

# Translating Jakob von Uexküll — Reframing *Umweltlehre* as biosemiotics

**Prisca Augustyn**

Florida Atlantic University  
Boca Raton  
augustyn@fau.edu

**Abstract.** Thomas Sebeok attributed it to what he called the ‘wretched’ translation of Uexküll’s *Theoretische Biologie* (1920) that the notion of *Umwelt* did not reach the Anglo-American intellectual community much earlier. There is no doubt that making more of Uexküll’s *Umweltlehre* available in English will not only further the biosemiotic movement, but also fill a gap in the foundational theoretical canon of semiotics in general. The purpose of this paper is to address issues of terminology and theory translation between Uexküll’s *Umweltlehre* and current biosemiotics.

*Jene reine Sprache,  
die in fremde gebannt ist,  
in der eigenen zu erlösen,  
die im Werk gefangene  
in der Umdichtung zu befreien,  
ist die Aufgabe des Übersetzers.*  
Walter Benjamin (1972 [1923]: 19)

## 1. Unlocking the *pure language* of Uexküll’s *Umweltlehre*

Upon the opening of the *Jakob von Uexküll-Archiv für Umweltforschung und Biosemiotik* in Hamburg in 2004, Jesper Hoffmeyer as one of the preeminent interpreters of Uexküll’s *Umweltlehre* believes that Uexküll’s work is still “in need of clarification” and that the “biosemiotic reframing of biological theory”, that has only taken its

first steps, “can be fruitfully informed by the work of the pioneer” (Hoffmeyer 2004: 74). His hope for the archive was that it could be a “meeting place between historical writings and emerging new agendas” (Hoffmeyer 2004: 74). The purpose of this paper is to address some insights and concerns related to an Uexküll translation project; and to determine how translating Uexküll’s work will contribute to the *clarification* and *biosemiotic reframing* of Uexküll’s *Umweltlehre*.

In his essay *The Task of the Translator* Walter Benjamin (1923: 1) defined translation as a change of *mode* of expression, a new arrangement or a new form. He described the *translatability* of any work as a specific significance inherent in the original that is the *pure language* or the theoretical or philosophical core of what is to be translated. He proposed that the task of the translator was “to release in his own language that pure language which is under the spell of another, to liberate the language imprisoned in a work” (Benjamin 1969 [1923]: 79–80).

In the context of biosemiotics, Donald Favareau recently gave an excellent illustration of Walter Benjamin’s notion of *pure language* that allows the translator to liberate the theoretical or philosophical core by translating a passage from Aristotle to show that his views in *De Anima* are more akin to the recent scientific drift than any other period. Favareau proposed that “a modern gloss of Aristotle’s famous dictum that ‘*the soul is the first actuality of a natural body that is potentially alive*’ might today read ‘*life is the emergent system property of the interactions of a self-catalyzing system that can adapt to its environment to persevere*’” (Favareau 2007: 9).

With this translation, Favareau is “reclaim[ing] the evolutionarily coherent notion that the appearance of humans with their unique kind of mental experience is itself a product of a legacy of sign relations arising out of animals’ interactions with each other and with the external world” (Favareau 2007: 10) in order to present biosemiotics as a *proto-science* whose goal is

to extend and broaden modern science, while adhering strictly to its foundational epistemological and methodological commitments — it

does not seek in any genuine sense of the term to ‘oppose’ much less ‘supplant’ the scientific enterprise, but, rather, to continue it, re-tooled for the very challenges that the enterprise itself entails, if not demands (Favareau 2007: 4).

Favareau’s notion of *retooling* an intellectual enterprise without opposing or supplanting its foundations is ultimately an act of translating in the sense of Benjamin’s *unlocking of the pure language in a new mode*. Similarly, Claude Lévi-Strauss (1977:4) defined translation as a change of *mode* of expression which did “not mean a different language as French, German, or the like, but to be expressed, in different words, on a different level” that is, again, a kind of retooling of an existing idea for a specific set of goals.

The writings of Thure von Uexküll are such translations of Jakob von Uexküll’s ideas in German. Thure von Uexküll had a completely different intellectual armamentarium at his disposal in the 1970s and 1980s when, after being in touch with semiotic theory through Sebeok, he reframed Uexküll’s *Umweltlehre* in German as well as in English (e.g. Uexküll, T. von 1980). A good example is Thure von Uexküll’s quote of a passage from *Theoretische Biologie* (Uexküll, J. von 1928) that he translated into English for his contribution to Krampen *et al.*’s (1987) landmark anthology *Classics of Semiotics* in English, and also into a different *mode* for his *Kompositionslehre der Natur* (Uexküll, T. von 1980) in German, in which he presents Jakob von Uexküll’s *Umweltlehre* as an undogmatic, empirical biology:

[...] da die Tätigkeit unseres Gemüts das einzige uns unmittelbar bekannte Stück Natur ist, sind seine Gesetze die einzigen, die mit Recht den Namen Naturgesetze tragen dürfen (Jakob von Uexküll 1928:40)

as the activity of the mind is the only aspect of nature immediately known to us, its laws are the only ones which may rightly be called laws of nature (Uexküll, T. von 1987: 149)

While the previous translation is guided by a desire for a high degree of linguistic exactitude, the following example is a good illustration of a translation that is guided by the desire to translate into

different words on a different level or ‘reframe’ it in terms of semiotic theory:

Kein Subjekt kann etwas Nicht-Subjektives erkennen. — Aber wir können in den Gesetzmäßigkeiten, die unsere subjektive Umwelt beherrschen, die Regeln erfassen, nach denen etwas Über-Subjektives, die Natur, unser Subjektsein gestaltet. (Thure von Uexküll ed. 1980:52)

No organism can have non-subjective experience. — But we can explore the sign processes of the subjective *Umwelt* of an organism and derive from them the principles by which nature [reality] produces the organism’s subjective experience. (*my translation*)

Thure von Uexküll not only translated Jakob von Uexküll’s early-20<sup>th</sup>-century German into late-20<sup>th</sup>-century German, but he also reframed the theoretical or philosophical core of Jakob von Uexküll’s work in terms of semiotics. For a new translation of Uexküll’s *Umweltlehre* the question now arises in how far the desire for a reframing of Jakob von Uexküll’s biological theory in the context of biosemiotics should forfeit linguistic exactitude without distorting Uexküll’s *pure language*.

For instance, the title *Streifzüge durch die Umwelten von Tieren und Menschen* (Uexküll, J. von 1934) may have found a successful mid-century reframing in the translation *A Stroll through the Worlds of Animals and Men* (Uexküll, J. von 1957), but it was in those 50 years since then that Uexküll has been reinterpreted in the context of (bio)semiotics and we may now ask the question if it is legitimate, or desirable, or even ethical to reframe this text with a translation like *Explorations into the subjective worlds of living organisms?*

Conservative thinkers may object that changing the title of a translation of a seminal text may hinder the dissemination of the existing body of work, both primary and secondary. But this is not so. The multiple English translations of Gottlob Frege’s famous essay *Über Sinn und Bedeutung* (1892) are a good case in point. An important translation of this text was made in 1949 with the title *On Sense and Nominatum* by Herbert Feigl (Feigl, Sellars 1949), largely relying on the terminology of Rudolf Carnap’s *Meaning and Necessity* (1947). The 1952 translation by Max Black and P. T. Geach under the title *On*

*Sense and Reference* relies on a new translation of key terms and a new title that signifies precisely the theoretical reframing their new translation was intended to offer. While Black and Geach's later translation is unequivocally regarded the classic text in the English canon of the philosophy of language, the Feigl translation is still considered an important landmark and is used in prominent anthologies such as Martinich's popular textbook *The Philosophy of Language* (1985). The multiple reframings of Frege's ideas have been far from an impediment to their dissemination. It may well be due to the diverse translations and reframings that Frege's ideas are still relevant beyond analytical philosophy and semantics precisely because the different readings of the original continue to fuel the international theoretical dialogue.

## **2. Sebeok's discovery of Uexküll's *Umweltlehre* as biosemiotics**

Of course, we owe the discovery of Uexküll's work for the canon of semiotic theory to Thomas Sebeok; and his reception and interpretation of Jakob von Uexküll's *Umweltlehre* continues to inform semiotic theory in general and the biosemiotic movement in particular. But what role should his interpretation play for the task of the Uexküll translator?

Sebeok described his discovery of Uexküll in several personal essays and it is worth quoting Sebeok's personal account in full:

I first came across von Uexküll's name in 1936, when I was still in my teens and he was to have lived for eight more years. I chanced to catch his name on the verso of the half-title page to Ogden and Richard's *The Meaning of Meaning*, the 4th edition of which I purchased when I was an undergraduate at Magdalene College in Cambridge, where Richards was Pepys Librarian at the time and with which Ogden was also associated (according to the same page), and which also listed him as the "General Editor of the International Library of Psychology Philosophy and Scientific Method." This consisted at the time already of some 85

volumes. *Theoretical Biology* was listed as the 34th book from the top, or 52nd from the bottom. The title having caught my attention, I obtained a copy from the library, found that it was a 1926 translation of a German book published in 1920, and that it was beyond doubt over my head. Not until some thirty years later did I come to realize that this judgment was premature as well as very wide of the mark. The English translation had in fact been carried out “wretchedly...under Ogden’s eccentric auspices” (Sebeok 1991b: 104). In the mid 1960s, when at last I read the authentic German version, I came to believe that Ogden, the very animator of Anglo semiotics in the 20th century, had either known little or no German or, with all his polymathic gifts, had failed to understand what *Theoretische Biologie* was really about: not biology, not psychology, not physiology, but semiotics. What’s more, it unfolded a wholly unprecedented, innovative theory of signs, the scope of which was nothing less than semiosis in life processes in their entirety. It created and established the basis for a comprehensive new domain: we now call it *Biosemiotics*. (Sebeok 1998: 30)

Sebeok read the German original in 1976 and found it “if not pellucid, nonetheless electrifying” (Sebeok 1998a: 32–34). He explored Uexküll’s writings in the mid 1970s and arranged for a partial publication of *Bedeutungslehre* [*Theory of Meaning*; Uexküll, J von 1982] and a new translation of *Streifzüge durch die Umwelten von Tieren und Menschen* [*A Stroll through the Worlds of Animals and Men*; 1992].

In 1977, Sebeok presented a paper entitled *Neglected figures in the history of semiotic inquiry: Jakob von Uexküll* (Sebeok 1979) at the III. *Symposium über Semiotik* in Vienna. There he connected with Thure von Uexküll and the domain of *biosemiotics* had found its principal proponents for the coming decades. Other important figures of that time were the oncologist/polymath Giorgio Prodi and the comparative psychologist Heini Hediger (cf. Sebeok 1998, 2001b) and the foundations were in place for a domain of biosemiotics that pertains to all organisms.

Thure von Uexküll’s and Sebeok’s meetings in Germany were later attended by the biologists Jesper Hoffmeyer and Kalevi Kull, now two of the leading figures of the biosemiotic movement. The help of those who have worked with Uexküll and Sebeok is invaluable in addressing

any fundamental questions that would arise for an Uexküll translation project. The main questions will revolve around Uexküll's terminology.

### 3. "Terminological issues abound" (Sebeok 2001b:37)

Sebeok attributed it to the poor translation of Uexküll's *Theoretische Biologie* (1920) that his *Umweltlehre* did not reach the Anglo-American intellectual community much earlier. Uexküll had revised his *Theoretische Biologie* during his Hamburg years and published a second edition in 1928 (reprinted in 1973 by Suhrkamp). An ambivalent review of the English translation of 1926, that was unfortunately based on the first edition, congratulated the translator on a translation "of what we know to have been very difficult German" and adds that "an unnecessary difficulty seems to be raised by the use of difficult terms" (Thomson 1927 quoted by Sebeok 2001b: 64).

In his contribution to *Classics of Semiotics*, Thure von Uexküll (1981) explained that his father understood biology as a general science of life as opposed to any narrow definition of biology; and that his terminology clearly must be understood as *general semiotics*. Jakob von Uexküll's frequent use of concepts of musicology can be seen as a desire for his work to be understood beyond the traditional boundaries of biology (cf. Stjernfelt 2001) or to align his views with those of Karl Ernst von Baer (cf. Kull 1999: 391), but it may present an impediment to those who seek a smooth integration of Uexküll's concepts with those of Peirce and Saussure. However, Thure von Uexküll insisted that the differences in Jakob von Uexküll's "terminology are not to be regarded simply as a source of difficulty; they may also prove helpful" in fleshing out where his concepts diverge from those of Peirce and Saussure (cf. Uexküll T. von 1987: 148; see also Krampen 1997: 512). This may result in such important new translations of Uexküll's work as the metaphor suggested by Thure von Uexküll of *nature as a composer listening to her own composition* (cf. Uexküll T. von 1992: 281).

Following a different trajectory, in his contribution to Marcello Barbieri's *Introduction to Biosemiotics* (Barbieri 2007), Marcel Danesi (2007: 283) proposed the neutral terminology of Modeling Systems Theory (MST) as a step towards a standard terminology that will bring semiotics in line with the biosemiotic movement, because it is not species-specific. He believes that semiotic theory has been burdened by terminological inconsistencies, especially by the use of concepts and definitions in idiosyncratic ways.

The translator may ask herself in how far is the idiosyncratic terminology essential to the pure language of Uexküll's *Umweltlehre*? And in how far is a neutral terminology conducive to the integration of general semiotics and biosemiotics? And will a neutral terminology allow biosemiotics to be the bridge between the sciences and the humanities that its current proponents intend it to be?

Sebeok referred to Whitley's *Intellectual and Social Organization of the Sciences* (Whitley 1984), pointing out that "each field has a separate communication system, that is a benchmark set of shared vocabulary items of its own that differentiates this field from all others as a sort of monopolistic exclusion device" (Sebeok 2001a: 71):

The present terminological requirements to subsume a semiotics of culture, or just plain semiotics, under a semiotics of nature, or biosemiotics, might have been obviated decades earlier. As things are going right now, the boundaries between the two are crumbling, giving way to a unified doctrine of signs embedded in a vast, comprehensive life science. (Sebeok 2001a: 159)

Marcel Danesi considers the lack of a standard terminology one of the obvious impediments to the success of *biosemiotics* as a bridge between the sciences and the humanities. Danesi (Danesi 2007) proposed that the neutral non-species-specific terminology of MST could be the key to that successful fusion of semiotics and the biological sciences as the vast life science that Sebeok envisioned in his global semiotics (2001a).

Jakob von Uexküll's terminological choices outside of the life sciences, his musicological metaphors in particular, can be interpreted

as a way to escape the “separate communication system” of biology in the early 20<sup>th</sup> century in order to transcend the “benchmark set of shared vocabulary items” (Sebeok 2001a: 41); an approach that caused Sebeok to identify Uexküll as the most important *krypto-semiotician* of the 20<sup>th</sup> century.

The major currents in the biosemiotic movement are likewise characterized by their preferences in terminology. Marcello Barbieri demands more rigid definitions; a view that contrasts with the metaphorical eclectic use of biosemiotic concepts that can be found in the work of Jesper Hoffmeyer and, for that matter, in Uexküll’s writing. In fact, the metaphorical play in Uexküll’s writing and the transdisciplinarity of his objectives have been underexplored due to the lack of access to more of his work in English.

The use of concepts in innovative ways, however, can be looked at from two perspectives. One can praise the productivity of an idea for giving rise to new ideas in different contexts. “Symbol’s grow” (CP 2.302). As far as a translator’s scholarly ethics is concerned, one could say that when talking about theory, it is important to be faithful to the intended meaning and context of a theoretical concept.

The term “biosemiotics” is a good example, because its history reflects a sort of syncretizing of formerly divergent terminologies such as biohermeneutics (cf. Anton Markoš) and semantic biology (cf. Marcello Barbieri) under biosemiotics to show that what these currents have in common is greater than what divides them; and that the common future goals are more important than the historiographies of each movement.

#### **4. A translation case study: Wittgenstein’s family resemblances and prototype theory**

What Wittgenstein and Uexküll have in common is the undogmatic character of their work; they were both concerned with signification, and their respective interpreters were/are responsible for the proliferation of the concepts that are the basis of the resulting theories.

Eleanor Rosch's (cf. Rosch, Mervis 1975) reframing of Wittgenstein's idea of *family resemblances* as *prototype theory* reveals a number of interesting aspects of theory translation. There are many translation problems related to prototype theory; and this will only be a brief characterization of the most obvious flaws (cf. Augustyn 2006).

First, the term "prototype" is not typically defined as an example that shares most characteristics with other members of the same category. A prototype, instead, is typically defined as a model for something that does not exist yet, a preliminary sketch or placeholder for something that is to be later. In Rosch's prototype theory, however, the idea of *family resemblances* has been used to show that categories are not defined by necessary and sufficient conditions, but by similarities (or *family resemblances*) with so-called *prototypes*. But nonetheless, prototype theory is one of the most successful theoretical frameworks in semantics, cognitive linguistics, cognitive psychology and many other fields and has yielded many interdisciplinary applications; and this may be due to no more than the trans-theoretical marketing potential of the term *prototype* and its articulation as a *theory*.

Prototype theory as a translation of Wittgenstein's *family resemblances* is a good example for what Claus Emmeche called "disciplinary promiscuity" when he wrote:

We need periods when one discipline attacks the other; we need exchange and even theft of concepts, methods and perspectives. And to continue our sexual metaphor, we need a dose of disciplinary unfaithfulness as well, perhaps some professional mate swapping. [...] At the same time, we ought to be skeptical of any non-reflective interdisciplinary traditions. (Emmeche 1991: 176)

This idea resonates with Sebeok's dictum that "[semiotics] and, *a fortiori*, biosemiotics are, or should be, fields committed to producing novelty and innovations, not much else." (Sebeok 2001a: 39)

Wittgenstein's notion of "family resemblances" in the context of his observation on games in the *Philosophical Investigations* (Wittgenstein 1953) has been the object of such "disciplinary promiscuity" in various disciplines beyond philosophy. (cf. Wierzbicka 1990: 357;

1992: 158). In addition to a reframing this caused a sort of *shift in focus* away from the larger context: Wittgenstein's more fundamental notion of *Sprachspiel*, translated into English as *language game* has faded into the background, because the attention was redirected to Wittgenstein's analogy of *family resemblances* through its reframing as *prototype theory* and "has developed into an almost unchallengeable dogma in the current literature on meaning" (Wierzbicka 1992: 23).

In fact, the notion of "family resemblances" has become quasi-synonymous with prototype theory as one of the most successful cognitive models inaugurated by the work of Eleanor Rosch (e.g. 1973, 1975). In other words, in the particular interpretation proposed in prototype theory, the idea of *family resemblances* has been removed from the context of the *Sprachspiel*. While the famous passage on games was only an illustration of why Wittgenstein compared language to a game, the *language game*, undoubtedly, is Wittgenstein's metaphor for natural language by which he addresses *the great question* as is evident from the following quote that precedes the example of games and *family resemblances* in his *Philosophical Investigations* (Wittgenstein 1953:31):

Here we come up against *the great question* that lies behind all these considerations. — For someone might object against me: You take the easy way out! You talk about all sorts of language-games, but have nowhere said what the essence of a language-game, *hence of language*, is: what is common to all these activities, and *what makes them into language or parts of language*. [emphasis mine]

Wittgenstein's *Sprachspiel*, much like Saussure's chess metaphor, was an intuitive analogy in search of a definition of language. The translation of Wittgenstein's original German *Spiel* as 'game' is one of those unfortunate translations that influenced the reading of Wittgenstein's work for decades. Anna Wierzbicka (1990: 358; 1992: 159) pointed to the root of the problem:

In German, the word *Spiel* has a wider range of use, corresponding roughly to the English playing. [...] One feature which separates the concept of 'game' lexically encoded in English from the concept of

‘Spiel’ lexically encoded in German, is the idea of rules: of knowing beforehand what one can do and what one cannot do. Another difference has to do with the idea of a well-defined goal, which may or may not be attained. If features like these are not identified and clearly stated, cross-linguistic lexical research cannot succeed.

For example, consider the word *Kartenspiel* ‘card game’ on the one hand; and concepts like *Kinderspiel* ‘child’s play’ or the adjective *spielerisch* ‘playful’ on the other hand. Furthermore, the verb *spielen* extends from all kinds of ‘play’ into ‘gambling’, ‘acting’, ‘toying’, ‘teasing’ and ‘pretending’ and is therefore much more complex than the English *game* may suggest, and much closer to the notion of *play* than any Wittgenstein interpreter relying on the English translation may ever suspect.

The translation of *Spiel* as ‘game’ in Wittgenstein’s language theory has forced the exegesis of this important aspect in the wrong direction for decades. Since the publication of Wittgenstein’s *Philosophical Investigations* (1953) classical philosophers have centered their efforts around proving Wittgenstein wrong about his observation on games by trying to find a feature common to all games; e.g. Khatchadourian (1957–58) suggested “serving a specific human need”, or Stone (1994) “being a rule-governed activity”.

In German, it would be impossible to enlist *being subject to rules* as a common feature to all things called *Spiel*. Replace *game* with *play* in English and many arguments may become irrelevant while other connections suggest themselves, such as, for instance, the affinity between Wittgenstein’s *Sprachspiel* with Rene Thom’s notion of *play*. (cf. Augustyn 2006)

To assess whether Eleanor Rosch should be admonished for her *disciplinary promiscuity* or *disciplinary unfaithfulness* or commended for her innovative use of Wittgenstein’s notion of *family resemblances* may be a question of scholarly ethics for some, or a mere matter of taste for others. From the perspective of the translator, the whole affair could have been avoided by a better translation of Wittgenstein’s *Sprachspiel*, because the *language game* unequivocally constitutes one of those non-reflective interdisciplinary traditions that even the most

talented promiscuous theorists should steer clear of. Textbooks in semantics and cognitive science might look quite different today if the language game had been translated as ‘language play’ and the centrality of the notion of *game* had been called into question more forcefully; and Eleanor Rosch would have had to promote her prototype theory without the endorsement of Wittgenstein’s *Philosophical Investigations*.

The Wittgenstein/Rosch case study shows that (1) a particular translation of a theoretical concept — even an inaccurate one from a linguistic perspective — can influence the way scholarly communities look at an entire body of work and what part of it they focus on; (2) a successful reframing can move a theoretical concept beyond the disciplinary boundaries in which it was originally articulated; and (3) if the reframing fits into an existing body of work it can be articulated as a precursor to a set of ideas that developed much later in a very different context and strengthen its theoretical focus with a new terminology.

For the translation of Uexküll’s *Umweltlehre*, a successful reframing can make the difference between (1) an interpretation of Uexküll as an eccentric biologist, important semiotic theorist of the 20<sup>th</sup> century, or foundational theorist of 21<sup>st</sup> century biosemiotics; (2) it can remain within a semiotics of nature, the disciplinary boundaries of biology or articulate itself as the “unified doctrine of signs embedded in a vast, comprehensive life science” (Sebeok 2001a: 159) that includes culture; and (3) a new terminology may align the reframing of *Umweltlehre* with existing theoretical frameworks that are valued by different scholarly communities (e.g. Peircean semeiotic and MST).

## 5. Avoiding the ‘Guru effect’

Jesper Hoffmeyer identified another important aspect the Uexküll translator has to take into consideration (Hoffmeyer 2004: 74):

Will the veneration one feels for the pioneer tend to bias critical enquiry? Will the modern perspective, in this case biosemiotics, tend to bias our evaluation of work done nearly a hundred years ago? And will the “Uexküllian” perspective [...] tend to blind us from such areas in the field where a modern approach may require a paradigmatic distance from the old master?

What Hoffmeyer proceeds to do is exactly this: by translating the Uexküllian concept of *Planmäßigkeit* and combining it with the Peircean notion of *habit-taking*, he arrives at an understanding of causality in nature that is at the heart of biosemiotics. This teleological principle that is expressed in Uexküll’s *Umweltlehre* and Peircean semiotics is expressed in new terms as *indeterminacy* or *interpretation* in nature as in culture. By mapping the Uexküllian concept onto the Peircean concepts, the translator may be tempted to take certain notions as equivalent even though they were not proposed as such. Reframing Uexküll to fit the concepts of MST amounts to the same decontextualizing of 20<sup>th</sup> century work in order to bring it into the 21<sup>st</sup> century. Recall Don Favareau’s reframing of Aristotle. The Guru effect affects the translator precisely when she cannot resist the temptation to endow the material she translates with the modern perspective that lacks the proper amount of *paradigmatic distance from the old master*.

## 6. Towards a glossary of Uexküll’s biosemiotics

Sebeok was convinced that “this is why Jakob’s seemingly arcane terminology [...] is so advantageous, even when — or especially because — it provokes an often-felt need to have recourse to an accompanying formal glossary” (Sebeok 2001a: 41). But what exactly should such a glossary look like? In his collection *Kompositionslehre der Natur*, Thure von Uexküll (1980) included a glossary that may be a useful starting point. Thure von Uexküll’s glossary relies heavily on definitions from Jakob von Uexküll’s own work; should these be the foundation of a *Glossary of Uexküll’s Biosemiotics* for the 21<sup>st</sup> century? Which terms should be naturalized into English? What role should the

terminologies of Peircean semeiotic and MST play? Should it include all extant translations? Should the focus be on the origin of each term in Uexküll's *Umweltlehre* or on their interpretation in biosemiotics? Should it follow a simple dictionary format or include encyclopedic information on each term? Should it be aimed at an uninitiated reader of biosemiotics or an expert?

The Glossary of Uexküll's Biosemiotics will certainly alleviate the task of the Uexküll translator of integrating Uexküll's own terminology in order to place his work firmly into the (bio)semiotic canon in English. The translator's current perspective, in this case biosemiotics, will unequivocally "bias [her] evaluation of work done nearly a hundred years ago" (Hoffmeyer 2004: 74) and thereby influence the terminological choices. Striking a balance between arcane and neutral terminology, sacrificing just enough linguistic exactitude to successfully reframe Uexküll in terms of biosemiotics are precisely the challenges of getting to the philosophical and theoretical core of Uexküll's *Umweltlehre* in our time.

## References

- Augustyn, Prisca 2006. Language *game* and language *play*: Saussure's chess metaphor, Wittgenstein's *Sprachspiel*, and the notion of *play* on René Thom's catastrophe theory. *Interdisciplinary Journal for Germanic Linguistics and Semiotic Analysis* 11(1): 67–80.
- Barbieri, Marcello 2007. *Introduction to Biosemiotics. The New Biological Synthesis*. Dordrecht: Springer.
- Benjamin, Walter 1972 [1923]. Die Aufgabe des Übersetzers. *Gesammelte Schriften*. Bd. IV/1, Frankfurt: Suhrkamp, 9–21.
- 1969 [1923]. The task of the translator. *Illuminations*. New York: Schocken Books, 69–82. [Transl. Harry Zohn]
- Black, Max; Geach, P. T. (eds.) 1952. On sense and reference. In: *Translations from the Philosophical Writings of Gottlob Frege*. Oxford: Philosophical Library, 56–78.
- Carnap, Rudolf 1947. *Meaning and Necessity*. Chicago: University of Chicago Press.

- CP = Peirce, Charles Sanders 1931–1958. *Collected Papers of Charles Sanders Peirce*, vols. 1–6 Hartshorne, Charles; Weiss, Paul (eds.) 1931–1935]; vols. 7–8. Burks, A. W. (ed.) 1958]. Cambridge: Harvard University Press.
- Danesi, Marcel 2007. Towards a standard terminology for (Bio)semiotics. In: Barbieri, M. (ed.), *Introduction to Biosemiotics. The New Biological Synthesis*. Dordrecht: Springer, 283–298.
- Emmeche, Claus 1991. *The Garden in the Machine: The Emerging Science of Artificial Life*. Princeton University Press.
- Favareau, Donald 2007. The evolutionary history of biosemiotics. In: Barbieri, M. (ed.), *Introduction to Biosemiotics. The New Biological Synthesis*. Dordrecht: Springer, 1–69.
- Feigl, Herbert and Winfried Sellars (eds.) 1949. *Readings in Philosophical Analysis*. New York: Appleton Century Crofts.
- Frege, Gottlob 1892. Über Sinn und Bedeutung. *Zeitschrift für Philosophie und Philosophische Kritik* 100: 25–50.
- Hoffmeyer, Jesper 2004. Uexküllian Planmässigkeit. *Sign Systems Studies* 32(1/2): 72–97.
- Khatchadourian, Haig. 1957–1958. Common names and family resemblances. *Philosophy and Phenomenological Research* 18: 341–358.
- Krampen, Martin; Oehler, Klaus; Posner, Roland; Uexküll, Thure von (eds.) 1981. *Die Welt als Zeichen: Klassiker der modernen Semiotik*. Berlin: Severin und Siedler.
- 1987. *Classics of Semiotics*. New York: Plenum Press.
- 1997. Phytosemiosis. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), *Semiotics: A Handbook on the Sign-Theoretic Foundations of Nature and Culture, vol. 1*. Berlin: Walter de Gruyter, 507–522.
- Kull, Kalevi 1999. Biosemiotics in the twentieth century: A view from biology. *Semiotica* 127(1/4). Berlin: Walter de Gruyter, 385–414.
- Lévi-Strauss, Claude 1978. The meeting of myth and science. *Myth and Meaning: Cracking the Code of Culture*. University of Toronto Press.
- Martinich, Aloysius P. 1985. *The Philosophy of Language*. Oxford: Oxford University Press.
- Rosch, Eleanor 1973. On the internal structure of perceptual and semantic categories. In: Moore, T. E. (ed.), *Cognitive Development and the Acquisition of Language*. New York: Academic Press, 111–144.
- Rosch, Eleanor; Mervis, Carolyn 1975. Family resemblances: Studies in the internal structure of categories. *Cognitive Psychology* 7(4): 573–605.
- 1979. *The Sign and its Masters*. Austin: University of Texas Press.
- Sebeok, Thomas A. 1998. The Estonian connection. *Sign Systems Studies* 26: 20–41.
- 2001a. *Global Semiotics*. Bloomington: Indiana University Press.

- 2001b. Biosemiotics: Its roots, proliferation, and prospects. *Semiotica* 134(1/4): 61–78. [Kalevi Kull (ed.)]
- Stjernfelt, Frederik 2001. A natural symphony? To what extent is Uexküll's Bedeutungslehre actual for the semiotics of our time? *Semiotica* 134(1/4). Berlin: Mouton de Gruyter, 79–102.
- Stone, Jim 1994. Games and family resemblances. *Philosophical Investigations* 17(2): 435–443.
- Thomson, T. Arthur 1927. Review of J. von Uexküll *Theoretical Biology*. *Journal of Philosophical Studies* 2(1): 413–419.
- Uexküll, Jakob von 1920. *Theoretische Biologie*. Berlin: Julius Springer.
- 1928. *Theoretische Biologie*. [2. verm. und verb. Auflage.] Berlin: Julius Springer.
- 1934. *Streifzüge durch die Umwelten von Tieren und Menschen*. Berlin: Verständliche Wissenschaft Band 21.
- 1957. A stroll through the worlds of animals and men. In: Schiller, Claire H. (ed. and transl.) *Instinctive Behavior: The Development of a Modern Concept*. New York: International Universities Press, 5–80.
- 1973. *Theoretische Biologie*. Frankfurt: Suhrkamp. [2. Auflage]
- 1982. The theory meaning. *Semiotica* 42(1): 25–82.
- 1992. A stroll through the worlds of animals and men: A picture book of invisible worlds. *Semiotica* 89(4): 319–391.
- 1996. A stroll through the worlds of animals and men. Wolfgang Schirmacher (ed.), *German Essays on Science in the 20th Century*. New York: Continuum, 171–178.
- Uexküll, Thure von (ed.) 1980. Jakob von Uexküll. *Kompositionslehre der Natur. Biologie als undogmatische Naturwissenschaft. Ausgewählte Schriften*. Frankfurt: Propyläen.
- 1987. The sign theory of Jakob von Uexküll. In: Krampen *et al.* (ed.) 1987: 147–179.
- 1992. Preface to *A stroll through the worlds of animals and men: A picture book of invisible worlds*. *Semiotica* 89(4): 319–391.
- Whitley, Richard 1984. *The Intellectual and Social Organization of the Sciences*. Oxford: Oxford University Press.
- Wierzbicka, Anna 1990. 'Prototypes save': on the uses and abuses of the notion of 'prototype' in linguistics and related fields. In: Tsohatzidis, Savas (ed.), *Meanings and Prototypes: Studies in Linguistic Categorization*. New York: Routledge, Chapman & Hall, 347–367.
- 1992. Back to definitions: Cognition, semantics, and lexicography. In: Dolezal, F: *Lexicographica*, vol. 8. Tübingen: Niemeyer, 146–174.
- Wittgenstein, Ludwig 1953. *Philosophical Investigations*. London: Blackwell.

**Как переводить Якоба фон Юкскюлла:  
включение Umweltlehre в рамки биосемиотики**

По мнению Томаса Себеока именно «никуда не годный» перевод «Теоретической биологии» Юкскюлла (1920) виноват в том, что понятие Умвельта не закрепилось в англоязычном мире. Без сомнения, доступ к трудам Юкскюлла на английском языке не только развил бы биосемиотику, но и заполнил лауну в основном каноне семиотической теории. Цель данной статьи — рассмотреть проблемы терминологии и теории перевода в связи с Юкскюлловскими разработками теории Умвельта и биосемиотикой.

**Jakob von Uexkülli tõlkimisest —  
Umweltlehre toomine biosemiootikasse**

Thomas Sebeoki meelest oli Uexkülli *Teoreetilise bioloogia* (1920) “häädine tõlge” süüdi selles, et ‘omailma’ (*Umwelt*) mõiste ei jõudnud angloameerika intellektuaalsetesse ringkondadesse varem. Ei ole kahtlustki, et Uexkülli omailma-uuringute kättesaadavuse paranemine inglise keeles ei edendaks mitte ainult biosemiootikat, vaid täidaks ka tühimiku semiootilise teooria põhikaanonis. Käesoleva artikli eesmärk on käsitleda terminoloogiaprobleeme ning tõlketeooriat seoses Uexkülli omailma-uuringute ja biosemiootikaga.