

Central Filing

Please reply to R.P. Ferris

25th January 1983

Reference RPF/WBL/46E

Mr. R. Bexon,
Imperial Tobacco Ltd.,
3810 St. Antoine Street West,
Montreal,
P.Q.,
CANADA. H4C 1B5.

Dear Bob,

Hello again! I am sure by now that Martin will have informed you that I am on your case! And I must say, Project Crawford makes a very fascinating story as you have documented it to us, not least because it touches on some of our own questions in the sensory/subjective area (albeit in a non menthol context).

As you may know, I am due to come out to Montreal, hopefully in March, so I am sure it would be quite fruitful for us to get together for some time during that two week period. For now, I will confine myself to some preliminary observations based on first acquaintance with your case material.

Aftertaste is the great chameleon of tobacco sensory testing, all things to all men, and having a tendency to 'disappear' into the background evaluative context until such a time as that background changes whereupon, as you have found, it will tend to stand out in sharp relief!

We have found that aftertaste is a relatively low profile component in higher tar assessment, in the sense that its presence at familiar levels will remain an unacknowledged 'taken for granted' contributor to product acceptance and only its absence or presence in uncharacteristic quantity or quality will evoke (negative) reaction. It is quite clear however that as we move to the low yield smoker, aftertaste emerges as an important consciously acknowledged contributor to product acceptance. We have seen evidence of this in work comparing attribute vocabularies of middle tar and low tar panels of both DELTA and BROMLEY specification, where aftertaste references tend to be relatively exclusive to the low tar groups, for whom it also attracts a higher salience value.

/...

STANDARD INDUSTRIAL CLASSIFICATION 1974 B 25100100
INTERNATIONAL STANDARDIZATION ORGANIZATION

103491062

Discussion work with our low tar consumer panels indicates that the emergence of aftertaste salience is related to the declining prominence of other variables in the total sensory 'mix' and it is apparent that, subject to some important caveats, 'aftertaste' is most often regarded as a product plus.

But what is aftertaste? Some confusion exists as to when it may be experienced, either as an interim sensation between puffs, or as a terminal, almost 'recollective' experience either immediately following extinguishing the cigarette, or some time afterward. The general consensus would suggest that aftertaste is experienced after consuming the whole cigarette, that it is more likely to be a product positive immediately following extinguishing the cigarette, and characteristically decays to a potential negative over the next half an hour.

Unfortunately, aftertaste has at least three seperable meanings which may be present individually or in combination for any given cigarette type:

(i) AFTERTASTE AS A TASTE

Most aftertaste references, on simple probe, will be referred to as a taste experience, and the more redolent of fresh natural tobacco flavour this experience is, the more it will be considered a product plus in the low tar context. To the extent to which it decays over time it becomes a product negative. Aftertaste improvement in this context refers to a quality improvement in the direction of perceived tobacco-ness of flavour.

(ii) AFTERTASTE AS AN IRRITATION

On a more in depth probe, at least as prominent as taste based definitions, we see the emergence of references to residual irritations in terms of lingering mouthburn and throat burn. These are considered a product negative, especially in the extent to which they persist over time. Aftertaste improvement in this context refers to quantity improvement in the direction of reduction but not complete eradication.

(iii) AFTERTASTE AS A RESIDUE

Less commonly, and almost invariably a negative, aftertaste is used to describe textural sensations which might more appropriately be termed 'mouth coating'. Such textural references are often but not invariably accompanied by a taste reference, and terms such as 'flour-y', 'powdery', and 'chalky' are common, sometimes interspersed with references which are probably related more closely to mouth drying, astringency effects.

/...

103491063

25th January 1983

In general terms, qualitatively, aftertaste improvement is a question of increased 'naturalness' of flavour with no marked decay effect, reduced but not eradicated irritation (especially of the throat) and no evidence of textural residue. Quantitatively, aftertaste absence is almost universally rejected in much the same way as obtrusively high levels are, but all the indications are that within an intermediate bandwidth, for the low delivery smoker, aftertaste represents a product plus opportunity.


I would suggest that your interpretive problems, as you anticipate in your own questions, come largely from taking a uni-adjectival view of aftertaste which I believe should profitably be researched as dimensional, bi-polar and consisting of at least three sub-definitions which may sometimes act in concert but most often make conflicting contributions to the overall perception. In short, I think we are hunting a three-headed chameleon!

Regrettably, I believe my comments probably do little but confirm your own suspicions, but perhaps our own corroborative experiences will help make the case for incorporating subscales of the parent attribute in any subsequent researches, accompanied preferably by an appreciation of temporal decay effects.

I believe we have scope for an interesting discussion on measurement techniques for establishing consumer bandwidths of tolerance for aftertaste in addition to the whole question of how to relate this to the menthol issue. However, this is certainly a face to face job. I hope for now that these initial ramblings are of some use. Please keep me documented on any developments emerging before our meeting. Until then, good luck with your chameleon!

Best regards.

Yours sincerely,



R.P. FERRIS

n.o.o. c.c. Dr. L.C.F. Blackman, R&DD, Millbank
Dr. M. Oldman, GR&DC, Southampton
Mr. D.E. Conway, GR&DC, Southampton
f Central Filing

103491064