert analysis by the applicants' legal counsel, following rejection of their asylum claims by the UK Home Office. Matras identifies a number of problems in these reports and then introduces his own approach, which he calls the 'inductive-dialectological'. Matras claims that it differs in fundamental ways from, and addresses many of the problems with, the approach employed by Verified.

We welcome Matras's willingness to outline his approach in some detail and his making publicly available his corpora of recordings of Syrian Arabic and Kurmanji.¹ Matras also deserves thanks for drawing attention to an important issue in the field: the use of inductive and deductive reasoning, and the relationship of each to LAAP.

Matras's contribution has prompted us to consider further some of the fundamental epistemological and methodological issues underpinning LAAP. In this response we focus on Matras's method, its foundations and its fitness as forensic evidence in the context of asylum applications. We will not address the case-specific grounds on which Matras contrasts his method with that used by Verified. We note at the outset that we have in part been compelled to limit our response to a general level because Matras has declined multiple requests (including from the editor of this journal) to release the data he cites. He doing so he has cited both the need to protect confidentiality and the former affiliations of the first author of this article. We have also been unsuccessful in our attempts to have the data released by the UK Home Office.

We begin (§2) by summarising the key elements of Matras's approach, showing that it is not in fact fully inductive. We clarify that the standard LAAP task is one of verification, which is necessarily associated with deductive reasoning, and argue that inductive reasoning is suited only to open classification tasks. The ramifications of recognising this distinction are central to this paper.

Our aim in this response is to show that Matras's approach is problematic in a number of ways. First, Matras argues *de facto* in favour of testing the evidence against a single hypothesis; yet this may lead to inadvertent bias and betrays logical flaws that have serious forensic implications, as is well known in other branches of forensic science. Second, there are potential problems with the generation of Matras's initial hypothesis, based as it is on the

applicant's story. Third, it appears that Matras's view of the question to be addressed is not consistent with the trier of fact's requirements, given that the burden of proof is on the applicant. We will discuss each of these problems in more detail below (§3-5).

Matras's article also leads us to address three further issues: the need for a fixed conclusion scale, the large number of disparate conclusions among experts in LAAP, and the institutional demands that drive LAAP casework (§6-8). We conclude with some advice to asylum courts and to all practitioners in LAAP (§9).

2. Epistemological issues in LAAP

Matras's approach

Matras's 'inductive-dialectological' approach begins with the analyst making observations about linguistic features in a pre-recorded speech sample, with a focus on those features known to be dialectologically variable. A second stage is conducted in some cases, with the analyst eliciting new material from the asylum claimant via a set of questions structured in the manner of a sociolinguistic interview, in order to elicit the sort of fluent and natural narrative style that might be lacking in a formal asylum interview. These materials are then compared to reference recordings from other speakers of the relevant language(s), drawn from a wide geographical area. The reference recordings include examples of specific diagnostic phrases and words believed to reveal regional isoglosses. The data available from the asylum claimant's recordings and the reference materials are then used to assess 'the plausibility of the applicant's claim to have been socialised in a particular location or locations' (Matras 2018: 57).

We infer from Matras's discussion of cases (2018:65--71) that a further 'contextualisation' takes place in which the linguistic findings are related to the applicant's declared life history, including possible secondary influences. Matras cites various cases involving dialect mixture, including that of a 17-year-old asylum seeker who claimed to be Syrian but whose speech evinced some Egyptian features. The occurrence of dialect mixing is argued to be in line with the applicant's story of having left Syria at age 13, followed by two years' residence in Egypt and finally coming to share a flat with an Egyptian. We refer to this case several times below.

Matras's description seems consistent with the approach taken by many counter-experts in LAAP, in particular those contracted through De Taalstudio, a Dutch company (Verrips 2010). Matras's approach also appears to represent an application of the 'basic LADO question' proposed by Patrick (2012:536): 'How does an applicant's linguistic performance in a LADO context correlate with their history of speech community membership and language socialization?' Thus the present critique applies not only to Matras's work as a counter-expert in LAAP but addresses issues that are encountered in the casework of others too.

As we will explain in due course, the key difference between Matras's and Verified's approach lies not in the first being 'inductive-dialectological' and the second being deductive. Rather, the difference lies in how the question is framed and in the hypotheses being tested. Matras (2018:53) suggests that 'framing the question of linguistic background as two juxtaposed hypotheses ... risks biasing the results by excluding the possibility that speech can be varied and multilayered.' We argue in the opposite direction: assessing the evidence in the light of only one hypothesis is known in forensic science as well as in the social sciences to

introduce the risk of bias. In exploring only one hypothesis, Matras commits an error that contravenes general forensic principles appropriate for sound expert evidence. We explore this issue in more detail in §3.

Inductive approach?

Matras calls his approach inductive. In our view, only the first stage in Matras's approach, observing dialectal features in speech samples, might be accurately represented as inductive; subsequent stages clearly are not. Inductive reasoning proceeds from the bottom up: data are gathered and a hypothesis is developed to explain them. Deductive reasoning is the converse: the analysis starts out with a hypothesis that gives rise to certain expectations if the hypothesis is true, and data are tested against these expectations. The interpretative stages in Matras's approach clearly exemplify a deductive approach. Of the essence here is that Matras views the linguistic findings in light of the hypothesis that the asylum claimant's story is true; his conclusion is not reached inductively by generating a hypothesis from the data.

Matras's nomenclature wrongly suggests that his approach is inductive while Verified's is not. However, inductive reasoning is indeed applied by Verified and other LAAP agencies in cases involving classification (Hoskin 2018:36, Cambier-Langeveld 2016:29). As we explain in the next section, inductive analysis is in principle only appropriate in classification cases. It is not appropriate in cases of verification, which instead require deductive reasoning.

We also draw attention to the inevitable limitations and drawbacks associated with the use of any reference corpus. While Matras's publicly-available corpora of Arabic and Kurmanji are genuinely welcome contributions to the field, it is important to note that there is no such thing as a neutral dataset. All data are collected by design and guided in some way by theoretical positions concerning the nature and structure of the object of study, choice of number and type of source, and so on. In the case of linguistic data we must make choices about the type of speaker, number of subjects, and type of material to be elicited. Matras's Arabic speakers are described as 'bilingual' (p. 70), and 'some were collected in the Middle East while others in the UK' (p. 75). No location is represented by more than two or three speakers, and Syrian Arabic is represented by three speakers in total. No further demographic information is offered on the Arabic speakers, but the Kurmanji speakers are largely male (78%) and university educated (69%), with 48 % aged between 20 and 29 years. Thus the Kurmanji data are not balanced in the way typical of a sociolinguistic corpus. Obviously, the database is at present too limited to serve as the sole reference for a conclusion to be derived inductively 'in relation to the intersection of isoglosses', as Matras suggests (2018:69).

A verification or a classification task?

There are two different types of case for which LAAP is conducted. These are often labelled *verification* versus *classification* tasks (Moosmüller 2010; Cambier-Langeveld 2010; Foulkes, French and Wilson 2019). According to Cambier-Langeveld (2016:28), the standard LAAP task, in the first instance, is one of verification. Verification tasks involve developing, by deduction, a specific alternative hypothesis for comparison with the initial hypothesis based on the asylum claimant's story. Classification, on the other hand, employs inductive reasoning to identify the asylum seeker's most likely country of origin, e.g. for repatriation purposes, consequent upon an inability to verify the applicant's account of his/her origins. In most circumstances classification is inherently the more difficult task, since the question is open and thus a multitude of possible answers might be generated.

Matras's characterisation of his approach as inductive suggests that he interprets the basic LAAP task as one of classification. Both the characterisation and the interpretation, however, are mistaken. In fact, the LAAP expert is sought to provide evidence on a specific claim by the asylum seeker, and the LAAP procedure serves to assess whether the linguistic evidence supports or casts doubt on the claim. The cases referred to by Matras, i.e. appeal cases in which LAAP is sought to investigate the veracity of the applicant's claims, thus *inherently* fall into the verification category, which is by its nature deductive. The fact that Matras was hired by applicants' legal counsel and not by the government does not change the task of the expert or the question to be addressed, as will be discussed in §5.

Recognition of LAAP as a verification task or an open classification task is far from trivial, especially when it entails methodological consequences, as is the case here (Moosmüller 2010: 43--44). One major difference is that verification cases logically involve the testing of at least two hypotheses.

3. The problem of single hypothesis testing

As argued above, Matras's approach effectively involves the evaluation of the linguistic data in light of the applicant's entire claimed history of socialisation. At the same time, Matras (2018:53) criticises Verified's method for 'framing the question of linguistic background as two juxtaposed hypotheses'. However, according to Verified's own documentation, an alternative hypothesis is only formulated if the applicant's claim is found to be implausible.

'The purpose of the linguistic analysis is to try the hypothesis that the subject of the linguistic analysis speaks a language or dialect which is consistent with the given place of origin ... The linguistic behavior of the subject displayed in the data is examined for consistency with the given speech community being tested. Where the given place of origin is refuted by objective analysis, another alternative hypothesis is generated for testing against the speech data.' (Verified 2012: 2)

Matras suggests (2018: 61) that Verified selected, for reasons of 'convenience', an origin in Egypt as the default hypothesis in each of the Syrian cases he examines. This is unlikely to have been the case, since Verified's practice is to formulate alternative hypotheses on the basis of the analyst's judgement of the applicant's likely (substratal) linguistic background (Hoskin 2018:36). Verified's sequential approach seems to us to conform to guidelines on LAAP by the UK Home Office:

'Each report will express its analysis and results according to at least one and possibly 2 hypotheses. Every report will address the first hypothesis, which is that the speaker has the linguistic background as claimed. If linguistic background is not as claimed (see negative outcomes below), a second hypothesis proposing an alternative background will be tested.' (Home Office 2018:20)

In our view, however, both Verified's and Matras's approach are inconsistent with principles of sound forensic evidence. In verification cases, comparing the initial hypothesis with an alternative is an essential component of a fair and logically sound forensic analysis and must be acknowledged at all stages. The initial question of verification *must* consider the linguistic evidence in light of both the claimant's story (X) and an alternative hypothesis that the

claimant's story is not true ($\neg X$). Even a positive outcome at this stage, i.e. a report supporting the claimant, must show that it has evaluated the evidence for X against that for $\neg X$.

In other words, even if the linguistic evidence is consistent with what is claimed, its consistency does not in itself allow an expert to express the strength of the evidence. In order to express what the evidence means for the case at hand, the likelihood of the evidence must always be considered under two hypotheses: How plausible is this evidence if hypothesis X is true, compared to how plausible it is if the alternative hypothesis is true? It is impossible to judge the significance of the evidence without explicit testing of an alternative hypothesis.

We might, for instance, observe a set of vowel and consonant pronunciations that largely conform to known patterns for Syrian Arabic. To that extent the evidence supports the initial claim that the speaker is Syrian. But could those patterns also be found in other dialects of Arabic? Without explicitly assessing that alternative, we cannot judge to what extent the observed patterns support the claimant's story (Do they support it a little or a lot? Do they contain relatively unremarkable and non-distinctive features, or do they contain a set of shibboleths?) Neither can we determine whether there might be an equally or even more likely explanation. Matras's example of a Syrian who claimed to have shared a flat with an Egyptian is a clearly illustrative case: the hypothesis is that the claimant has Egyptian influence because of dialect contact; Egyptian features are observed; *ergo*, the hypothesis is supported. However, the hypothesis can only be supported to the extent that it cannot be rejected; the strength of the evidence cannot be tested, and nor can it be known whether there are more likely explanations without explicitly considering the alternatives.

The evidence garnered in favour of a single hypothesis is therefore at best of limited value, in effect confirming the claimant's version of events only at the level of not being able to eliminate X as a plausible explanation. However, if expressed inappropriately (e.g. 'the evidence is strongly supportive of X', see also §6 below), the evidence is logically flawed and ought, in our view, to be inadmissible on grounds of being misleading.

Yet, even if the conclusion is expressed accurately as a degree of consistency between the findings and the expectations based on one hypothesis, there remains the problem of bias. Within forensic speech science, especially speaker comparison, it is now widely accepted that an analyst must explore the evidence in light of two competing hypotheses. Failure to do so risks confirmation bias, i.e. seeking evidence to support one hypothesis because the alternative hypothesis is either considered unlikely *a priori* or not considered at all (Nickerson 1998, Edmond et al 2017). Likewise, considering only one explanation for the facts and failing to explicitly consider alternative explanations for the facts is known to lead to explanation-induced bias in the social sciences (Anderson and Sechler 1986).

We observe that Verified shows some awareness of this issue:

'It should, however, be noted that Verified expresses how *consistent* the linguistic behaviour displayed is with the linguistic community of the hypothesis. No implications are to be construed as to how *specific* the speech sample is to the linguistic community which forms the basis for the hypothesis, nor about the likelihood to arrive at a corroboration or refutation of any alternative hypothesis.' (Verified 2012:4).

We do not see this awareness in Matras's article, especially since he specifically opposes the juxtaposition of two hypotheses. To all intents and purposes, Matras argues in favour of considering only the asylum seeker's story as explanation for the facts.

We suggest that the most likely alternative hypothesis should actually be given due consideration before an analysis is conducted, to determine whether LAAP can be expected to yield a relevant result and to determine the required expertise (Cambier-Langeveld 2016:32). Conducting LAAP can only help the trier of fact if we expect to be able to distinguish between a true and a false claim. However, in view of the range of features that could be accounted for by citing secondary influences, and in the absence of an alternative hypothesis, an expert applying Matras's approach is generally under no compunction at all to consider whether or how he could distinguish between a true and a false claimant.

Principles of sound forensic evidence

The issue discussed above, i.e. the necessity to consider the evidence in light of two hypotheses, mirrors the debate in forensic science more generally over Bayesian reasoning in expert testimony (e.g. Association of Forensic Science Providers 2009; Broeders 1999; Morrison 2011). Broeders (2010) and Lindh (2010) have raised this issue before with specific reference to LAAP. The general Bayesian approach to forensic evidence is summarised by the Association of Forensic Science Providers (AFSP; an independent body representing numerous forensic sciences in the UK and Ireland) with reference to four principles: *balance*, *logic*, *robustness* and *transparency*. The principle of *balance* asserts:

'The expert should address at least one pair of propositions usually one based upon the prosecution issue and one based upon an alternative (defence issue). If a reasonable alternative cannot be identified then the expert may address only the one proposition but will make it clear that he cannot evaluate the strength of the evidence.'
(Association of Forensic Science Providers 2009:161)

The principle of balance acknowledges that it might not be possible to identify an alternative hypothesis. But by implication this is the exception, not the rule. The AFSP's guidance clarifies how to proceed in the absence of an alternative hypothesis, in the scenario of a criminal case in which the suspect or defence team do not submit an alternative. The same principles can be applied to LAAP cases. AFSP suggests that the expert has two choices to avoid the situation in which there is no alternative:

1. Adopt, on behalf of the defendant, an alternative proposition.
 2. Explore a range of alternative explanations for the findings.
- (Association of Forensic Science Providers 2009:162)

Both options encourage the making of pragmatic decisions – presumably via inductive reasoning – to develop one or more alternative hypotheses for comparison. In cases where no alternative hypothesis can reasonably be offered, there should be no evaluation of the strength of the evidence.

Failure to adhere to principles of sound forensic evidence can have immense repercussions. It has been shown to lie at the heart of miscarriages of justice such as the murder convictions of Sally Clark in 1999 (Dwyer 2003, Horton 2005).

4. The problem of tailor-made stories

Matras brings into focus the role of the asylum applicant's story of origin and socialisation in formulating hypotheses in LAAP cases. He states (2018:56--57) that there is 'an emerging consensus among researchers that LADO should address individuals' socialisation history and their way of communicating in a particular setting (that of the interview) rather than place of origin.' Matras's method therefore takes the detailed story of the applicant, and his/her performance in the LAAP interview, as its backdrop. The applicant's story is used to generate a hypothesis (i.e. to derive X in our logical formulation). The language analysis then aims to establish to what extent the linguistic facts can be accounted for within the applicant's entire declared history of residence, including his/her claimed exposure to other dialects. Matras contrasts his position with that of Verified. He suggests that Verified does not take into account the possibility of secondary influences on the applicant's speech, i.e. those which may have occurred subsequent to initial socialisation.ⁱⁱ

At this point we may note that it is questionable whether the operation of secondary influences can truly be *tested* through the analysis of a person's linguistic performance. For example, let us again consider Matras's example (2018:66--7) of a 17-year-old-asylum seeker who claimed Syrian origins but whose speech evidenced multiple Egyptian forms. Matras attributes these to the applicant's having left Syria at age 13, then living for two years in Egypt and, finally, sharing a flat with an Egyptian at the time the interview was conducted. In such cases it would be difficult, if not impossible, to affirm with sufficient confidence whether the declared life history is sufficient to yield the long-term effects on language apparently being claimed. Influence through dialect contact is a complex process. It involves accommodation, leading to code mixing or longer-term adjustments to a speaker's underlying phonetic and linguistic system. Such processes are socially and linguistically complex. Long-term effects on speech production require intensive and extended exposure in situations of appropriate power relations (e.g. Evans and Iverson 2007, Babel 2012). Generally, though, accommodation and related processes are temporary and situational, varying from speaker to speaker, from feature to feature, and from situation to situation. Empirically demonstrating the likely effects of dialect contact in a LAAP case requires data of a form that is unlikely to exist (e.g. a large enough corpus of similar people who have encountered similar circumstances, plus comparable recordings of those same people prior to the occurrence of dialect contact). As a consequence, claims of secondary influences are extremely difficult to test, and are no more than speculative.

The aspect of the applicant's claim that can – and should – be tested via LAAP is the claimed primary place of socialisation. Furthermore, there is good reason to doubt claims, by asylum seekers or by experts on their behalf, which would serve to lessen or explain away the potential differences between true and false claimants. It is part of forensic awareness to take due note of the setting in which the applicant's claims to origin are made, since such claims occur in the context of the very same asylum application procedure in which their veracity is under investigation. The applicant's story may thus be tailored to explain possible mismatches between the linguistic data and what one would normally expect given the applicant's claimed origin. Assertions made about a lack of education or an extremely secluded lifestyle may not be true; they could be made up to account for a lack of local knowledge.

Once a negative LAAP report has been produced for a government agency, or a claim rejected for other reasons, legal representatives are likely to ask applicants to provide possible explanations for any inconsistent findings. These explanations can then be presented as part of

the applicant's story at the point of appeal, and used by counter-experts. We discuss one such case here to illustrate the problem.ⁱⁱⁱ

In a LAAP report for the Dutch government, the applicant's claimed origin in Syria was refuted, based on the analysis of her Kurmanji. The applicant claimed to have lived in Syria for 45 years, to be an Assyrian Christian and to be monolingual in Kurmanji. The report argued that her Kurmanji speech could not be placed within a speech community in Syria and that it contained non-native features. The report also suggested a possible origin in Turkey and a possible active knowledge of Turkish and/or Armenian.

A counter-analysis was performed via De Taalstudio. In a paragraph entitled 'Language profile according to the applicant', the counter-expert introduced a new claim, which was not part of the applicant's original story:

'According to the letter of information about the assignment, the applicant speaks Kurmanji as her only language, *and may have spoken Assyrian in her childhood*' [emphasis added].

Note that this claim is entirely speculative and appears to be tailor-made to account for the results of the first LAAP report. We do not know whether this claim originated with the applicant, her legal representative or De Taalstudio. In any case, despite the lack of evidence for the claim, the counter-expert used it as an explanation for the 'idiosyncratic features' that 'lend her speech the overall character of a foreign accent'. The counter-expert's report concluded that the applicant's Kurmanji was 'consistent with the Kurmanji that is spoken in Syria, as well as consistent with her own narrative according to which she acquired Kurmanji as her second language.' A speculative statement in the letter of information supplied to the counter-expert by De Taalstudio was thus incorporated to become an aspect of the applicant's 'own narrative', even though it was not in any of her original statements. Doing so allowed the counter-expert to confirm the claimed origin despite the noted 'character of a foreign accent' in the applicant's only language.

Similar cases occur fairly regularly in Dutch practice. Speculative claims added to applicants' narratives after the initial LAAP report and then used in counter-expert reports to account for discrepant findings include: stays in refugee camps; (grand)parents from another area; regular tuning to certain radio channels or the watching of TV programmes; and, since the applicant's arrival in Europe, friendly contacts with speakers of the same language, from a different area. In any case, the example cited above shows that in the context of asylum applications aspects of the applicant's account may be tailor-made to account for the linguistic evidence. In these circumstances, whether the linguistic facts are consistent with the applicant's own account has little bearing on the question of whether the applicant's account is true.

5. The expert's duty to the court and the question to be addressed

The analyst's task is to deliver expert evidence. This is true no matter what method is used or what type of linguistic material is marshalled in evidence. The LAAP task requires specialist input from those with appropriate training to 'provide the court with information which is likely to be outside a judge's or a jury's knowledge and experience' (CPS 2014:7).

Thus an expert has an overriding duty to the court, regardless of whether the expert acts on behalf of the prosecution or the defence in criminal cases, or on behalf of one or other party in tribunal cases. This is understood in all jurisdictions. For example, in the Code of Conduct for forensic experts in criminal cases in the Netherlands (NRGD: 2015), the first rule states: ‘With careful research and reporting, contribute above all to allow the judicial authority to come to a balanced assessment on the criminal case’. In the UK, the duty of the expert to the court is enshrined in Criminal Procedure Rule 19.2 (Ministry of Justice: 2015), and in Practice Directions for Asylum and Immigration Tribunals:

10.2 It is the duty of an expert to help the Tribunal on matters within the expert’s own expertise. This duty is paramount and overrides any obligation to the person from whom the expert has received instructions or by whom the expert is paid.

10.3 Expert evidence should be the independent product of the expert uninfluenced by the pressures of litigation.

10.4 An expert should assist the Tribunal by providing objective, unbiased opinion on matters within his or her expertise, and should not assume the role of an advocate.

10.5 An expert should consider all material facts, including those which might detract from his or her opinion.
(UKAIT 2014: 10)

While these principles would appear obvious, it seems that they are not always acknowledged by practitioners in LAAP. The persistent use of the terms ‘counter-expert’ and ‘counter-expertise’ is a case in point. No doubt intended as labels of convenience, these labels can easily be misinterpreted as meaning that it is the counter-expert’s task to ‘counter’ an analysis conducted on behalf of a government agency.

In the case of LAAP, the expert linguist’s duty to the court is to produce a strength-of-evidence statement on the extent to which the claimed primary place of socialisation is supported by the linguistic evidence as found in the speech sample. It is expressly *not* the expert’s duty to assess the credibility of the applicant’s story as a whole, since the overall credibility assessment is the role of the decision-making authority, not that of the expert linguist.

Note here that the burden of proof rests with the asylum seeker. The UNHCR Handbook (2011: 38) states: ‘It is a general legal principle that the burden of proof lies on the person submitting a claim.’ Thus a counter-report that only addresses the question of whether the applicant’s account *could* be true will not (or, according to the law, should not) make any significant changes to the outcome of a case. Verrips, as director of De Taalstudio, is well aware of this:

‘ ... the IND’s decision to reject the asylum application will not be affected by a contra-expertise unless the contra-expert concludes that the LADO-analysis confirms the asylum seeker’s origin as their claimed place of origin with a high degree of certainty. This is so, regardless of whatever critique the contra-expert may express related to the IND’s LADO-report’ (Verrips 2010: 286).

This situation, while legally justified, might press counter-experts to express conclusions of inappropriate strength as support for the applicant's claims, even though their methodology may not allow it (cf. §3).

A Dutch court recently recognised the flaw in the approach taken by Matras. In a report (submitted through De Taalstudio on 9 April 2018), this approach was described as follows: 'I see my task as an expert to take the applicant's statement as the point of departure and then check the evidence to see if it is consistent with that statement, as far as is possible to ascertain.' The court ruled that the counter-expert had not addressed the right question and the findings of the counter-analysis were consequently dismissed:

'De rechtbank merkt op dat de contra-expert klaarblijkelijk getoetst heeft of de spraak van eisers overeenkomt met hun relaas. De rechtbank acht dit een onjuiste toets omdat daarbij van de juistheid van het relaas wordt uitgegaan. Als de spraak van eisers al zou stroken met hun relaas, zijn daarvoor altijd nog andere verklaringen mogelijk.' (Ruling dated 13 July 2018, court The Hague, NL 18.3179 and NL 18.3184)

Translation: *'The court notes that the counter-expert has apparently tested whether the plaintiffs' speech matches their account. The court considers this to be an incorrect test because it is based on the assumption that the account is correct. Even if the plaintiffs' speech would be consistent with their account, other explanations are always possible.'*

6. The issue of fixed conclusion scales

A further issue worthy of comment in the context of appropriate framing of conclusions is that many counter-experts do not use a fixed conclusion scale. Instead, the conclusion is worded freely (Verrips 2010:283). Below we list some of the conclusions, encountered over the course of a few years, by one particular counter-expert (not Matras). In all cases, the counter-expertise was commissioned by De Taalstudio. Note how this particular counter-expert confirms origins even in specific villages, showing how much the conclusions are oriented towards the asylum seeker's claims.

- (...) overwhelmingly likely she is a [nationality] [ethnicity].
- I conclude that the most plausible explanation for the combination of his language performance and his considerable local knowledge of [island name] is that the claim that he lived on [island name] for most of his life is correct.
- I believe she is from [country X].
- The applicant is a native [ethnicity] and [ethnicity] speaker from [place name], [country X]. I am absolutely sure.
- Most likely [country X].
- [country X].
- I would say with certainty he is from [island name].
- I am sure she is from [island name], southern [country X].
- I would say he is surely a [ethnicity]. His local geographical knowledge suggests strongly he is from [place name].
- A native [ethnicity] from [island name], southern [country X].
- Some limited non-linguistic data about [place name], which I would say give some support to her claim to be from [place name].

- I would say with considerable confidence that he is a native [ethnicity] speaker, and with some confidence that he is from [place name], southern [country X].
- I'd say with confidence that he is [nationality] [ethnicity] from [place name].
- [place name], without a doubt.
- [island name], southern [country X], possibly [place name] village. High probability.
- I have no hesitation in saying he is from [place name].
- One can say with reasonable confidence that she is from [island name].
- I find it likely (...) that the applicant lived on [island name] from age 6 to age 20.
- The local knowledge listed in section 4 inclines me to the charitable interpretation that she is from [place name].
- I am very confident he speaks the language he claims to speak (...) and comes from a village on the banks of the [river name], as he claims.
- I find the combination of linguistic behaviour and local detail in her testimony fairly convincing.
- I think it possible that he grew up and was socialised on [island name].

Free wordings of conclusions without specification of the range of possible conclusions can again be misleading or difficult to interpret for the trier of fact. The use of a fixed conclusion scale is now standard in most forensic sciences and government agencies, since the reader must be able to infer where the strength of the conclusion lies relative to the range of conclusions that an expert is willing to give. In the UK, expert witnesses must specify the opinion scale that they use (Criminal Evidence Rule 19.4(f)(i); Ministry of Justice 2015).

7. Likely causes of disparate conclusions in LAAP

In forensic speaker comparison it is extremely rare to find two experts disagreeing on the fundamental facts of the case (disagreements have instead occurred over methodology and formulation of conclusions). The general description of segmental and suprasegmental patterns is likely to be very similar, as is the understanding of how those patterns align with published descriptions of the relevant language or dialect. To our knowledge, in only a handful of cases has a speaker comparison case involved experts taking diametrically opposed views of the evidence, such that one side offers a conclusion supportive of the prosecution but the other side of the defence (Peter French, personal communication). The case of *R –v– Slade, Baxter, Pearman & Hudson* [2015] EWCA Crim 71] is one of the very few such cases we know of, and even in this case there were numerous difficulties with the materials, so that the best interpretation was by no means obvious.

Yet there is a remarkable level of disharmony between the findings of LAAP agencies and those of counter-experts. According to Verrips (2010: 289), who is in a good position to know, the rate of agreement is estimated to lie between 30% and 60%, implying a rate of disagreement between analysts of between 40% and 70% of cases. These disagreements are not just differences in scale of confidence but involve the basic question of whether the claim of origin is supported, with the evidence thus apparently pointing in opposite directions. This high percentage of disagreement is a cause for serious concern, since courts are hardly in a position to adjudicate between diametrically opposed positions.

Why should we find this degree of difference? There are a number of logical possibilities, possibly occurring in combination: (1) serious and widespread incompetence in analytic skills; (2) overt or covert bias from one or both sides; (3) diverging views on the task and question at hand, such that different questions lead to different answers; (4) inadvertent bias

resulting from a failure to understand the forensic context of the analysis. This last point includes failure to understand that it is the expert's task to express a strength of evidence, that the burden of proof is on the applicant, and that there is a necessity of considering two competing hypotheses at all times in order to contribute to fair decision-making.

While early debates on LAAP have implicitly assumed that problems occur due to a combination of (1) and (2), in our view the most likely explanation for the frequently polarised outcomes of LAAP cases is a combination of (3) and (4). Ideas on the nature of the task vary, depending on whether the analyst is positioned as working for an asylum seeker or an asylum agency. This appears to lead to counter-experts acting as a witness for the defence, who in some cases see it as their task not to supply an objective second opinion but to counter previous negative findings by investigating whether the linguistic facts could somehow also be accounted for within the applicant's story. This may explain in part why disharmony in the findings of LAAP agencies and counter-experts is so common.

8. The issue of institutional demands

We end by identifying one further major threat to reliable LAAP. It is important to point out the role of institutional demands that drive LAAP casework. Very fast turnaround times are required due to the fixed timeframes set for decision making in asylum cases. Moreover, accepting the costs and numbers reported in Matras (£1.2 million for 4,760 reports), analyses would appear to cost an average of £252 each, presumably including the interview/data collection. It is no surprise in these circumstances to see that the reports received by Matras's did not contain a 'complete transcription' (p. 58). We can argue as strongly as we wish in favour of full-scale reports, quality assurance and proper data collection, but these figures suggest that agencies are simply not being paid enough to allow them the time to do their jobs properly. There is also evidence that costs have fallen over time: in 2008 and 2009 costs were estimated to range from £350 to £700 where transliteration was involved (National Audit Office 2009, cited by Home Office Science: Migration and Border Analysis 2011: 32).^{iv}

It appears possible that the two commercial firms, Verified and Sprakab, are outcompeting each other, to the point where we cannot fathom how the necessary minimal quality assurance might be implemented under the given cost constraints. Indeed, Verified is committed to supplying preliminary conclusions within thirty minutes of an interview, with a full report in 3-5 working days (Home Office 2018). We thus urge the UK Home Office and other immigration services to agree a more suitable pricing structure for LAAP in their future requests for tenders, and to invite companies to compete with each other in terms of the quality they can offer within this price, in full recognition of the expert nature of the work to be conducted. The price per analysis should minimally be doubled to allow for a range of factors such as careful data selection, taking applicants' entire linguistic profile into account instead of just one language, a thorough testing and selection procedure for the native analysts, face-to-face case discussions in the office (not via Skype) between native analysts and linguists, crosschecks etc. The linguistic community, sociolinguistic and forensic, can surely advise. While such a call might appear naïve, in the UK this would amount to an increase in costs of £1.2 million per annum, a trivial sum in the context of asylum and overall government spending. More robust analysis would in turn ensure genuine claimants are accorded recognition quickly and bogus claimants can be repatriated quickly, in both cases generating significant savings in terms of the ongoing costs of housing claimants (Home Office Science: Migration and Border Analysis 2011).

9. Conclusion

In summary, we recognise the advances made in Matras's approach in improving transparency in the use of reference material. We also appreciate his clarification of epistemological issues in LAAP. We have criticised aspects of Matras's approach, but we reiterate that these points apply to other experts too, including Verified in some cases. Matras appears to fail, as others do, to appreciate the forensic context in which LAAP is situated. Any approach that is clearly contrary to established forensic principles risks reaching misleading conclusions.

Aside from the advice for immigration services to arrange a more suitable pricing for LAAP, we think that asylum courts would do well to adopt a Code of Conduct for LAAP experts similar to the ones that exist for experts in criminal law, if they wish to avoid having experts submitting reports that are not helpful to the courts in adjudicating fairly on the issues at hand.

We take this opportunity to echo the point, made by Cambier-Langeveld (2010, 2012, 2014, 2018), that understanding the forensic context of LAAP is critical. This includes following a logically and legally acceptable framework, and one that applies irrespective of the linguistic methods prioritised by the analyst. We advise anyone who ventures into the field of forensic casework to consider carefully the context in which the work is performed. Relevant questions include: What is the issue that the court needs to decide upon? Do I have the expertise to help? Do I have sufficient information to determine what are the *facts* and what are the *claims* in the case at hand? Where does my (speech) material come from? What are my basic assumptions? What should I do to ensure that the evidence I provide is weighed properly? Do I feel free to express a conclusion objectively and fairly, without pressure to reach a conclusion in any particular direction, expressed with undue strength?

In all, we hope to have made it clear that it is essential for all practitioners of LAAP to recognise the forensic obligations of their role in order to improve the objectivity, balance and forensic fitness of their work.

References

Andersen, C.A. and Sechler, E.S. (1986). Effects of explanation and counterexplanation on the development and use of social theories. *Journal of Personality and Social Psychology*, vol. 50, no. 1: 24--34.

Association of Forensic Science Providers (2009) Standards for the formulation of evaluative forensic science expert opinion. *Science and Justice* 49(3): 161--164.
<https://doi.org/10.1016/j.scijus.2009.07.004>

Babel, M. (2012). Evidence for phonetic and social selectivity in spontaneous phonetic imitation. *Journal of Phonetics*, 40(1), 177--189.

Broeders, A.P.A. (1999) Some observations on the use of probability scales in forensic identification. *Forensic Linguistics* 6(2): 228--241.

- Broeders, A.P.A. (2010) Decision making in LADO – A view from the forensic arena. In K. Zwaan, M. Verrips and P. Muysken (eds) *Language and Origin: the role of language in European asylum procedure: linguistic and legal perspectives*. Nijmegen: Wolf Legal Publishers, 51--60.
- Cambier-Langeveld, T. (2010) The role of linguists and native speakers in language analysis for the determination of speaker origin. *International Journal of Speech, Language and the Law*, 17(1): 67--93.
- Cambier-Langeveld, T. (2012) Clarification of the issues in language analysis: a rejoinder to Fraser and Verrips. *International Journal of Speech, Language and the Law*, 19(1): 95--108.
- Cambier-Langeveld, T. (2014) State-of-the-art in language analysis: a response to the chapter on LADO in the Oxford Handbook of Language and Law. *International Journal of Speech, Language and the Law*, 21(2): 371--381.
- Cambier-Langeveld, T. (2016) Language analysis in the asylum procedure: a specification of the task in practice. *International Journal of Speech, Language and the Law*, 23(1): 25--41.
- Cambier-Langeveld, T. (2018) Language analysis in the asylum procedure: consider the context. *International Journal of Speech, Language and the Law*, 19(1): 95--108. In I.M. Nick (ed) *Forensic Linguistics: Asylum-seekers, Refugees and Immigrants*. Malaga: Vernon Press, 1--22.
- CPS [Crown Prosecution Service] (2014) Expert evidence. https://www.cps.gov.uk/sites/default/files/documents/legal_guidance/expert_evidence_first_edition_2014.pdf
- Dwyer, D. (2003). The duties of expert witnesses of fact and opinion: R v Clark (Sally). *The International Journal of Evidence & Proof*, 7(4), 264--269.
- Edmond, G., Towler, A., Grows, B., Ribeiro, G., Found, B., White, D., Ballantyne, K., Searston, R.A., Thompson, M.B., Tangen, J.M., Kemp, R. I., and Martire, K. (2017) Thinking forensics: Cognitive science for forensic practitioners. *Science & Justice* 57(2): 144--154.
- Evans, B.G., Iverson, P. 2007. Plasticity in speech production and perception: A study of accent change in young adults. *Journal of the Acoustical Society of America* 121, 3814--3826.
- Foulkes, P., French, P. & Wilson, K. (2019) LADO as forensic speaker profiling. In P. Patrick, M. Schmid, & K. Zwaan (eds.) *Language Analysis for the Determination of Origin*. Cham: Springer, pp. 91--116.
- Home Office (2018) *Language analysis*, version 21.0. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685203/Language-analysis-AI-v21.0EXT.pdf
- Home Office Science: Migration and Border Analysis (2011) *Language analysis testing of asylum applicants: Impacts and economic costs and benefits*. Report prepared for the UK Border Agency: New Asylum Model team (NAM +).

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257177/language-analysis.pdf

Horton, R. (2005). In defence of Roy Meadow. *The Lancet*, 366(9479), 3--5.

Hoskin, J.A. (2018) Native speaker non-linguists in LADO: an insider perspective. In I.M. Nick (ed) *Forensic Linguistics: Asylum-seekers, Refugees and Immigrants*. Malaga: Vernon Press, 23--40.

Legal Aid Agency (2019) Guidance on the Remuneration of Expert Witnesses.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791497/Guidance_on_the_Remuneration_of_Expert_Witnesses_April2019.pdf

Lindh, J. (2010) Wording of conclusions and structure of LADO reports. Paper presented at Gothenburg Workshop on Language Analysis, University of Gothenburg, Sweden, 22-23 November 2010.

Matras, Y. (2018) Duly verified? Language analysis in UK asylum applications of Syrian refugees. *International Journal of Speech, Language and the Law* 25(1): 53--78.

Ministry of Justice (2015) Criminal procedure rules, part 19: expert evidence. Crown Copyright. <http://www.justice.gov.uk/courts/procedure-rules/criminal/docs/2015/crim-proc-rules-2015-part-19.pdf>

Moosmüller, M. (2010) IAFPA position on language analysis in asylum procedures. In K. Zwaan, M. Verrips and P. Muysken (eds) *Language and Origin: the role of language in European asylum procedure: linguistic and legal perspectives*. Nijmegen: Wolf Legal Publishers, 43--47.

Morrison, G. S. (2011) The likelihood-ratio framework and forensic evidence in court: a response to *R v T*. *The International Journal of Evidence & Proof* 16: 1--29.

National Audit Office (2009) *National Audit Office – Asylum Value for Money Study Cost Model, 2007-2008*. London: Accenture.

Nickerson, R. S. (1998) Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology* 2(2): 175--220.

NRGD [Nederlands Register Gerechtig Deskundigen] (2015) Gedragscode NRGD, version 2.0.

https://nrgd.nl/binaries/Gedragscode%20gerechtelijk%20deskundigen_tcm39-88125.pdf

Office of the United Nations High Commissioner for Refugees (2011) *Handbook and guidelines on procedures and criteria for determining refugee status under the 1951 Convention and the 1967 Protocol relating to the Status of Refugees*, last accessed 20 May 2019, <http://www.unhcr.org/uk/publications/legal/3d58e13b4/handbook-procedures-criteria-determining-refugee-status-under-1951-convention.html>

Patrick, P. (2012) Language analysis for determination of origin: objective evidence for refugee status determination. In P. Tiersma and L. Solan (eds.) *The Oxford Handbook of Language and Law*. Oxford University Press, 533--546.

Prokofyeva, T. (2018) Linguistic origin identification in focus: theory and practice in LOID. In I.M. Nick (ed) *Forensic Linguistics: Asylum-seekers, Refugees and Immigrants*. Malaga: Vernon Press, 41--55.

UKAIT (2014) *Practice Directions: Immigration and Asylum Chambers of the First Tier Tribunal and the Upper Tribunal*. London: Asylum and Immigration Tribunal.
<https://www.judiciary.uk/wp-content/uploads/2014/11/revised-pd-3112014.pdf>

UNHCR [United Nations High Commissioner for Refugees] (2011) *Handbook and Guidelines on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees*, December 2011, HCR/1P/4/ENG/REV. 3, available at: <https://www.refworld.org/docid/4f33c8d92.html> [accessed 17 June 2019]

Verified (2012) *LOID – Method and Limitations*. Retrieved from <https://cms.qz.com/wp-content/uploads/2015/09/metod-och-begrc3a4nsningar-loid-ho.pdf> [accessed 17 June 2019]

Verrips, M. (2010) Language analysis and contra-expertise in the Dutch asylum procedure. *International Journal of Speech, Language and the Law* 17 (2): 279--294.

Case:

R –v–Slade, Baxter, Pearman & Hudson [2015] EWCA Crim 71.
<http://www.bailii.org/ew/cases/EWCA/Crim/2015/71.html>

ⁱ <http://www.arabic.humanities.manchester.ac.uk/> and <http://kurdish.humanities.manchester.ac.uk/>

ⁱⁱ There is discrepancy between the observations on Verified's casework in Matras (2018) and the description of Verified's methodology in Prokofyeva (2018), a linguist employed by Verified, regarding the extent to which an applicant's history of socialisation is taken into account. According to Prokofyeva, various sociolinguistic elements of the declared life history (including residential history) are considered as part of the initial hypothesis. However, an explanation of *how* they are considered is lacking. Unfortunately, we cannot comment further, since we have not been able to access the data cited by Matras. Generally speaking, on the one hand we agree with Matras and others that certain sociolinguistic factors should be taken into consideration, since the age of the person (at which they left their home country), their residential history, the ethnicity, the dialect spoken at home by the parents, the setting of the interview etc. may influence the way a person speaks to some degree. On the other hand it is the primary place of socialisation that can and should be tested with LAAP, and caution is advised in accepting claimed circumstances as explanations for unexpected findings (see main text). Adapting what Patrick (2012, p. 544) states on the knowledge of native speakers, we suggest the real question is not *whether*, but *how*, sociolinguistic influences based on the applicant's claims should be taken into account in LAAP.

ⁱⁱⁱ Cited reports are available, in anonymised form, on request.

^{iv} The UK has a system of set fees for expert evidence in criminal cases (Legal Aid Agency 2019). Fees for related specialties suggest that LAAP is severely undervalued (e.g. hourly rates for voice recognition experts at £93.60, speech therapists at £79.20, handwriting experts at £72, lip reader or signer at £57.60). A typical forensic speaker comparison or profiling case, assuming a single evidential recording is to be analysed, generally takes 1-2 days' work (Foulkes, French & Wilson 2019), suggesting a true cost at the expert fee level of £700-£1400.