Sapir, Whorf, and Wittgenstein on the referential whole and *Irre*

parokṣakāmā hi devāḥ
the gods love a snipe hunt

Any entity in human experience is, for Sapir, "a functionally significant point in a system of relatednesses;" "no entity in human experience," he says, "can be adequately defined as the mechanical sum or product of its physical properties."[1] Specifically he argued against the notion that although the construct 'phoneme' may be useful enough in the abstract "it has small relevance for the actualities of speech." Sapir showed this view to be "the reverse of realistic."[2]

Vocal sound is to phoneme as object is to instrument:

> "In the physical world the naïve speaker and hearer actualize and are sensitive to sounds, but what they feel themselves to be pronouncing and hearing are 'phonemes.' . . . To the naïve speaker and hearer, sounds (i.e., phonemes) do not differ as five-inch or six-inch entities differ, but as clubs and poles differ."[3]

Vocal sound is to phoneme as *Ding*, thing, is to *Zeug*, gear:

> "To say that a given phoneme is not sufficiently defined in articulatory or acoustic terms but needs to be fitted into the total system of sound relations peculiar to the language is, at bottom, no more mysterious than to say that a club is not defined for us when it is said to be made of wood and to have such and such a shape and to have such and such dimensions."[4]

Here we may recall a perseverant notion of Heidegger's:

> "What we 'first' hear is never noises [*Geräusche*] or complexes of sounds [*Lautkomplexe*], but the creaking waggon, the motor-cycle. . . . what we hear is *not* what is expressed in the utterance [*das Ausgesprochene der Verlautbarung*]. Even in cases where the speech is indistinct or in a foreign language, what we proximally hear is *unintelligible* words, and not a multiplicity of tone-data."[5]

"What the naïve speaker hears," Sapir writes, "is not phonetic elements but phonemes."[6] He would likely have agreed with Heidegger that "It requires a very artificial and complicated frame of mind to 'hear' a 'pure noise';" to hear tone-data and not phonemes.

---

[1] Edward Sapir, "The Psychological Reality of Phonemes" (1933) repr. in *Selected Writings of Edward Sapir in Language, Culture and Personality* (ed. David G. Mandelbaum 1949, pprbk. 1985) 46.
[2] *Id.* 46-47.
[3] *Id.* 47.
[4] *Ibid.*
[5] Martin Heidegger, *Being and Time* (tr. John Macquarrie and Edward Robinson 1962) 207.
[6] "Psychological Reality of Phonemes" 47.

Indeed it may take a disabused ear to hear that one is not uttering, e.g., [t] but rather [ʔ], the glottal stop. "In some languages," Trask informs us, "such as Hawaiian and Arabic, the glottal stop functions as an ordinary consonant phoneme; in others, like English and German, it appears phonetically but non-contrastively in certain positions."[7] An Arklatexican may accurately hear 'accent' in the native Scot's 'Scoʔland.' Yet the native speaker of Arklatex will insist that he himself is saying the [t] in 'football,' 'Milton,' and 'Latin' when in fact his casual utterances are much nearer fooʔball, Milʔon, and Laʔin. He feels he is saying [t] in part because he **does** 'tap the [t]' in saying 'Miltonic,' and 'Latinity;' in which vocables the stress is on the second syllable and [t] initiates the stress. When the stress remains on the first syllable the glottal stop is conserved, as in Laʔinate.

This hearing [t] where it is not is one sort of illusion liable to arise from what Sapir calls our "phonemic versus phonetic hearing;" illusion produced by the phonologic system itself: "the unconscious reinterpretation of objective facts because of a disturbing [biasing] phonological preparedness not precisely adjusted to these facts."[8]

Trask characterizes one such "disturbing phonological preparedness" as a difference in "underlying form;" and thus Trask defines 'phonetic illusion' as "The phenomenon in which a native speaker insists that two different words which, objectively, are phonetically identical nevertheless sound different, as a consequence of their having different underlying forms." Trask instances one of Sapir's examples as "the classic case": "the Sarcee speaker who insisted that *dìní* 'this one' (underlying *dìní*) sounded different from *dìní* 'it makes a sound' (underlying *dìnít*)."[9]

'Underlying form' is shorthand for a complex of phonological potentials. Sapir recalls that John Whitney, his native informant, "claimed that he 'felt a *t*' in the [final] syllable [of *dìní* 'it makes a sound'], yet when he tested it over and over to himself, he had to admit that he could neither hear a '*t*' nor feel his tongue articulating one." Sapir goes on,

> "I did not then know enough about Sarcee phonology to understand the mysterious '*t*' theory. Later on it developed that there are phonologically distinct types of final vowels in Sarcee: smooth or simple vowels; and vowels with consonantal latency, i.e., vowels originally followed by a consonant which disappears in the absolute form of the word but which reappears when the word has a suffix beginning with a vowel or which makes its former presence felt in the sandhi phenomena. One of these disappearing consonants is –*t*', of which –' may be considered a weakened form. [after comparison of their different behaviors when compounded with the same suffixes] We see at once that *dìní* 'this one'

[7] R. L. Trask, *A Dictionary of Phonetics and Phonology* (1996) *s.v.* 'glottal stop,' p. 160. When Sapir says "English has no glottal stop" ("Psychological Reality of Phonemes" 58) he must mean that English does not have it as an ordinary consonant phoneme as do Hawaiian and Arabic.

[8] "Psychological Reality of Phonemes" 48.

[9] *A Dictionary of Phonetics and Phonology s.v.* 'phonetic illusion,' p. 269; citing "The Psychological Reality of Phonemes;" where we read "The grave accent represents a low tone, the acute accent a high one. Sarcee is a tone language." 52 fn. 7.

behaves like a word ending in a smooth vowel . . . , while *dìní* 'it makes a sound' acts as though the final vowel had a voiceless consonantal latency, which registers partly as −'. . ., partly as −*t*'−."[10]

Phonetic illusion is an artifact of the dynamics of phonemic relations, in the case at hand the different behavior under desinence of *dìní*$_1$ and *dìní*$_2$. The self-deceived native speaker is in this sense "a victim of his phonologic system."[11] One wants to add: 'and it's all and only systems, always and already, for better and for worse.'

Certainly no later than *Being and Time* Heidegger was declaring that human existence is in the truth and in 'untruth,' *Unwahrheit.*

> "To be closed off [*Verschlossenehit*] and covered up [*Verdecktheit*] belongs to Dasein's *facticity*. In its full existential-ontological meaning, the proposition that 'Dasein is in the truth' states equiprimordially that 'Dasein is in untruth'. But only in so far as Dasein has been disclosed [*erschlossen*] has it also been closed off [*verschlossen*]; and only in so far as entities within-the-world have been uncovered along with Dasein, have such entities, as possibly encounterable within-the-world, been covered up [*verdeckt*] (hidden [*verborgen*]) or disguised [*verstellt*]."[12]

In 1930 Heidegger gives untruth a special name, *die Irre*, 'errancy.' Of particular note for present purposes are the characteristics of errancy as constitutional and as scaling. "Human beings do not merely stray into errancy. They are always astray in errancy, because as ek-sistent they in-sist and so already stand within errancy. . . . errancy belongs to the inner constitution of the Da-sein into which historical human beings are admitted." As to its scaling property errancy ranges from comedy to tragedy, goof to catastrophe: "every mode of comportment has its manner of erring. Error extends from the most ordinary wasting of time, making a mistake, and miscalculating, to going astray and venturing too far in one's essential attitudes and decisions."[13]

What does it mean "as ek-sistent they in-sist"? What is ek-sisted 'out to' and in-sisted 'into'? There is only one such space and that is 'world.' Human existence is being-in-the-world and there is nowhere 'else' for us *to* be. So what is 'world'? The referential whole of sense-making constitutes the structure of the world.[14] More fully expressed:

> "We shall call the relational character [*Bezugscharakter*] of these referential relations [*Bezüge des Verweisens*] *sense-making* [**be-deuten**]. In its familiarity with these relationships, Dasein 'makes sense' to itself: in a primordial manner it gives itself both its Being and its potentiality-for-Being as something which it is to

---

[10] "Psychological Reality of Phonemes" 53-54.

[11] *Id.* 59.

[12] *Being and Time* 265.

[13] "On the Essence of Truth" (tr. John Sallis) in Martin Heidegger, *Pathmarks* (ed. William McNeill 1998) 150.

[14] *Das Bezugsganze dieses Bedeutens nennen wir die **Bedeutsamkeit**. Sie ist das, was die Struktur der Welt, dessen, worin Dasein als solches je schon ist, ausmacht. Sein und Zeit* 87.

understand with regard to its Being-in-the-world. The 'for-the-sake-of-which' is the rationale of an 'in-order-to'; this in turn gives sense to a 'towards-this'; the latter explains an 'in-which' of letting something be relevant; and that in turn the basis of the 'with-which' of relevance. These relationships are interconnected as a primordial totality; they are what they are **as** this sense-making [*Be-deuten*] in which Dasein gives itself beforehand its Being-in-the-world as something to be understood. The referential whole of this sense-making [*das Bezugsganze dieses Bedeutens*] we call 'meaningfulness' [*Bedeutsamkeit*]. This is what makes up the structure of the world – the structure of that wherein Dasein as such already is."[15]

We ek-sist and in-sist by and through 'sy-stems' of relations of reference; they 'stand us up' and sustain us, afford us holdfasts.[16] "Da-sein always means that a context [*ein Zusammenhang*] of things at hand is already essentially discovered with its being. In that it *is*, Da-sein has always already referred itself to an encounter with a 'world.' This *dependency of being referred* [*Angewiesenheit*] belongs essentially to its being."[17] Because we ek-sist and in-sist by these systems we "already stand within errancy," for the dynamics of these systems inherently produces error and illusion; *Irre* is constitutive of existence as a modality of sense-making.

Sapir died in 1939 and Whorf wrote an essay for the memorial volume. There Whorf shows that linguistic illusion scales up to the level of semantics. He recounts that before he studied under Sapir he worked for a fire insurance company (the Hartford) where his job was to analyze the causes of fires and explosions. Whorf writes,

> "My analysis was directed toward purely physical conditions, such as defective wiring, presence or lack of air spaces between metal flues and woodwork, etc., and the results were presented in these terms. Indeed it was undertaken with no thought that any other significances would or could be revealed. But in due course it became evident that not only a physical situation *qua* physics, but the meaning of that situation to people, was sometimes a factor, through the behavior of the people, in the start of the fire. And this factor of meaning was clearest when it was a LINGUISTIC MEANING, residing in the name or the linguistic description commonly applied to the situation."[18]

---

[15] A mash-up of Joan Stambaugh's translation (*Being and Time* 1996) at 81, Macquarrie and Robinson at 120, and substitution of the Sheehanic 'sense-making' for 'signify' (*Bedeuten*) and its forms.

[16] So Wittgenstein: "What I hold fast to [*festhalte*] is not *one* proposition but a nest of propositions." (No such thing as *an* equipment.) "What stands fast [*festheht*] does so, not because it is intrinsically obvious or convincing; it is rather held fast [*festgehalten*] by what lies around it." "It is not single axioms that strike me as obvious, it is a system [*ein System*] in which consequences and premises give one another *mutual* support [**gegenseitig** *stützen*]." *On Certainty* (tr. Denis Paul and G. E. M. Anscombe, ed. Anscombe and G. H. von Wright 1969) ¶¶ 225, 141, 144.

[17] *Being and Time* Stambaugh 81.

[18] "The Relation of Habitual Thought and Behavior to Language" repr. in *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf* (1956) 135 (his all-caps).

Whorf discovered for the insurance industry, or at least explicated, the notion of 'semantic hazard.' As Sapir did for phonetic illusion Whorf gives a number of examples. Thus,

> "around a storage of what are called 'gasoline drums' behavior will tend to a certain type, that is, great care will be exercised; while around a storage of what are called 'empty gasoline drums,' it will tend to be different—careless, with little repression of smoking or of tossing cigarette stubs about. Yet the 'empty' drums are perhaps the more dangerous, since they contain explosive vapor. Physically the situation is hazardous, but the linguistic analysis according to regular analogy must employ the word 'empty,' which inevitably suggests lack of hazard."[19]

And here Whorf describes the relational pattern – "the general formula" – giving rise to semantic hazard:

> "The word 'empty' is used in two linguistic patterns: (1) as a virtual synonym for 'null and void, negative, inert,' (2) applied in analysis of physical situations without regard to, e.g., vapor, liquid vestiges, or stray rubbish, in the container. The situation is named in one pattern (2) and the name is then 'acted out' or 'lived up to' in another (1), this being a general formula for the linguistic conditioning of behavior into hazardous forms."[20]

Irre is secreted in the interstices of the system of relatednesses, *das Bezugsganze.*

The great avatar of *Irre* for Wittgenstein was *Verhexung,* bewitchment. As in the famous characterization of his *agon*: "Philosophy is a struggle against the bewitchment of our understanding by the resources of our language."[21] Accordingly "Our motto might be, 'Let us not be bewitched!'"[22] But there can be no final victory; for, so to speak, *wieviel Mittel jedoch*, *so viel Verhexung.*

"One is often bewitched by a word [*Man wird oft von einem Wort behext*]. For example, by the word 'know'."[23] Or 'for.' Heidegger writes,

> "The child's question, 'What is this thing?', is thus answered by stating what it is used for, defining what one finds in terms of what one does with it. . . . The interpretation appresents the *what-for* [*Wozu*] of a thing and so *brings out* the reference of 'in-order-to.' It brings to prominence '*as what*' the encountered thing can be taken, how it is to be understood. . . . In thus bringing out the *what-for* and the *for-sake-of-which* of something, the incomprehensibility [*Unverständlichkeit*]

---

[19] *Ibid.*

[20] *Ibid.*

[21] *Die Philosophie ist ein Kampf gegen die Verhexung unsres Verstandes durch die Mittel unserer Sprache. Philosophical Investigations* (tr. G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte; 4th rev. ed. Hacker and Schulte 2009) ¶109.

[22] *Unser Motto könnte sein: 'Lassen wir uns nicht behexen!'* Ludwig Wittgenstein, *Zettel* (tr. G. E. M. Anscombe, ed. Anscombe and G. H. von Wright 1967) ¶690.

[23] *On Certainty* ¶435.

is removed, the meaning of meaningfulness is made *explicit*, *it is put into words*. As a meaning thus brought out, it can now itself get its word."[24]

Then comes the child's next question: 'What am I for?' From this pellet of grammar gas-giants of teleology are continuously sublimed.

A different approach is suggested by the work of Sapir, Whorf, and Wittgenstein. One might answer the child, 'It depends on the context.' A human being is "a functionally significant point in a system of relatednesses." "Our knowledge forms an enormous system [*ein großes System*]. And only within this system has a particular bit the value [*Wert*] we give it."[25] So also for a particular human life; its worth – its 'for' – is system-dependent, which at any given moment means context-dependent. Just as "Our talk get its meaning from the rest of our proceedings"[26] so our lives get their meaning from the rest of our encounters, *Handlungen* – every situation we take on. "The mistake is to say that there is anything that meaning something consists in;"[27] and that there is any 'thing' that human 'for' consists in. "Only in the system has the sign any life;"[28] "A meaning of a word is a kind of employment of it;"[29] "Only in the stream of thought and life do words have meaning."[30] Only in the flux of a multitude of systems does human existence get itself 'employed,' have meaning.

"Thus we are tossed to and fro when we try to find out where understanding properly resides [*wo das Verstehen eigentlich liegt*]"[31] because it is distributed throughout the dynamics of systems, *das ganze Gewimmel der menschlichen Handlungen*, "the whole hurly-burly of human actions."[32] So to finish up the analogy: "You must bear in mind that the language-game is so to say something unpredictable [*Unvorhersehbares*]. I mean: it is not based on grounds [*nicht begrundet*]. It is not reasonable [*vernünftig*] (or unreasonable). It is there—like our life."[33]

DCW 5/01/2020

---

[24] Martin Heidegger, *History of the Concept of Time: Prolegomena* (tr. Theodore Kisiel 1985) 260-261.
[25] *On Certainty* ¶410.
[26] *Id.* ¶229.
[27] *Der Irrtum ist zu sagen, Meinen bestehe in etwas. Zettel* ¶16.
[28] *Id.* ¶146.
[29] *On Certainty* ¶61.
[30] *Zettel* ¶173.
[31] *Id.* ¶227.
[32] *Id.* ¶567.
[33] *On Certainty* ¶559.