

SAI-SIOS (ㅅ): A MISTAKEN IDENTITY OF GEMINATION*

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Sai-sios (or Bindungs-S) has been mistakenly viewed as an epenthetic *t* (orthographically *s*) or *n* that is inserted between two nouns which constitute a compound. This paper documents evidence that (i) *Sai-sios* is one of numerous manifestations of a gemination rule which copies the initial consonant of the second noun in a compound, that (ii) the orthographic *s* (i.e. *Sai-sios*) has caused hypercorrections and spelling pronunciations which have introduced some less natural or spontaneous pronunciations, and that (iii) all *Sai-sios* phenomena can be accounted for by independently motivated and well-known phonological rules. The identity of geminated consonants (as well as the rule of gemination) is obscured (and mistakenly identified as an epenthetic consonant) by the interaction of such well-known rules as obstruent neutralization, hardening (or tensification) and nasal assimilation, lateral nasalization, and cluster reduction (or degemination). Unlike the epenthesis analysis, the gemination analysis does not require a single extra rule or ad hoc device; furthermore the latter can account for other significant data that the former fails to accommodate.

0. Introduction *Sai-sios* (also known as Bindungs-S) has been one of the best known phonological phenomena which has been dealt with by numerous scholars of different theoretical orientations and interests. The typical phonological effect of *Sai-sios* is manifested in the hardening (also called 'fortition' and 'tensification') of a plain (unaspirated, nontense) obstruent in the initial position of the second noun in noun compounds, e.g. :¹

- (1) a. p→pp
pom 'spring' + palam 'wind' → pom-ppalam 'spring breeze'
b. s→ss
palam 'wind' + soli 'sound' → palam-ssoli 'sound of wind'

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¹ Korean examples are cited in the Yale system. Hyphens and periods mark morpheme and syllable boundaries respectively.

c. c→cc

cha 'tea' + can 'cup' → cha-ccan/chat-ccan 'teacup'

In the first two examples, the effect of *Sai-sios* is seen in the hardened obstruents, but there is actually no *Sai-sios* between two constituents of a noun compound, since it is allegedly deleted after the hardening process (see section 1). In the last example above, there are two alternate pronunciations, the second of which actually has a syllable final *t* (orthographically *s*), which is believed to represent *Sai-sios*. This inserted consonant (i.e. *Sai-sios*) is not a bad idea for a practical orthography, which insures that 'teacup' be pronounced with the obstruent in question hardened as is *cha-ccan* or *chat-ccan*, but its phonological identity is quite another matter.

Reviewing current literature dealing with this old problem, it is surprising to note general consensus on the following two points. First, there is indeed a segment that represents *Sai-sios*, be it *s*, *t*, or *n*, in noun compounds. Second, the hardening effect of *Sai-sios* is a regular productive process. Neither of these two points are correct in my view. It is easy to demonstrate how irregular the hardening process is in noun compounds, e.g. :

- (2) a. kwuk → kkwuk : mū 'radish' + kwuk 'soup' → mū-*kkwuk*, *mū-*kwuk*
 cāng 'bean source' + kwuk → cāng-*kkwuk*, *cāng-*kwuk*
 b. ces → *cces : kwul 'oyster' + ces 'pickle' → kwul-ces, *kwul-cces
 al 'roe' + ces → al-ces, *al-cces
 c. pap → ppap : achim 'morning' + pap 'meal/rice' → achim-ppap, *achim-
 pap; kīm 'seaweed' + pap → kīm-ppap, *kīm-pap 'seaweed roll'
 BUT khong 'bean' + pap → khong-pap, *khong-ppap 'rice mixed with
 bean'
 poli 'barley' + pap → poli-pap, *poli-ppap 'rice mixed with barley'
 cip/ccip : tōl 'stone' + cip 'house' → tōl-cip/tōl-ccip
 tōl + taykali 'head' → tōl-taykali/tōl-ttaykali 'dumb
 head'

The initial *k* of *kwuk* 'soup' is always hardened to *kk* in compounds (2a), while the initial *c* of *ces* 'pickle' is never hardened (2b). More problematic is the hardening of *p* in (2c); the same stop of the same noun is hardened in some compounds but not hardened in others. The last set of examples show that hardening is optional for the same compound. This might be due to the confusion of two hardening rules caused by *l* of two different sources (see Cook 1986). Suffice it to say that hardening (i.e. the *Sai-sios* effect) in noun compounds is anything but regular, and no more is said on this matter in this paper.

Returning now to the first of the two points mentioned earlier, the most widely accepted theory views that *Sai-sios* is an epenthetic *t* or *n* (which are

mutually exclusive) as most extensively documented by Kim (1970) and Kim-Renaud (1974) among others. However, this traditional view, which has been misguided by the orthographic device (i.e. *s*), which in turn was misguided by the obstruent hardening rule (see section 1), has not only caused hypercorrection and spelling pronunciation, but also phonetic errors even by some of the most competent linguists. The purposes of this paper are, therefore, to prove that (i) there is no epenthetic consonant, either *t* or *n*, that represents *Sai-sios*, (ii) that the true effect of *Sai-sios* (i.e. hardening) is caused by gemination of the initial consonant of the second noun in compounds, and (iii) that other cases of alleged epenthetic *t* or *n*, which do not derive via gemination, have been introduced by the spelling convention—a notorious case of hypercorrection.

This paper is organized as follows. In section 1, the traditional epenthesis hypothesis is critically reviewed, section 2 presents the gemination hypothesis based on independently motivated phonological rules, and in section 3 additional data in support of the gemination hypothesis are offered along with a summary and conclusion.

1. Epenthesis the epenthesis analysis is misguided by the fact that an epenthetic *t*, which behaves exactly like an underlying *t*, either triggers a well-motivated rule of hardening (also known as 'fortition,' 'tensification,' or 'cluster reinforcement') as shown in (3a) or undergoes another well-known rule of assimilation as shown in (3b).

(3) t-epenthesis

a. Hardening/Fortification/Cluster Reinforcement

kho 'nose' + tung 'ridge' → kho + t + tung → khot.ttung (cf. kho.ttung)

nay 'river' + ka 'edge' → nay + t + ka → nayt.kka (cf. nayk.kka, nay.kka)

b. Weakening/Nasalization

kho + nolay 'song' → kho + t + nolay → khon.nolay

nay + mul 'water' → nay + t + mul → nayn.mul (cf. naym.mul)

In addition to epenthetic *t*, this analysis postulated an epenthetic *n* to account for such noun compounds as those shown in (4). Even with this n-epenthesis, an alternate (and better) pronunciation for (4c), i.e. *namun.nip* cannot be derived. As a matter of fact, the t-epenthesis analysis works for *namun.nip* only if *n* is underlying, i.e. *namu + t + niph* → *namun.nip* (via nasal assimilation and obstruent neutralization). Compounds like this not only indicate that the initial *n* of the second noun is underlying rather than epenthetic, but also provide crucial evidence for gemination (see below). Ahn's (1985) analysis introduces C (instead of *t*) which gets spelled at a later stage. This is essentially identical to the epenthesis analysis, but this analysis does not require an n-epenthesis, resembling my analysis (see below).

(4) n-epenthesis

- a. pam 'night' + il 'work' → pam + n + il → pam.nil
- b. khong 'bean' + yes 'candy' → khong + n + yes → khong.nyes
- c. namu 'tree' + iph 'leaf' → namu + n + iph → namu.nip (cf. namun.nip)

It is not just the two rules shown in (3) that make the t-epenthesis attractive, but there are two other very productive rules, i.e. 'cluster reduction' and 'apical instability' (Martin et al. 1967), that make the epenthetic *t* even more satisfying. Because of these rules, *t* and *n* in medial clusters either delete as shown in (5a) or assimilate in point of articulation of the following consonant as shown in (5b).

- (5) a. Cluster Reduction (to be called Degemination).
 khot.ttung → kho.ttung 'nose ridge'
 nayt.kka → nay.kka 'riverside' (CR)
 cf. nayk.kka → nay.kka (Degem)
- b. Apical Instability([+coronal] → [-coronal, αanterior]):
 nayt.kka → nayk.kka 'riverside'
 nayn.mul → naym.mul 'river water'

The n-epenthesis, on the other hand, is not motivated at all where the *n* in question is underlying, rather than derived. The underlying status of the *n* is provided by another very productive rule that Martin et al. call 'nasal lateralization.' This powerful progressive (6a) or regressive (6b) rule accounts for the data in (6c). If the *n* in (6c) is not underlying, an extra rule would be required to account for the second *l*. Needless to say, there are some peculiar properties associated with the n-initial nouns, one of which can be best explained in terms of the Syllable Contact Law (Murray and Vennemann 1983) or the Stronger Onset Principle (Cook 1986), but they need not concern us here (see also Ahn 1985). Suffice it to say that the rule of n-epenthesis is irrelevant to *Sai-sios*.

(6) Nasal Lateralization :

- a. sol 'pine' + niph 'leaf' → sol.lip 'pine needle' *sol.nip
 mul 'water' + nyak 'medicine' → mul.lyak 'liquid medicine' *mul.nyak
- b. mān + li → mā.li 'ten thousand li' *mā.n.li
 kōn + lan → kō.lan 'difficulty' *kō.n.lan
- c. hal + nil → hal.lil 'work to do'
 sewul + nyek → sewul.lyek 'Seoul station'

Returning now to epenthetic *t*, this analysis has overlooked the most crucial data, such as those given in (7). If *t* is real indeed, why is it absent from so many

compounds which constitute the most optimal environment ?

(7) CV + C₁V(C) where C₁ is noncoronal :

- a. C₁ = stop : mū + kwuk → mū.kkwuk / *mūt.kkwuk 'radish soup' cf.
mūk.kkwuk
pha + kwuk → pha.kkwuk / *pha^t.kkwuk 'onion soup' cf.
pha^k.kkwuk cf. pha^t.kkwuk 'bean soup'
mo + kaps → mo.kkap / *mo^t.kkap 'seedling price', but cf.
mo^k.kkap. cf. mo^t.kkap 'nail price'
- b. C₁ = nasal : cha + mas → cham.mat / *chan.mat 'tea taste', but cf.
chaⁿ.mat 'cold taste'²
pay + melmi → paym.mel.mi 'seasickness'(?)/payn.mel.mi

Why are the compounds in (7a) with a *t* unacceptable, while they are acceptable with a *k* which is homorganic to the initial consonant of the second noun ? Is the epenthetic *t* assimilated by apical instability ? Not so, because it is an optional rule. Notice that with a *t* or *n*, the compounds are unacceptable **only for the intended meanings** ; otherwise they are acceptable, in which case *t* and *n* are neither epenthetic, nor does *n* derive from *t*. There is nothing wrong with the phonological sequence of *t.kk* or *n.m* as witnessed by the unintended meanings of the compounds in (7) as well as the additional examples in (8), which show that *t* and *k* contrast before *kk*.

(8) *t.kk* vs. *k.kk*

- a. mut.kko 'bury and' vs. muk.kko 'tie and'
b. pat.kko 'receive and' vs. pak.kko 'thrust in and'

The crucial question is this: If *Sai-sios* is a *t* and the sequence *t.kk* is not only well-formed phonologically, but also contrasts with the sequence *k.kk*, why are the forms in (7) with the medial sequence *t.kk* unacceptable for the intended meanings ? The only answer is that there is no *t*, i.e. there is no *Sai-sios*. Then, what is the identity of the *t* that occurs in those compounds that are given in (3) and a host of other similar constructions ? The answer is twofold. First, the nonhomorganic *t* or *n* in medial clusters has been introduced by the spelling convention of *Sai-sios*, i.e. spelling pronunciation and hypercorrection. Second, the homorganic *t* or *n*, which is not introduced by spelling pronunciation, is one of many phonetic manifestations of geminated consonants.

The spelling pronunciation with a nonhomorganic *n* or *t*, e.g. *payn.mel.mi* 'sea sickness' and *nayt.kka* 'riverside' is less natural and less spontaneous than the other form of pronunciation with a homorganic *n* or *t*, e.g. *paym.mel.mi* and *nayk.kka*. In fact, a pause is required between the two consonants if they

² *chan.mat* 'cold taste' represents a noun phrase rather than a noun compound.

are nonhomorganic. The influence of the orthographic device has even misguided some professional linguists as shown by the phonetic transcriptions cited in (9).

(9) Orthographic Influence :

- a. *[t=n] : *[pat=ñil] for [paññil], i.e. path + nil → /pan.nil/ 'field chore'
 b. *[t=s] : *[it=s'ok] for [is.s'ok], i.e. ni + sōk → /is.ssok/ 'inside of teeth'

The alleged phonetic sequence [t=n] (9a) or [t=s] (9b) are simply impossible for Korean because of the well known processes of 'nasal assimilation' and 'assibilantion' (Martin et al.; but this is really a part of coronal neutralization). This false perception is obviously influenced by the spelling convention.

2. Gemination The *t*, which consistently appears before a homorganic obstruent and which has been mistaken as *Sai-sios* and contributed much to spelling pronunciation, is not epenthetic but derives via the rule of gemination and another very productive rule of obstruent neutralization. Putting details aside, let us consider Coronal Neutralization as part of Obstruent Neutralization, which turns all tense obstruents (CC series and Ch series) to corresponding plain series (C) in syllable final position; furthermore, it neutralizes all coronal obstruents to *s* before a sibilant and to *t* before a stop. As illustrated in (10b), the underlying obstruents become neutralized to *t* in columns II and III or to *s* in columns IV and V. Columns III and V also illustrate hardening (e.g. *k* → *kk*, *s* → *ss*).

(10)	I	II	III	IV	V	Gloss (of stem)
a.	kiph-e	kip.ko	→ kip.kko	kiph.so	→ kip.sso	deep
	takk-e	tak.ko	→ tak.kko	takk.so	→ tak.sso	shine
b.	cec-e	cet.ko	→ cet.kko	cec.so	→ ces.sso	wet
	ssiss-e	ssit.ko	→ ssit.kko	ssiss.so	→ ssis.sso	wash
	mit-e	mit.ko	→ mit.kko	mit.so	→ mis.sso	believe

What relationship do Neutralization and Hardening have with Gemination? Let us consider how we might derive forms in columns II and III in (11). The epenthesis analysis would insert a *t* which becomes assibilated to *s* in the last two forms. This means assibilantion is an independent rule, not part of a neutralization rule. The forms in III derive via Cluster Reduction.

(11) CV + C₂V(C) where C₂ is coronal :

	I		II	III	Gloss
a.	may 'grinder'	+	tōl 'stone'	mayt.ttol	may.ttol grinding stone
b.	cha 'tea'	+	can 'cup'	chat.ccan	cha.ccan tea cup

- c. cesa 'ceremony' + sang 'table' cesas.ssang cesa.ssang ceremonial table
 d. pi 'rain' + soli 'sound' pis.ssoli pi.ssoli sound of rain

Alternatively, let us assume that the syllable final *t* as well as *s* derives by the gemination of the initial obstruent of the second noun. Notice that assibilation is not required in this analysis. The geminated consonant triggers Hardening, after which it may be degeminated as illustrated in (12). In this case, gemination simply means hardening. For this reason, one might propose a rule of hardening, which appears to be a more direct way to account for the forms in column IV of (12), from which those corresponding forms in column III may be derived by another rule. There would be two major problems with this proposal. Such a hardening rule has no phonetic motivation as it would have to apply after a vowel or a sonorant (e.g. cho.tay→cho.ttay 'candlestick', pom.palam→pom.ppalam 'spring breeze') unlike the well-motivated hardening rule, which is not restricted to a particular construction (e.g. nak.cci, *nak.ci 'octopus' (tautomorphemic), mek.ko→mek.kko 'eat and' (heteromorphemic, verb), nas.calu→nat.ccalu 'sickle handle' (heteromorphemic, noun compound)). More seriously, such a hardening rule cannot account for the compounds in which the initial consonant of the second noun is a sonorant rather than an obstruent (14). This means that the noun compounds like those in (14) require another rule, which is not motivated at all otherwise. The beauty of the gemination analysis is that not a single extra rule is required to account for all cases of *Sai-sios* phenomena.

(12) Geminated Coronal Obstruents :

	I	II	III	IV
	Underlying	Gemination	Hardening/Neut.	Degemination
a.	may + tol	mayt.tol	mayt.ttol	may.ttol
b.	cha + can	chac.can	chat.ccan	cha.ccan
c.	ceysa + sang	ceysas.sang	ceysas.ssang	ceysa.ssang
d.	pi + soli	pis.soli	pis.ssoli	pi.ssoli

This gemination rule is not restricted to coronal obstruents, but it applies to noncoronal obstruents (13) as well as to nasals (14).

(13) Geminated Noncoronal Obstruents :

	Underlying	Gemination	Hardening	Degemination
a.	cha 'tea' + pyeng 'bottle'	chap.pyeng	chap.pyyeng	cha.pyyeng
b.	mū 'radish' + kwuk 'soup'	mūk.kwuk	mūk.kkwuk	mū.kkwuk
c.	pay 'ship' + kil 'pass'	payk.kil	payk.kkil	pay.kkil

(14) Geminated Nasals :

	Underlying	Geminated (Surface)
a.	cha 'tea' + mas 'taste'	cham.mat 'tea taste'

- b. cha 'tea' + niph 'leaf' → chan.nip 'tea leaf'
 c. nay 'river' + mul 'water' → naym.mul 'river water'
 d. namu 'tree' + niph 'leaf' → namun.nip 'tree leaf'

This gemination analysis does not require a single extra rule, not even assibilation, and all other rules that interact with Gemination are independently motivated. This rule accounts for all cases of the so-called *Sai-sios* effect, including those crucial data in (7), which the epenthesis analysis fails to accommodate. What then is the status of Gemination? Is it required to account for only the *Sai-sios* phenomena? Not so. Gemination is an independently motivated rule, as shown by the morpheme internal homorganic clusters which have nothing to do with compounding or *Sai-sios*, e.g.:

(15) Geminated Tautomorphic Obstruents:

	I	II	III	Gloss
	Underlying	Geminated	Neutralized	
a.	pa.ppun	pa pp .ppun	pa p .ppun	busy
b.	ma.ttang.hi	ma tt .ttang.hi	ma t .ttang.hi	rightly
c.	mi.kki	mi kk .kki	mi k .kki	bate
d.	ki.phi	ki ph .phi	ki p .phi	deeply
e.	mi.they	mi th .they	mi t .they	below
f.	pa.khui	pa kh .khui	pa k .khui	wheel
g.	ka.cca	ka cc .cca	ka t .cca	false one
h.	päy.chwu	päy ch .chwu	päy t .chwu	cabbage
i.	pi.ssan	pi ss .ssan	pi s .ssan	expensive

I cannot imagine any rule simpler than Gemination to derive the nine different medial clusters shown in III. This gemination rule is the same rule that accounts for those clusters (i.e. *Sai-sios*) illustrated in (12), (13), and (14). This gemination analysis also offers a better explanation in terms of 'degemination' for what has been called 'cluster reduction'.

Another set of crucial data that the epenthesis analysis is unable to handle elegantly includes those in (16).

(16) Obligatory Degemination after Sonorant:

	Underlying	Gemination	Hard./Neut.	Degemin.
a.	san 'mountain' + kil 'pass'	sank.kil	sank.kkil	san.kkil
b.	pom 'spring' + palam 'wind'	pomp.palam	pomp.ppalam	pom.ppalam
c.	pam 'night' + cam 'sleep'	pamc.cam	pamt.ccam	pam.ccam
d.	palam 'wind' + soli 'sound'	palams.soli	palams.ssoli	palam.ssoli
e.	mul 'water' + soli 'sound'	muls.soli	muls.ssoli	mul.ssoli

For the gemination analysis, all that is required to account for these additional:

data is to add a constraint to the effect that Degemination, which is optional following a (stem final) vowel, is obligatory following a consonant (i.e. sonorant). This 'optional' or 'obligatory' deletion of a consonant makes good sense considering the maximum number of consonants allowed medially on the phonetic surface. How does the epenthesis analysis fare with those in (16)? The ad hoc nature of t-epenthesis is most apparent here. First of all, the insertion of a *t* creates a triconsonantal cluster, directly contradicting the well-known rule of triconsonantal cluster reduction which Kim (1972) states in terms of the 'principle of close articulation (cf. 'coda cluster realization', Ahn 1985). Second, the *t* must be deleted, having fed hardening, but the problem is that deletion is just as arbitrary as epenthesis, since it is neither motivated otherwise, nor accountable in terms of Kim's principle of close articulation simply because *t*, which has the zero degree aperture, must be deleted among other consonants. The gemination analysis does not create a triconsonantal cluster if I may invoke here the Obligatory Contour Principle, i.e. geminated consonants are linked to a single element at the melodic level (McCarthy 1986).

3. Conclusion The obvious conclusion drawn from the discussion presented in section 2 is that there is no *Sai-sios*. Instead, there is a geminated consonant, a true consonant which is neither a glide nor a liquid. A corollary of this conclusion is that there is neither *t* nor *n*, i.e. no *Sai-sios*, where there is no underlying consonant to geminate. This is borne out by the fact that there is no geminate glide or liquid in compounds. The compounds given in (17) in which the second noun begins with a vowel, i.e. no initial consonant, attest to this fact.

(17) CV(N)+VC : No C to Geminate :

a. say 'bird'	+ al 'egg'	→say.al *say.tal	'bird's egg'
pay 'stomach'	+ ali 'ache'	→pay.a.li *pay.ta.li	'stomach ache'
pi 'rain'	+ os 'cloth'	→pi.ot *pi.tot	'rain gear'
ay 'child'	+ wulum 'cry'	→ay.wu.lum *ay.twu.lum	'baby cry'
twāy.ci 'pig'	+ wuli 'pen'	→twāy.ci.wu.li *twāy.ci.twu.li	'pig pen'
b. cam 'sleep'	+ os 'cloth'	→ca.mot *cam.tot	'sleep wear'
		nwu.nwu.sum	'smile in
nwun 'eye'	+ wusum 'smile'	→*nwun.twu.sum	'one's eye'
nwun 'eye'	+ al 'egg'	→nwu.nal *nwun.tal	'eyeball'

I hasten to point out at this point that words like *wutos* 'upper wear' and *khotwusum* 'sneer' that Kim (1970) cited, hardly constitute counter-examples to this conclusion simply because they cannot constitute evidence for *Sai-sios* either. Consider the examples given in (18).

(18) Spurious Counterexamples

- a. cec 'milk' + emi 'mother' → ce.te.mi *ce.ce.mi 'wet nurse'
 b. keth 'out' + os 'cloth' → ke.tot *ke.thot 'outer wear'
 c. mith 'under' + al 'egg' → mi.tal *mi.thal 'reserve egg'
 d. pich 'light' + aley 'below' → pi.ta.ley *pi.cha.ley 'under the light'
 e. mos 'pond' + an 'inside' + ey 'in' → mo.ta.ney *mo.sa.ney 'in the pond'

The underlying coronals in these examples become neutralized in *t* as if they were followed by a consonant (i.e. in syllable final position). One might account for this apparent anomaly by establishing a boundary or deriving them at a different level (à la lexical phonology), but the relevant point is that the surface *t* derives from many different sources, all of which are underlying stem finals, i.e. *t* is not epenthetic. In other words, these examples in (18) are analogical sources for the *t* in *wutos* and *khotwusum*, which does not represent *Sai-sios*.

As a last piece of evidence in support of the gemination analysis I offer the three sets of words in (19), which indicate that Gemination is a semantically motivated rule.

- | (19) | I | II | III |
|------|-----------------|-------------|----------------------------|
| a. | kkā.man 'black' | say.kka.man | sayk.kkaman *sayt.kka.man |
| b. | phā.lan 'blue' | say.pha.lan | sayp.pha.lan *sayt.pha.lan |
| c. | nō.lan 'yellow' | *say.no.lan | sayn.no.lan |

The forms with an epenthetic *t* are unacceptable. If acceptable at all, they, of course, represent spelling pronunciation. The third form in column II is ungrammatical because Degemination does not apply to nasals as expected in the gemination analysis. There is no appreciable difference in lexical meaning between the forms in II and the corresponding ones in III, but there is a subtle pragmatic difference which may be defined based on the degree of intensity or emphasis. The form in III with a geminated consonant indicates the strongest intensity or emphasis. For this reason, gemination may be reinterpreted as reduplication, considering universal semantic functions of the reduplication process.

The identification of *Sai-sios* as a geminated consonant brings us, in spirit at least, back to Martin's (1951) Q. This line of reasoning might eventually lead one to regard the laryngeal features that are associated with the two-tense series of obstruents as autosegments.

What other lessons have we learned from the history of *Sai-sios* studies? We have seen how an orthographic device has misguided even some of the most well-disciplined minds. We have seen a series of errors that have been built upon a simple initial error. Modern linguistic dissertations are full of ad hoc devices which provide for what Householder (1952) might call 'hocus-pocus' solutions where no 'God's truth' has been found. Hundreds and perhaps even

thousands, of pages devoted to the pursuit of the true identity of *Sai-sios* could have been spared had *Sai-sios* NOT been written in the first place.³ I hope this paper has taught us how simple truth can be.

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³ I do not discount some value of the device in a practical orthography.